

# ABSRC 2021 CONFERENCE PROCEEDINGS

Advances in Business-Related Scientific Research Conference - Abstracts

Advances in Business-Related Scientific Research Conference - Papers

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#### **KEYNOTE SPEAKER**



Abigail Ingram
Professor and Director of Women in Entrepreneurship
Institute at DePaul University, United States

Abigail Ingram, J.D., is the inaugural Director of the Women in Entrepreneurship Institute (WEI) and faculty at DePaul University, as well as a practicing attorney licensed in Illinois, U.S.A. Abigail launched her first business in Denver, Colorado, in 2009, and spent four years exploring sustainable business models for creative entrepreneurs. Abigail joined the nationally ranked Entrepreneurship program at DePaul in 2016, and currently teaches entrepreneurship and entrepreneurship law courses alongside her fundraising efforts, research, and executing programs including the Accelerator at the WEI. Abigail enjoys travel and learning about entrepreneurship and sustainability in diverse cultures, including as a Professional Fellow for the U.S. Department of State to Croatia and Slovenia.

#### **Abstract**

#### Gender Equity in Research and Business Post-Pandemic

Equal access to opportunity and "equity" more broadly have become central in economic and social conversations in the 21st century. This keynote draws upon current research on the benefits of gender-diverse teams, disparate impacts of the COVID pandemic on research time and career trajectory for women scientists and faculty, and the current state and makeup of the workforce. This keynote also presents actionable ways to keep gender-diverse teams engaged and to retain diverse talent.

#### **Key Words**





#### **KEYNOTE SPEAKER**



Marko Torkkeli Professor of Technology and Business Innovations at LUT University, Finland

Dr Marko Torkkeli is a Professor of Technology and Business Innovations at the LUT University, Finland. His research interests focus on technology and innovation management, strategic entrepreneurship, growth venturing, and decision support systems. He has more than 20 years of experience of entrepreneurship and consulting activities in innovation management and strategy. He is a member of the Academy of Management, Strategic Management Society, and serves as the Director of Publications of the International Society for Professional Innovation Management (ISPIM) and is one of the founding editors of the open access, multidisciplinary Journal of Innovation Management.

#### Abstract

#### Perspectives on open innovation: When theory meets practice

Since 2003 when father of open innovation Professor Henry Chesbrough coined the term 'Open Innovation' it has been the hot topic for academics, consultants and practitioners. Keynote aims to contribute to knowledge creation and more importantly, to knowledge accumulation, through the combination of multiple streams, perspectives, disciplinary approaches and diverse backgrounds.

In doing so, it departs from the current body of literature adopting a purely academic perspective on Open Innovation, and thus restates the importance of anchoring Open Innovation research into the reality, practices, challenges facing firms and policymakers.

This keynote reflects on Open Innovation book series which covers multiple perspectives, such as measuring and assessing the impact of Open Innovation, dealing with organizational matters and culture, designing strategies, policies, incentives and measures to support and implement Open Innovation, and discussing the advantages and limitations of adopting Open Innovation strategies.

**Key Words** 

open Innovation





## THE ROLE OF INSTITUTIONAL REPOSITORIES IN PROMOTING THE RESEARCH VISIBILITY AND IMPACT: ANALYSIS OF DIGITAL COMMONS

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#### **Abstract**

In this presentation, we address the issue of institutional repositories and analyze how those can be used by an higher education institution (HEI) to gain research visibility and impact. We provide an analysis of the Digital Commons repository and different scenarios, in which Digital Commons can be used to promote the research outputs, as well as other significant insights, data, or other information a HEI might wish to share with its target audiences. We suggest some innovative uses of research repositories, which have not been previously used, but could prove as a cost-effective way for small and medium-sized regional business schools to share information about different aspects of their work and conduct marketing/public relations activities.

#### **Key Words**

institutional repositories, digital Commons, research visibility, research impact





## PROPOSED MARKETING STRATEGY TO INCREASE THE SALES OF CV. KUSUMA MITRA NIAGA FOR KERAMIK ARTISTIKA

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#### **Abstract**

Keramik Artistika is a brand from local ceramic tiles manufacture in Indonesia called PT. Artistika Inkernas. This company was established in 1972 and focused on producing high-quality split tiles, with the primary market being the premium segment within Indonesia. Currently, CV. Kusuma Mitra Niaga as the sole agent of Keramik Artistika, is conducting the selling process. During the last five years, the agent struggles with lower sales while Indonesia had strong construction growth. This paper uses several frameworks for internal and external analysis. The study's result will be processed using SWOT analysis to find the real root cause of the reduction of sales of Keramik Artistika by CV. Kusuma Mitra Niaga. According to SWOT analysis, the root cause of the reduction of sales for Keramik Artistika by CV. Kusuma Mitra Niaga is the low brand awareness of Keramik Artistika in the commercial and residential market.

**Key Words** 

SWOT Analysis, Low brand awareness

#### INTRODUCTION

In the past ten years, the sector of ceramic tiles in Indonesia shows good performance, with the growth of consumption for ceramic tiles reach 10% annually (GBG Indonesia, 2015). The situation happened due to Indonesia's GDP growth that comes  $5\sim6\%$  annually and leads to an increase in the

construction sector, which reaches 5% annually (World Bank, 2019). Another reason is that the consumption level for ceramic tiles in Indonesia is still low. It only goes 2m2. Compared with Malaysia and Thailand that already reach 3m2 (GBG Indonesia, 2015). Keramik Artistika is a brand from local ceramic tiles manufacture in Indonesia called PT. Artistika Inkernas. This company was established in 1972 and focused on producing high-quality, split tiles, with the primary market being the premium segment within Indonesia.

Currently, CV. Kusuma Mitra Niaga is the sole agent of Keramik Artistika. In the last five years, CV. Kusuma Mitra Niaga struggles with lower sales while Indonesia had a strong and stable economic and construction growth. This research focuses on the root cause of lower sales for Keramik Artistika by CV. Kusuma Mitra Niaga and propose the marketing strategy to fix the existing condition. The researcher is performing the study of the internal and external conditions of the company. The internal analysis uses several frameworks: STP Framework, 4P analysis, VRIO Framework, Business Model Canvas, and internal interview with several members from both companies. For the external analysis, the author used several frameworks: Porter's Five Forces, PESTEL, Competitor Analysis by comparing 4P competitors, Consumer analysis through a survey. The study's result will be processed using SWOT analysis to find the real root cause of the reduction of sales of Keramik Artistika by CV. Kusuma Mitra Niaga.

#### **THEORY**

According to Philip Kotler, Marketing is Marketing is how companies interact with consumers, create solid relationships, and build customer value to capture value from customers in return (Kotler, Armstrong, & Opresnik, 2018), furthermore, American Marketing Association defines marketing as the activity, set of institutions, and processes for building, interacting, transporting, and exchanging offerings that have value for consumers, clients, partners, and society at large (American Marketing Association, 2017). There are steps of the marketing process to be followed by the institution. The first step of the marketing process is understanding the market's needs, wants, and demands. The second is designing a marketing strategy driven by customer value. The third is to create an integrated marketing program that delivers superior value. The last is to engage with customers to establish a relationship with the customer. The sub-chapter below will explain each marketing process step using several theories & frameworks such as PESTEL, VRIO, Porter Five's Forces, etcetera.

In this research, the conceptual framework is being followed. It helps the researcher provide the general concept of research and visualize how concepts or methodologies relate to one another. The researcher uses a conceptual framework based on the concept of strategic management in this final project. Figure 1 shows the framework for this research. The research started as the business issue formulation of CV Kusuma Mitra Niaga and was followed by creating a problem statement within the CV. Kusuma Mitra Niaga. Followed by data collection through primary and secondary data. The

captured data will be analyzed through internal and external analysis by using several frameworks. The author uses SWOT, TOWS, and root cause analysis to analyze internal and external analyses. The next step is the strategic formulation followed by the implementation program.

Business Issues Problem Statement Primary & Secondary Data Collection **Internal Analysis External Analysis** Segmenting, Targeting, and Positioning **PESTEL Analysis** 4P Analysis Porter's 5 Forces VRIO Framework Competitor Analysis BMC Framework Consumer Analysis Internal Interview SWOT, TOWS Analysis & Root Cause Strategic Formulation New STP Framework New Marketing Mix Diamond Strategy Analysis Implementation Program

Figure 1. Conceptual Framework Source. Own Data

#### **External Analysis**

The company's external analysis is the analysis of which the firm operates and located and the forces from outside the company that affected its performance. The researcher moves from a macro perspective of the company to a micro understanding of the external environment. In this final

project, the researcher will use two frameworks, PESTEL Framework and Porter's five forces.

#### PESTEL Framework

PESTEL framework is a tool to investigate the external condition of the company. The framework analyzes six external points of the company. There are: political, economic, sociocultural, technological, ecological, legal (Rothaermel, 2017). These points can provide opportunities and threats to the industry and company and sometimes change the market's whole competition aspect. From a political standpoint, several aspects affected the company. They are labor wages policy, gas price policy, the national grid for gas, Tingkat Komponen Dalam Negeri (TKDN) & SNI Policy, and Policy of ASEAN free trade agreement.

While, from the economic point of view, the factors that affect the company are: Growth Rates, Levels of Employment, Interest Rates, Price Stability, Currency Exchange Rates. Furthermore, the sociocultural point of view is concerned about customers' environmental issues. The technological points of view affect how the consumer knows and buys the products. Last is from legal points of view. The industry is not subjected to limitations from the government.

#### Porter's Five Forces Framework

The five forces model identifies five forces that determine an industry's profit potential and shape its competitive advantages (Rothaermel, 2017). The frameworks allow the manager or director to see the company's strategic position by looking from many points of view and gaining an overview of the company strategies. There are The Threat of New Entry. Power of Suppliers, Power of Buyers, Threat of Substitutes, Rivalry Among Existing Competition. For CV. Kusuma Mitra Niaga, the threat of new entry is high because The government of Indonesia does not limit the number of producers for ceramic tiles and the government does not regulate the number of imports which lead to numerous of general trader import their product from abroad mostly from Vietnam, India, and China. For the power of suppliers, the threat is medium due to the exclusive agreement between CV. Kusuma Mitra Niaga and PT. Artistika Inkernas where it mentioned CV. Kusuma Mitra Niaga cannot sell the same product produced by PT. Artistika Inkernas and PT. Artistika Inkernas cannot sell their product through other distributors.

The power of buyers is high because Many manufactures in Indonesia produce the same standardized item. The condition is worsening since many general traders import the products from abroad to Indonesia. Refer to that. The buyer has many options. Furthermore, the threat of substitutes is medium. It happens because of several substitute items in the market, such as floor hardeners with chemical coating, granite, or marble. All of them provide basic customer needs, but those substitute products still cannot match the ceramic tiles when combined with other factors such as reliability or price. Lastly, the rivalry among the existing competition is cutthroat since it is a perfect competition market.

#### Competitor Analysis

Competitor analysis is a process that included assessing the objectives, strategies, strengths and weaknesses, and reaction patterns of the competitor and also selecting which competitors to attack or avoid. The method of 4P comparison for a selected competitor was used in this research. The component for each category will follow the guideline from Michael Kotler's book in Marketing Management. This comparison aims to obtain the data used in SWOT analysis, root cause analysis, and as a guideline for the formulation of marketing strategy in the CV. Kusuma Mitra Niaga. Table 1 shows the comparison between Keramik Artistika and competitors.

Table 1: 4P Comparison Between Keramik Artistika and Competitors

Brand	Keramik Artistika	Keramik Roman	Granito	Mulia Ceramic	Terra Cotta
Manufactur ing Facilities	One manufacturi ng location in Jakarta	Three manufacturing location in East Java & Tanggerang	One manufacturi ng location in Bekasi	Three manufacturi ng location in Mulia Industrial Complex, Cikarang	One manufacturi ng location in Cirebon
Capacity of Production	185.000 <i>m</i> <sup>2</sup> / year	20.000.000 <i>m</i> <sup>2</sup> / year	4.000.000 m <sup>2</sup> / year	80.000.000 m <sup>2</sup> / year	-
Market Destination	Local	Local & Export	Local & Export	Local & Export	Local
Type of Product	Heavy Duty Ceramic & Split Tile Ceramic	Homogenous Ceramic	Homogenou s Ceramic	Gres Ceramic	Heavy Duty Ceramic & Split Tile Ceramic
Certificatio n	Certificatio n for Balai Besar Keramik	ISO and Certification from Balai Besar Keramik	ISO and Certificatio n from Balai Besar Keramik	ISO and Certificatio n from Balai Besar Keramik	-
Dimension	10x20, 10x15, 15x15	60x60, 60x120,30x120 , etc	60x60, 60x120,30x 120, etc	60x60, 45x45, 30x30	15x15, 20x20
Quality Issues	Dimension	Color Consistency	Color Consistency	Color Consistency	Reliability
Market Segment	Upper Level	Upper Level	Upper Level	Medium Low	Medium Low
Price	IDR 102.000 ~ IDR 536.000	IDR 235.000 ~ IDR 436.000	IDR 250.000 ~ IDR 355.000	IDR 85.000 ~ IDR 105.000	~ IDR 250.000
Terms of Payment	Cash & Retention	Cash & Retention	Cash & Retention	Cash & Retention	Cash & Retention

Place	Direct Selling, Indonesia Only	Direct & Multichannel Across Indonesia. Local & Export Market	Direct & Multichanne l Across Indonesia. Local & Export Market	Direct & Multichanne l Across Indonesia. Local & Export Market	Multichanne l. Indonesia market only
Promotion	Single Showroom, Online Marketing through social media, sales activity	Multiple showroom, online marketing, sales activity, mini showroom for dedicated merchant, Magazine, Expo	Multiple showroom, online marketing, sales activity, mini showroom for dedicated merchant, Magazine, Expo	Single showroom, online marketing, sales activity, mini showroom for dedicated merchant, Magazine	Sales Activity Only

#### Consumer Analysis

In this research, the researcher conducted consumer analysis to obtain the demographic data, socio-economic data, behavior data of the general consumer of ceramic tiles, and the consumer of CV. Kusuma Mitra Niaga for the product of Keramik Artistika. Table 2 shows the survey result from 100 respondents about brand awareness towards CV. Kusuma Mitra Niaga and Keramik Artistika. Scale 1 does not know about CV. Kusuma Mitra Niaga and Keramik Artistika and scale five are known about both.

Table 2: Mean Analysis for Brand Awareness

Parameter	Mean Result
Brand Awareness of Keramik Artistika	2.33
Brand Awareness of CV. Kusuma Mitra Niaga	2.22

From 100 respondents, it is obvious that 68% of the respondents never use Keramik Artistika in their project, and 32% said they are using the Keramik Artistika for their project.

From the survey, the researcher found that most of the consumers using Keramik Artistika are having an occupation as an architect (working in a firm or freelance) with 41% result and other types of position in building contractor and construction business with 59% result. Refer to discussion with a member of CV. Kusuma Mitra Niaga, Mr. DS and Ms. NK, there is no direct end customer due to the product segment. In the premium segment, most customers will use architect and contractor services to design and build their residential or commercial projects instead of doing it by themself.

Figure 2: Customer Occupation of CV. Kusuma Mitra Niaga



From 32 respondents who already use Keramik Artistika in their project, both in residential or commercial, the researcher found Keramik Artistika is mostly used by architects or contractors in the prestigious project. The percentage can be seen in the figures below

Figure 3: Project Value for The User of Keramik Artistika for Residential Project

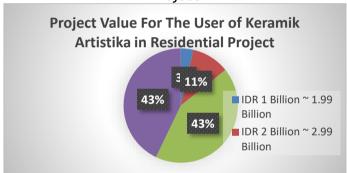


Figure 4: Project Value for The User of Keramik Artistika for Commercial Project



Table 3 shows the priority list only for consumers of Keramik Artistika during the selection process. The user of Keramik Artistika considers the quality as their foremost consideration, followed by model or color and dimension. Price is the last consideration for them during the selection process.

Table 3: Importance Factor to Choosing Ceramic Tiles For User of Keramik

Artistika

Parameter	Mean Result
Quality	3.97
Model or Color	3.94
Dimension	3.94
Price	3.25

Table 4 shows the result from 100 respondents about the marketing tools they prefer during the selection process.

Table 4: How Customer Knows About the Brand

Parameter	Mean Result
Reference of Other	4.05
Corporate Website	3.30
Social Media	2.70
Magazine	2.57
Poster	2.51

The customer takes the recommendation from others (especially with the same occupation) very serious during the decision making or selection process. For the consumer of Keramik Artistika, they prefer the sales activity as the marketing tools followed by showroom creation. At the same time, the social campaign is the least preferred marketing tool for them.

Table 5: Prefered Marketing Activity for User of Keramik Artistika

Parameter	Mean Result
Sales Activity	4.10
Showroom Creation	4.00
Social Media Campaign	3.50

From the promotion point of view, re-seller utilization will significantly impact CV Kusuma Mitra Niaga by expanding brand awareness and helping the company in terms of showroom creation and sales activity. The survey score is 4.44.

#### **Internal Analysis**

The company's internal analysis is the analysis to examine the company's internal condition to assess the resources, capabilities, competencies, and economic advantages as maximum as possible. In this analysis, the researcher will use the 4P Framework, VRIO Framework, Business Model Canvas (BMC) Framework, and internal interview.

#### **4P Frameworks**

The 4P of CV. Kusuma Mitra Niaga are mention below

Table 6: 4P of CV. Kusuma Mitra Niaga

Parameter	Keramik Artistika
Product	High quality of heavy duty ceramic tiles and split tiles
	ceramic with strong influence of natural color

Price	The price of Keramik Artistika is comparable with premium brand such as Roman & Granito. The price is between IDR 102.000 ~ IDR 536.000 depending on the
	model.
Place	Major cities across Indonesia with strong growth of
	services sector & premium residential areas with direct
	selling method (Without intermediatry).
Promotion	Single Showroom, Online Marketing through social
	media, and sales activity.

#### **Business Model Canvas**

In general, the business model is a framework that describes the rationale of how an organization creates, delivers, and captures value (Osterwalder & Pigneur, 2010). Figure 5 show the business model canvas of CV. Kusuma Mitra Niaga.

Business Model Canvas

Cov. Kusuma Mitra Niaga

Key Partners

Main Suppliers:

1. PT. Artistika Inkernas (for Ceramic Supplier)
2. Numerous Independent logistic provider.
3. PT. Bank Central Asia as creditor for CV. Kusuma Mitra Niaga
4. Architect & Design Interior Firms
5. Building Contractor & Consultant
5. Building Contractor & Consultant
6. Consultant
7. Premium quality product competitor in Supplier (independent logistic provider)
8. Consultant
7. Premium quality product competitor in Supplier (independent logistic provider)
9. P. Bank Central Asia as creditor for CV. Kusuma Mitra Niaga
1. Good connection with spice additional service of the caramic in small order), due to minimum stock policy of consultant (interior Firms in Consultant)
8. Building Contractor & Consultant
8. Consulta

Figure 5: Business Model Canvas of CV. Kusuma Mitra Niaga

#### **VRIO Frameworks**

VRIO framework is a theoretical framework that explains and predicts firm-level competitive advantage (Rothaermel, 2017). It is a tool to analyze the internal condition of the company.

Table 7: VRIO of CV. Kusuma Mitra Niaga

Resources	Valuable	Rare	Costly to Imitate	Organized to Capture the Value
Outstanding Product Performance	Yes	Yes	Yes	Yes
Able to Provide Small Quantity for Additional Purposes	Yes	Yes	Yes	Yes

Short Lead Time	Yes	Yes	Yes	Yes
Well Known in Big Corporation	Yes	Yes	Yes	Yes

#### DISCUSSION

This section will discuss the business solution by describing the marketing strategy of CV. Kusuma Mitra Niaga for Keramik Artistika.

#### **SWOT Analysis**

SWOT Analysis is a framework that consists of four components. There are Strengths, Weaknesses, Opportunities, and Threats to the company. Figure 6 shows the SWOT of CV. Kusuma Mitra Niaga

· Residential market is still growing and having huge market due to · Imported products from general importer with lower price and the growth of Indonesia's GDP quality. · Several big corporation that has a same sector with existing · The rise of substitute product such as Granite that has wide variety customer already invest in Indonesia such as Wuling, DFSK, and of model, dimension, and color. . The increase of quality for substitute product. Hyundai Motors. · Able to provide end to end solution such as maintenance & · Imitation of warranty clause by competitor. · Direct approach by PT. Artistika Inkernas. installation services during the project. · Utilization of retailer especially in suburban area of Indonesia . Huge social campaign by major player. · A new language of design in the world of architecture · Good product that satisfy the requirement of premium segment · Keramik Artistika has limited number of model, color, and dimension. CV. Kusuma Mitra Niaga can not propose the substitute Strong presence & relationship with big corporations such Toyota product. Astra Motor, Unilever, etc. . The changes of color or dimension is possible but with large Abundant experience or install base. amount of order in one project. · Able to provide urgent delivery in small - medium quantity for · Only has one showroom and located only in Bekasi . There is no re-seller for Keramik Artistika. All area of Indonesia is Flexible in terms of payment that leads to faster delivery time. handled through single company Sales team of CV. Kusuma Mitra Niaga has a strong knowledge & - Low brand awareness in residential market information about Keramik Artistika and backed up by expert from . CV. Kusuma Mitra Niaga only able to serve one segment of customer due to nature of Keramik Artistika. Competitor able to sold to multiple segment through product of KW2 & KW3 Less attractive of marketing campaign in social media

Figure 6: SWOT of CV. Kusuma Mitra Niaga

#### **Root Cause Analysis**

Several conditions lead to low brand awareness of CV. Kusuma Mitra Niaga for Keramik Artistika which are: less marketing campaign on social media, CV. Kusuma Mitra Niaga only has one showroom in Indonesia despite its vast geographic condition, direct selling method for all market segment (residential and commercial) that leads to the unknown of the brand.

#### CONCLUSION

Referring to the observation of SWOT, internal and external analysis in Chapter II, the researcher observes and concludes that the root cause of falling sales number in the CV. Kusuma Mitra Niaga for Keramik Artistika is due to low brand awareness.

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#### SUSTAINOPRENERUSHIP

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#### Abstract

The aim of this paper is to give a brief insight on sustainability as a business model, its past, present and the future. We firstly explain basic terminology (sustainopreneurship, ecopreneurship, social and environmental entrepreneurship). Then we present the future of Sustainability Entrepreneurship and its inclusion into the education system. We end the paper with challenges and opportunities.

#### **Key Words**

sustainopreneurship, ecopreneurship, social entrepreneurship, environemntal entrepreneurship

#### INTRODUCTION

In 1990s, the term ecopreneurship was used as a business model to solve environmental problems. Gwyn Schuyler (Schuyler, 1998) defined ecopreneurs as:

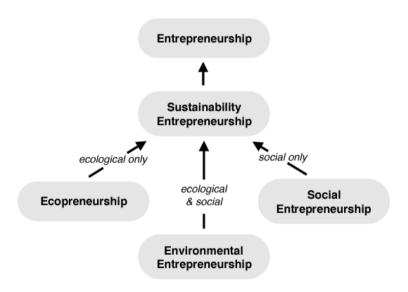
"Ecopreneurs are entrepreneurs whose business efforts are not only driven by profit, but also by a concern for the environment. Ecopreneurship, also known as environmental entrepreneurship and eco-capitalism, is becoming more widespread as a new market-based approach to identifying opportunities for improving environmental quality and capitalizing upon them in the private sector for profit."

From the above concepts - social entrepreneurship and ecopreneurship - a new concept was developed, so called sustainopreneurship (sustainability entrepreneurship) or entrepreneurship and innovation for sustainability. Sustainopreneurship, which was first introduced in 2006 by Abrahamsson, is

defined as an innovative business which aims to solve sustainability problems (Abrahamsson, 2006). It is often referred as a "business with a cause" - innovators turn problems which we face on our planet into opportunities for business.

The term sustainopreneurship is often confused with the term sustainable entrepreneurship. Sustainable entrepreneurship is simply just a "green business" which takes into account sustainability, it is an entrepreneurship with the aim to minimize CO2 footprint, negative impacts on all three aspects: environment, society and economy. This can be seen through business decisions, products or services and in internal/external communication. Here, sustainability is just an attachment to a core business. On the other hand, sustainopreneurship or sustainability entrepreneurship is an entrepreneurial activity, an action to solve problems related to the sustainability.

Figure 1: Ecopreneurship, Environmental and Social Entrepreneurship, Sustainopreneurship



Source: Lenczuk, 2017 (http://kth.diva-portal.org/smash/get/diva2:1160315/FULLTEXT01.pdf)

Sustainopreneurship is reflected by the following three dimensions. These three dimensions are answering to the questions "why" and "how" (purpose, motive and process).

**First dimension:** The purpose of sustainopreneurship is to find out practical and innovative solutions or to create innovations in order to solve problems related to the sustainability. This is the core motive and purpose of sustainopreneurship and the main difference between sustainability entrepreneurship and generic entrepreneurial activity. Here, the following

well-known areas are covered: poverty, health, education, water, climate change, energy,

sustainable production and consumption, chemicals, urbanization, food, social stability, ecosystems, biological diversity and land use, sea resources.

**Second dimension:** Creative organizing is the main issue to get results/solutions to the market. In other words, it is crucial to view problems as possibilities, obstacles as opportunities, and resistance as a resource. If the solution is generated by creativity, it is equally important to take it to the market in a creative and innovative way (Johannisson, 2005).

**Third dimension:** One of the main **issues of s**ustainopreneurship is the awareness that the market is a subsystem of our sociosphere which is a part of biosphere. Sustainopreneurship means to maximize harmony with life support systems in the process.

#### SUSTAINOPRENEURSHIP IS THE FUTURE

Since so much depends on how entrepreneurial we are, it is essential that entrepreneurs exclude any approach which would generate issues for any of the three aspects of sustainability (social solidarity, environmental responsibility and economic efficiency) - because that would not be a solution, but a new problem. This is of course the global, responsible approach, also the only socially responsible one. The concept of sustainopreneurship is purposefully combining, integrating the three aspects, and reminding us simultaneously of the critical importance of all of them in order to achieve the desired goals.

History teaches us that societies are as successful as they have managed to build a system in which people are appreciated and rewarded for what they have created and contributed to the society and not by what they may believe they are entitled to take for themselves. We are only members of a bigger community and we should behave accordingly.

According to **Veronika** Taranzinskaja, teaching expert and Head of PASCH South Asia, Goethe Institute, sustainopreneurship is crucial for necessary transformations of products, processes and behavioural patterns. It helps face the challenge of reducing the negative environmental and social impact of current unsustainable business practices (Taranzinskaja, 2020).

Today we cannot rely just on NGOs, government and other organisations to take action towards sustainability. Here, education institutions, especially, higher education institutions, can make a great contribution to build general sustainability awareness by:

 Integrating the concept into their curricula in various subjects, preparing students to become responsible in their future professional roles as well as in their private lives. - Operating and functioning of the institutions of higher learning in line with principles of sustainability. The institutions of knowledge and wisdom have a natural responsibility in society for being role models.

To make change, sustainability has to be a valuable part of standard curricula. Moreover, students should have opportunities to attend subjects that addresses issues like current global issues: pollution, discrimination, fair working and living conditions, etc.

#### CHALLENGES AND OPPORTUNITIES

It is encouraging to notice that combined focus on sustainability and innovation is clearly intensifying. Of course, sustainably requires innovation and innovation is no good if it creates problems of any kind, including those related to sustainability. Undoubtedly, the **potential benefit of sustainopreneurship is enormous**, in many ways: by preventing development of expensive, wastefull and ecologically unacceptable technologies, by helping to optimize businesses in terms of capacity, use of inputs, including human capital, as well as by supplying customers optimally without wasteful and non-recycleable packaging.

Professor dr. Boris Cizelj, a chairman of the board of directors of the Knowledge Economy Network and a founder of Sustainability Network of Networks, said: "Though it will take decades and generations to be fully implemented - it is worth every effort, as it will improve quality of life for every person on the planet, increase our productivity and efficiency, as well as make societies more stable and peaceful. When it comes to business, we shall understand that it is not just about "making money", but addressing properly a need in society, and being rewarded for doing it in a sustainable way."

1.1.1. One of the key conditions to move closer to sustainopreneurship is, of course, education, since everything starts with values which we adopt in our youth. For this strategically important task, it is important to enable and motivate the teachers and professors. They can be successful in this effort only if they accept and adopt these values themselves. The best way to be convincing is to comply personally because students are not only listening but also observing their teachers and parents. And, by doing so, they spot the discrepancies immediately.

The other equally important condition for implementing sustainopreneurship is the consistency of the entire regulatory and innovation ecosystem. It has to guide, support and encourage the proper behaviour and discourage wasteful and socially irresponsible behaviour of organisations and

individuals. Only if this is done effectively things will move in the right direction. Very few countries are close to this stage (the Scandinavian five, Switzerland, Singapore, New Zealand, Canada) - and the results are very convincing and tempting.

At the end, let us point out that a deeper research on sustainability innovations and sustainopreneurship should be done, a detailed taxonomy, a framework and a relationship with other concepts should be created. Moreover, there should be more case stories which would motivate why this concept really adds value.

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### A CONCEPTUAL FRAMEWORK FOR E-COMMERCE ADAPTATION

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#### **Abstract**

Nowadays it is impossible for countries, regions, and businesses to blame the technology for not capturing new business ideas. The use of new information and communication technologies generates opportunities for companies. Moreover, the adoption of new business models helps to create a competitive advantage. But we are aware that simply the use of e-commerce is not a guarantee for business success. The company should be well organized and flexible, have high quality and attractive products to be able to compete in the global market, and expect good results from the use of electronic commerce at its various levels.

The purpose of this research is to propose a conceptual framework that demonstrates the determinants of the IT adoption process in businesses and next the e-commerce adoption, through review of prior literature including concepts, methodologies, and theories relative to IT and e-commerce adoption. The research investigates and reveals several factors that directly or indirectly, as well as positively or negatively pressure and persuade businesses to adopt IT solutions. E-commerce development offers a promising way for businesses to meet the challenges of an ever-changing environment. It is important for the business to adapt and enhance ecommerce applications because it provides effective and efficient ways of doing business. It is of crucial importance to understand, explore and identify factors that influence the IT (Information technology) adoption process within businesses, especially in small and medium businesses. The model proposed in this paper, reviews, categorizes, and clarifies the key factors that we considered as more significant and important in the process. We hope this model will be used in the future for further research in the area to achieve a better understanding of e-commerce adoption.

#### **Key Words**

IT, e-commerce adaptation, factors, benefits, inhibitors, conceptual model

#### 1. INTRODUCTION

E-commerce can be considered as a new way of conducting business and its influence is increasing every year (Chong, 2008). The Internet has provided traditional retailers a new mean with which to serve customers and today there are two main trends of organizations which flow concurrently. On one hand, there is the Traditional Organization, established in between the 20th century and on the other is Modern Organization emerged in this ongoing century (Bejleri & Fishta, 2017). Empowered by the Internet, e-commerce quickly spread out to most businesses as companies found it to be an effective way of communication between parties (Nguyen, 2014). The successful adoption of e-commerce is a slow process and it cannot be completed at once, but rather in small series of adoption processes in which the company moves gradually from a simple to more complex stage of e-commerce (Brand and Huizingh, 2008).

E-commerce development offers a promising way for businesses to meet the challenges of an ever-changing environment. It is important for a business to adapt and enhance e-commerce applications because it provides effective and efficient ways of doing business. The advantages of e-commerce use include searching for products, services, information, advertising, buying, selling, and paying. It is a well-known fact that e-commerce and Internet technologies can benefit an organization (Akkren and Cavaye, 1999). IT adoption can be defined as the decision to use IT to support operations, management, and decision-making in the business (Thong and Yap 1996). Rogers (1995) defines adoption as the decision to make full use of an innovation as the best alternative. For a small business, the use of IT is mainly important for their ongoing life and survival because it improves their ability to compete with alike or larger organizations all over the world. Throw the web business can launch new products, gather information, market their business, improve communication and search and reach for new potential business opportunities.

The Internet has created a universal platform for buying and selling goods and services and driving important business processes inside the organization. Small and large companies are using the Internet to make product information, ordering, and customer support immediately available and to help buyers and sellers make contact (Laudon, 1999). The Internet creates an unprecedented opportunity for small businesses to enlarge in national and international marketing campaigns that previously would have been unaffordable (Poon & Jevons 1997).

It is of crucial importance to understand, explore and identify factors that influence the IT adoption process within businesses, especially in small and

medium businesses. This research aims to propose a conceptual framework that demonstrates the determinants of the IT adoption process in businesses and next to the e-commerce adoption, through a review of prior literature including concepts, methodologies, and theories relative to IT and e-commerce adoption. The research investigates and reveals several factors that directly or indirectly, as well as positively or negatively pressure and persuade businesses to adopt e-commerce solutions

#### 2. LITERATURE REVIEW

The factors that affect e-commerce adoption are useful in determining the reason why firms are at a certain level (Courtney and Fintz, 2001). There are a lot of factors within the organization that affect the adoption of ecommerce. The appropriate literature was reviewed to develop a model. A rich literature exists in this field since various researchers have identified and studied IT and e-commerce adoption factors. Consultant effectiveness, vendor support, IT experience, financial resources, and CEO support, user participation were some of the factors studied by Yap et al. (1992). Cragg & King (1993) studied relative advantage, competitive pressure, consultant support, and managerial enthusiasm. Swanson (1994) considered only two categories: Internal and external factors. Organizational readiness, external pressure to adopt, and perceived benefits we the factors studied by lacovou et al., (1995), and in the same year Thong & Yap (1995) studied the factors: organizational size, CEO attitude to IT, innovativeness, and knowledge of IT. Factors such as age, education, organizational level, frequency of computer use, computer literacy, and user training are studied by Ang & Koh (1997). Min & Galle (1998) studied three groups of strategic factors: environmental factors such as laws and government regulations; organization's characteristics such as organization size, and technological factors such as security. Sohn & Wang (1998) groped the factors in two groups internal and external; internal: new technology, top management support, the existence of champion, absorptive capacity, cost incentive and external: institutional support, competitor's move, customer pressure. Godenhielm (1999) grouped the factors into two categories: organizational factors (staffing, managerial support, the existence of strategy, funding) and environmental factors (competition, development partner, brand consistency). Akkeren & Cavaye (1999), Tabor (2000), Courtney & Fitz (2001) and Cloete et al. (2002) studied mostly management and organizational characteristics. Six categories were studied by Ranganathan et al. (2001): top management-related factors, organizational factors, firm strategy, project management-related factors, valuation factors, Internet IT environmental factors, collaboration factors, external IT environmental factors, and external business environmental factors. While Thatcher & Foster (2003) studied organizational and extraorganizational (industrial, governmental, and national culture).

#### 3. CONCEPTUAL MODEL

After reviewing the relevant literature and realizing an extensive analysis of secondary sources to develop a model, several factors have been

combined to describe and clarify the internal factors critical for the success in e-commerce implementation. We decided to incorporate some of the factors in the model having in mind two important facts: this model must be appropriate for our country Albania, which is a developing country, and must be applied in small and medium-sized organizations. We decided to include in the model factors related to organization's characteristics (we decided to include four factors: business type, size, revenues, and business's computer ownership) and management's characteristics (we decided to include five factors: owner's age, level of education, computer literacy, use of several programs for the organization and frequency of computer use). Courtney and Fintz (2001) categorized these factors as management and organization characteristics. Next, the perception of potential benefits and inhibitors is important and influences an organization's adoption of ecommerce. As e-commerce matured over the last few years, growing awareness and understanding of the benefits and uses of e-commerce among SMEs emerged (Cloete, et al. 2002). We believe that actual technological capabilities in an organization (from the simpler ones to the most sophisticated) influence e-commerce adoption. E-commerce activities range from the simpler ones such as using an e-mail, web site, a web browser to making online payments, selling and buying online, etc.

#### 4. ORGANIZATION'S CHARACTERISTICS

Organizational parameters such as size, structure, profitability, and computer possession are considered vital in IT usage. Organizational resources of the business must be positively supported from the initial implementation efforts for occurring technology and implementation. Type of business is also very important because businesses in different sectors have different needs. The businesses in different sectors have different information processing needs and those in more informationintensive sectors are more likely to use IT than those in less informationintensive sectors (Yap et al., 1992). Business types have considerable influence on the structure of IT activities of the organization (Currie, 1996). The size and structure of the organization have a significant impact on the adoption of IT (Lind et al., 1989). If an organization has large amounts of data and transactions, then it is more likely to adopt IT which can help streamline operations and offer process efficiencies within the organization (Thong and Yap, 1995). Lind et al. (1989) studied the size of the organization that was viewed as a predictor of the adoption of administrative, innovation, and information system use. CEO knowledge of computer and involvement leads to more successful use of IT in business and the use of IT is influenced by organizational factors such as sales and the type of business (Seyal et al., 2000). Thus, we decided to include in organizational characteristics four factors: business type, size, revenues, and business's computer ownership.

#### 4.1 Management Characteristics

Top management support is a critical organizational factor for the success of e-commerce adoption and diffusion. The adoption of e-commerce is

heavily reliant on the acceptance of e-commerce by the business owner (Cloete et al. 2002). If the owner neither perceives the technology to be useful nor understands its potential, then he will be reluctant to adopt it (lacovou et al., 1995). Corbitt et al., (1997) underline that the issue of ecommerce seems to be more a management problem rather than a technical one. The technology cannot be successfully implemented if the top management doesn't support the process. The level of computer literacy of the owner and a lack of knowledge on how to use the technology will result in the business being less likely to adopt e-commerce (Kirby & Turner, 1993). Ihlstrom et al., (2003) draw attention to the fact that the attitude toward IT may come from manager's previous education or information on the benefit of IT obtained from external sources The more comfortable managers are with the technology, the more they use computers and different programs for their business aims, the more likely they are to use IT in different levels of it, so moving toward e-commerce adoption. Thus, we decided to include in management characteristics five factors: owner's age, level of education, computer literacy, use of several programs for the organization, and frequency of computer use.

#### 4.2 Benefits and Inhibitors

Perceived benefits and inhibitors are a key reason why organizations adopt and continue to use the Internet (Poon and Swatman, 1999). Thus, the adoption of e-commerce is largely based on perceived benefits and barriers to e-commerce adoption. Poon and Swatman (1997) identified short-term and long-term benefits. Harrison et al. (1997) identified some of the benefits of e-commerce: improved information exchange with customers/suppliers, improved customer service, expanded business reach, international markets, and reduced costs. Some of the potential benefits of e-commerce as presented by Cloete et al., (2002) are: improved information exchange with customers, increased customer loyalty, increased service to the customer, easier access to international markets, expanded business reach, reduced costs of maintaining up-to-date company information, and improved information exchange with suppliers, reduced costs through webbased purchasing and procurement, improved competitive position of the company, and attracting new investments to the company. Inhibitors are expected to play a big role in the context of small organizations, where resources and computer sophistication are limited (Swatman, 1991). Courtney and Fintz (2001) summarize some issues that impact the adoption of e-commerce: low use of e-commerce by customers and suppliers, concerns about security aspects, concerns about legal and liability aspects, high costs of development and computer and networking technologies, limited knowledge of e-commerce models and methodologies and unconvinced of benefits of e-commerce. While inhibitors to e-commerce adoption as of Cloete et al., (2002) are: concerns about legal issues and internet security, contracts and liability, telecommunications services not dependable, cost of computers and network technologies too high, level of computerizations is too low, e-commerce use is too low among supplies and customers, limited knowledge of the required technology, and the business is not convinced of the financial and business benefits.

#### 4.3 Technological capabilities in place for e-commerce adoption.

Technological capabilities refer to entry-level e-commerce activities (Clorte et al. 2002). The amount of technology currently in use in the organization, such as PCs with modem and email facilities can ease the process of adoption (lacovou et al., 1995). SMEs are finding email useful for business communications and document transfer (Poon & Swatman 1999). The usage of different programs, email, and direct online communication with a web presence or not, has resulted in efficiency gains and the ability to perform new tasks, such as sharing documents and working distantly with current or potential customers and suppliers. Thus, the study of technological capabilities may observe the current infrastructure in an organization such as the existence of a strategy for developing e-commerce, a computerized database for customers and supplies, a computerized inventory for products and services, use of electronic mail (e-mail), and access to the Internet. These are considered only as basic infrastructure but more sophisticated potentials and capabilities may be present in the business everyday activity such as a website demonstrating the company's products and services, customers' orders and payments received through an Internet Website, and placing orders and making payments with/to suppliers over the Internet.

The above-discussed factors that were derived from extensive analysis of secondary sources have been combined into the following model to describe and clarify the internal factors critical for the success in e-commerce implementation. We propose the model, represented in the following Figure 1, for further research in the future.

Organisation's Characteristics Busines Size of Revenues Computer organization ownership Type Management Characteristics Age Use of IT Level of education **Technological** capabilities Computer literacy Benefits of e-commerce Use of several Inhibitors of Frequency

e-commerce adoption

Figure 1. The e-commerce adoption model

#### 5.CONCLUSIONS

of computer

The discussed factors above that were derived from extensive analysis of secondary sources have been combined into a model to describe and clarify the internal factors critical for the success of e-commerce implementation. Such factors as management and organizational characteristics are believed to influence the use of IT in an organization. The current level of IT adoption, thus the technological capabilities in place, perceived benefits, and inhibitors are believed to influence e-commerce adoption. We suggest this model for further research in the future because the proposed model requires further testing through empirical validation.

e-commerce

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## TAKEOVERS AND MERGERS WITH EMPHASIS ON ECONOMIC ANALYSIS AND EVALUATION OF THE TAKEOVER BIDS

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#### **Abstract**

The author studies a very topical subject in the field of financial and organizational restructuring of the firms, i.e. takeovers and mergers, whereat the key attention is given to the economic analysis of these transactions and evaluation of the takeovers bids. In the introductory part he sets shortly a theoretical frame of takeovers and mergers, and then he proceeds by citing of some media coverage takeovers and mergers occured worldwide and in Slovenia. He highlights them through the valid legislation. The central part of the paper is dedicated to the economic analysis of the firms' merging. By using a concrete numerical case, the author represents a method »discounted cash flow analysis« and a method »market multiple analysis.« The former is more accurate but also more demanding. The added value of the author's paper is also an attempt to financially evaluate takeover while using a concrete numerical case. He chooses net present value as the most appropriate decision making criterion and pinpoints to the benefits of a takeover transaction. He points out the difference between the evaluation of the takeover of a firm and the evaluation of the other investments. As the motive for taking over a firm is economic based rather than management based, a key driver for the acquiring firm is a value maximisation after the takeover is carried out. The author defends a thesis, that it is worthwhile to take over a firm, if the present value of cash flow of the combined firm exceeds the present value of the two firms as separate entities. The author devotes his attention especially to the guestion how to determine or set the bidding price for purchasing of the target firm, and he shows on some concrete numerical cases the evaluation of the takeover bid. He sets and graphically illustrates a price range with possible consequences. In this particular case expected profits out of takeovers are crucial. Through some concrete numerical cases is shown, how the certain differences in the evaluation of a takeover bid may occur, if the different ways of a takeover funding are used, like a share offer (1), i.e. exchange of shares between an

acquiring and a target firm, and a cash offer(2), i.e. purchasing of shares of a target firm by cash. The author attaches himself to the question of setting the bidding price by exposing the economic reasons for takeovers and mergers, and he shows some calculations for estimating the economic effects of the takeovers and mergers just realizied. He refers to some analyses (KPMG) showing us some unsuccessful takeovers and mergers and reveals the main reasons for their failure. At the end of this paper, the author resumes the main findings of his study, and addresses the management of the firms who intend to implement a takeover and/or a merger to do this with great responsibility and professionally, to elaborate a thorough economic analysis preliminary up front, and last but not least to confront well with and to engage efficiently with the key challenges following the takeovers and mergers carried out (in the post takeover period).

#### **Key Words**

takeovers, mergers, takeover bid, economic analysis of mergers, evaluation of the takeover bids, earnings per share, market capitalisation





## ACTIVITIES OF CHARITY NON-GOVERNMENTAL ORGANIZATIONS AND THEIR ETHICAL BACKGROUNDS

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#### Abstract

The origin of charitable activities stems mainly from the Christian tradition, founded in their early communities, where caritas means, in addition to something highly valued, also and above all love for one's neighbor and his respect. In later forms of charity we find a greater influence of views of altruism and philanthropy as well as secularization. Ethical conduct is important not only for charitable activities, but also for operations in the economy and society as a whole, as this ensures trust in business partners and individuals. If in the first forms the ethics of mercy prevailed, which means above all the selfless and dedicated work of an individual for vulnerable or helpful fellow human beings, modern approaches increasingly adopt the altruistic concept of helping others, which then after the Second World War ethics and Kant's efforts to form different initiatives. More recently, however, we have seen a new approach to charity, reflected in a more balanced relationship between those who help - volunteers and those who are helped - vulnerable categories. The latter appear even in the role of self-sufficient predominantly in NGO forms, with a constant tendency of the state to assume greater power over them.

**Key Words** 

ethics and morals, charity, NGO, volunteers





## IMPORTANCE AND METHODS OF SPEECH FRIGHT MANAGEMENT

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#### Abstract

Speech fright in a public performance is a type of anxiety that manifests itself in various ways and affects the quality of the performance itself. Managing a stage fright is not always easy, and can significantly improve speech quality. The aim of this paper is to present theoretical assumptions and known methods that can influence the fright of public appearance, and which can be used to improve the performance of communication in business situations. The conducted secondary research shows the significance of the problems of those professionals who experience speech fright, but also presents methods by which the effects of anxiety can be reduced or even eliminated. The results of the research provide important guidelines for the preparation of public appearances in all professions in which it is part of business activities.

#### **Key Words**

public speech, business speech, business presentations, speech fright, fear of public speaking, speech fright symptoms, fright management methods

#### Introduction

Public speaking has countless similarities with everyday conversation, but there are important differences and specifics that in public situations create anxiety. These differences can be determined through the larger audience to which the speech is addressed, the time limit in which the message is expected to be conveyed, and there is not too much room to interrupt and possibly correct what is said as can be expected in everyday conversations. Public speaking must be based on a logical structure, which is why it requires a good preparation (Tafra-Vlahović, 2013). All of this suggests that public

speaking is an extension of lifelong communication skills. It is the characteristics that determine public speech, but also the importance of the outcome of that specific communication process that leads to the appearance of anxiety. Anxiety is defined as a psychological, physiological and behavioral condition that is induced in animals and humans, by a current or potential danger, and can be a reflection of a pathological state of mind since the constant fear of the unknown or undefined comes from within (Gregurek, Pavičić, Gregurek jr., 2017). A person most often reacts to anxiety on the basis of the first signal at the perceived impending danger, and possible reactions are escape or fight (ibid). Speech fright is, by definition (Dimitrov Palatinuš 2013) energy that helps people when they are in situations of any kind of public appearance and occurs as a natural way in which the body puts all the senses in an active state, awake state, where a person consciously experiences time and space in which it finds itself, the very situation, which is why that person can act adequately. The National Institute of Mental Health announced that the fear of public appearance is present in as many as 73% of the population. According to numerous studies, this fear has a very high position on the scale of the most common fears, and on some of them it even triumphs or parries the fear of death (ibid.). Studer et.al (2011) provided results of their research on musical students according to which there are 65% of respondents that strongly need to receive more support and more information (84%) concerning stage fright and one third of the students experienced stage fright as a problem. The authors think that this was only moderately correlated with negative feelings of performance anxiety. Amir et.al. (2008) state that according to cognitive theories of anxiety, selective attention to negative social cues heightens anxiety and biases judgments of social events, thereby leading to ineffective social behavior.

Gobbard (1979) says that stage fright is an universal human experience that occurs with varying intensity in everyone who stands before an audience and is correlated with shame arises from conflicts around exhibitionism, from concerns over genital inadequacy, and from the fear of loss of control. Hamilton (2000) states that fear of other people's views, fear of rejection, fear of the unknown, traumatic experience from the past, and social anxiety can be triggers of nervousness before a public appearance. Clevenger (2009) cites the definition of speech fright by Floyd I. Greenleaf from his unpublished master's thesis that say: 'social speech fright an evaluative dissability, occurring in social speech situations characterized by anticipatory negative reactins of fear, avoidance and various internal and overt manifestations of tension and behavioural maladjustment'. Clevenger himself criticizes this definition and believes that it is not compatible with his obtained results of interviewing a large number of students about the experience of public speech anxiety. Speech fright is one of the universal phenomena that does not depend on a person's age, cultural background, gender, occupation or education (Furmark, et.al. 1999). A factor of significant influence on the occurrence of speech fright can also be the own experiences of individuals gained during life when they were exposed to similar situations. Even the oral examination in primary school has the characteristics of public speech because the person is (most often) exposed to the audience - classmates and the teacher who assesses the outcome. Experiences that accumulate through life can be negative, so they will only increase the anxiety with age, but they can also be positive, thus building self-confidence in an individual that plays a major role in combating anxiety (Verderber, Verderber, Sellnow, 2013).

The reasons why people experience this anxiety are numerous. Bippus and Daly (1999) present the ones discussed by theoreticians as increased selffocusing, fear of not meeting audience expectations, believing that one is dissimilar and subordinate to the audience, perceived skills deficiency, fear of evaluation, audience scrutiny, an uninterested or unresponsive audience, lack of experience in public speaking situations, poor preparation and a contagion effect in which adjacent speakers' anxiety increases an individual speaker's own anxiety. The same authors conducted an interesting resarch to find out what is the difference of stage fright explanation between those who has no formal background in communication and those who own previous public speaking experience. The first group of respondents administered nine factors: mistakes, unfamiliar role, humiliation, negative results, rigid rules, personality traits, preparation, audience interest, and physical appearance. In contrary, the respondents with previous public speaking experience impacted their ratings of these factors, but their personal level of public speaking anxiety was unrelated.

Tafra-Vlahović (2013) distinguishes four types of people according to how they deal with speech fright: those who avoid public appearances at all costs because the very thought of them creates anxiety; anticipators are those who worry excessively about their public appearance from the moment it is scheduled and are afraid of mistakes or criticism; adrenaliners feel a great deal of speech fright before a public performance and can be helped by calming techniques in order to eliminate the physical symptoms and improvisers who do not prepare well, so the speech fright catches them during public speaking. The cause of anxiety can be the situation itself or some intrinsic (internal) factors. Situational anxiety arises due to the burden of the situation or certain parts of the situation such as audience expectations, the importance of the outcome, the organization of space, the formality of the occasion and the like. Internal root of the speech fright on the other hand, is also called communication fear and refers to the internal relationship of the individual and the expected communication in public. It is most often conected with the fear of evaluation, feelings of inferiority, and Tafra Vlahović (2013) believes that the self-confidence of the speaker and the control over that fright is a necessary element of successful public speech and performance To be able to manage the speech fright one needs to know the own reactions and the methods of controling them.

Speech fright can trigger a whole range of different symptoms that make it difficult for an individual to communicate in public, but these symptoms can also influence significant negative outcomes of the communication process itself. Studer et.al. (2011) discussed fright that is perceived as having negative career consequences by a considerable percentage of the

students included in their research. Physical symptoms are caused by adrenaline because glucose is released in the blood, which supplies the muscles with energy, so they become tense and more ready for action (Lundeberg, 2001). Adrenaline causes a rapid heartbeat, speeds up the rate of breathing and increases blood circulation in the body, nausea, dizziness. sweating, trembling hands, kneeling, abdominal cramps, headaches and even fainting. Unpleasant symptoms lead to deconcentration, and even blackouts are possible when the speaker separates from the situation he is in, instantly feels the gap in minds and loses the flow of thoughts and forgets everything that was about to say. A significant problem can be caused by stuttering. Therapists have been dealing with stuttering as a speech impediment for a long time, and today there are various scales for measuring this problem. Bernardini et.al (2010) study children with stuttering and present The Speech Situation Checklist (SSC) that deal with individual's emotional reaction to and extent of fluency failures in particular speech situations. The SSC is a self-report checklist which is contained in the Behavior Assessment Battery (BAB), a multi-dimensional set of inter-related, evidence-based, self-report tests that provide normative data for children who do and do not stutter. The SSC has two components: Emotional Reaction (ER) that assesses speech specific negative emotional reaction to interpersonal speech settings and to specific sounds \ words and Speech Disruption (SD) that evaluates a person's report of speech disruption in the same situations. To determine the emotional reaction and later speech disrupitons, respondents are presented with 55 communication situations in which they must present their experience using the Likert scale in which to measure the ER, the statements are provided with the level of fear from: not afraid, a little afraid, more than little afraid, much affraid to very much affraid. The same Likert Scale is proposed for the SD where the respondents need to present the level of trouble they experince in the same situations. According to Bernardini et.al. (ibid) those who stattered score significantly higher than the ones that do not statter on the both sections of the SSC. Brutten i Vanryckeghem (2003), who are the initial authors of the presented scale, also designed a scale for adults. Although these are measuring instruments for people that stuttering is a regular speech barrier, the scale could be modified and used to measure stattering but as well appearance of other symptoms of fear and anxiety realted to speech fright.

Some of the other behavioral symptoms are agitation, anxiety, hyperactivity, inability to organize thoughts, forgetfulness, and some people tend to take sedatives to eliminate the symptoms of fear<sup>1</sup> and according to Studer et.al. (2011) the experience of stage fright as a problem significantly predicted the frequency of use and the acceptance of medication as a coping strategy. Severe symptoms of nervousness also lead to poor non-verbal communication, such as shaky voice, staring at the floor, quiet speech, repetition of the same sentences, redness in the face, avoidance of looking at the audience, hunching over, frequent correction of allegations and the

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<sup>&</sup>lt;sup>1</sup> http://hdd.hr/2020/04/02/trema/ , prikaz simptoma treme (posjećeno 12.02.2021.)

like. All of the above significantly contributes to the impression of insecurity.

Aronson, Wilson, and Akert (2012) addressed the topic of individual behavior in a group setting, that is, how the presence of others can have different effects on the way an individual behaves. They state that there are two variants of the presence of others; the first is completing the task with colleagues who are also completing some tasks and the second is completing the task in front of an audience whose main purpose is to observe the actions of the one who is performing. The results of dozens of researches proved to be consistent, and confirmed that if it was a relatively simple task or a wellpracticed activity, the individuals observed performed it better. On the other hand, if it is a more difficult task that seemed unknown or not practiced well, there was a counter-effect in which the person needed longer to solve it and less successfully (ibid). The presence of others creates extra energy and increases psychological excitement. For that reason, dominant behavior occurs if the task is simple and familiar, and vice versa if the task is more complex and unknown. Phenomenon where people perform easy tasks better in the presence of others is called social facilitation, and the phenomenon known as social interference is for the situations in which people perform complex tasks less well in the presence of others. Public speaking is recognized by most as a more complex task, especially if people are not accustomed to constant presentations. Consequently, it is concluded that the psychological excitement and sppech fright that occurs due to exposure to observers may negatively affect the outcome of a public appearance as an example of social interference. Potentially solving the task in the form of a public appearance will be more difficult and thus increase the chances of a negative outcome.

### Methods of reducing or eliminating speech fright in public appearances

Speech fright in public appearances is a significant obstacle and hindrance, and many occupations in which the occurrence of the same or its elimination is of key importance, have developed various techniques and methods that can achieve the desired mitigating effect of fright. Techniques and methods of reducing anxiety that are most often mentioned by the authors are: attitude change method, relaxation method through exercise, breathing exercises, visualization, voice training method, audience profiling method, method of focusing on public performance preparation, nonverbal communication management as the method and combined therapeutic methods.

Cognitive behavioral theory claims that the individual partially creates social phobia by exaggerating the probability and consequences of the failure and perceives speaking in front of those who listen as much riskier than it really is (Sedlan Konig, Peulić, Matijević, 2018) and the first method speaks about the importance of changing attitude towards fear and public appearances. This can also avoid blackouts and can ensure continuation of the speech because the skipping of thoughts is most often not noticed by the listener who does not know what was to be followed in the speech. Fear of possible mistakes and blackouts that an individual may encounter during a public

appearance, due to the fear of being insufficiently professional or adequate. can be avoided by skipping thoughts, and if the speaker remembers a lost thought during the speech, the same can be added to the speech later (Tomić, Radali, Jugo, 2020). Physical sensations described are never pleasant for the speaker and make public performance difficult, but while speech fright, palpitations, and nausea may not be so easily soothed, one can consciously change the way these symptoms interprets. The moment a person is overwhelmed by some of the feelings described, what can help is to make yourself convinced that it is excitement or liveliness due to public appearance, and even enthusiasm because a person has the opportunity to transfer the knowledge, skills or attitudes to other people who listen (ibid). It is often forgotten that every public performance is an opportunity to improve oratory, an exercise that makes you a better speaker, and that rarely mistakes will be noticed since the audience does not know the presentation plan and program in advance. Therefore, it is important for a person to change the attitude and see every public speech as an opportunity for improvement and an opportunity for growth in the role of a speaker, and through experience the negative speech fright transform it into the positive one. Psychologists recommend that every negative thought that occurs should be counteracted by at least five positive ones.

Exercise is a great way for some to get rid of excess negative energy and direct the adrenaline to something else before a public performance. There are a variety of active exercises as well as relaxation ones that are known to help reduce anxiety. The activity will stimulate circulation in the body. circulation of the entire system, facilitation of the oxygen supply to the brain, and also divert thoughts ahead of the speech that follows. Physical activity is a good way to get rid of feelings that occur with fear. In addition to active exercise, body and muscle relaxation plays a major role in body tension that occurs due to the fright of public appearance. First of all, it is necessary to make sure that the body is placed in the correct position, which primarily concerns upright posture. This enables the proper flow of internal energy, which, among other things, has a lot of influence on voice and pronunciation. It is equally important that the head is in the correct position with respect to the spine and neck, and to achieve this there are several simple exercises (Tafra-Vlahović, 2013) that aim to concentrate on stretching the neck muscles, relaxing the whole body, controlling muscle tension and regulating breathing.

Sedlan Konig, Peulić and Matijević (2018) believe that all body relaxation exercises as well as voice and pronunciation exercises start with proper breathing because if there is tension in the neck, speakers will force the voice from the throat and thus prevent interesting coloring of their voice. Breathing control is therefore very important, and breathing exercises are used not only for the purpose of calming down before a public performance, but in a number of panic-causing situations. Breathing exercises can be performed in a lying or sitting position, and in order to feel the constant flow of air, visualization of extinguishing the candles on the cake can be used and thus the air is exhaled. When breathing, breath control is important, and it can be performed with a longer pronunciation of f / s / š

sounds during exhalation. Exhalation control is equally extremely important when practicing breathing. In this sense, exercises are recommended in which the duration of inhalation and exhalation is counted, and exhalation should be longer and slower than inhalation. It is very important to breathe deeply before and during speech. An exercise that can be performed is deep breathing in a way that the diaphragm and abdomen stretches. Stretching the diaphragm is achieved by squeezing the air by pulling the abdomen to the extreme limits, and sometimes additionally pushing the abdomen towards the spine with the hand. When inhaling, the diaphragm is active and it is lowered by pushing the abdominal muscles forward. For one exercise. it is necessary to do about twenty such slow inhalations and exhalations (ibid). Breathing exercises are used not only for the purpose of calming down before a public performance, but in a number of panic-causing situations. People who suffer from anxiety, panic attacks and similar conditions know that learning how to breath properly, and breathing for the purpose of calming down can be of great help. Studer et.al. (2011) say that in their research breathing exercises and self-control techniques were rated as effective as medication.

Speech organs are rarely paid attention to, and are very important in forming a dynamic and clear voice to be used during a public appearance. One of the symptoms of speech fright is trembling of the voice, which makes fright easier to notice during speech. Škarić (2000) describes in details the course of different voice exercises and states their importance. The stretching and relaxation exercise has the task of increasing the alertness of the brain as the muscles fill and empty with blood while stretching the joints (jaw, shoulders, collarbones, elbow bones, and stretching the ligaments) contributes to easier and safer voice release when speaking. What is equally important is to move the head up - down, left - right to relax the tendons and thus increase the sense of speech in the body (ibid). The so-called 'thunderous ha' exercise is often cited as a very effective one. Exercise resembles a strong cough, but differs from a cough in the work of the larynx. It is recommended to make a dozen voices "ha" within the eight seconds. It is necessary to open the mouth wide for better sound resonance. Vibrations are felt in the nose and face during this exercise. Individuals with the nasal voice problem, there are exercises such as the one aiming to increase the air pressure in the mouth - which is achieved by greater inflow and less swelling of the air from the mouth, while the other exercises cancels the pressure difference in the pharyngeal, nasal and oral cavities (ibid).

The visualization method works on the principle of a mental draft of the presentation that everyone creates for themselves. Most people before an expected public appearance visualize and imagine only negative scenarios that can happen. This is not necessarily bad because it can predict possible positive responses, but in preventing anxiety it is important to focus on positive outcomes within the visualization. Positive visualization evokes real positive feelings. Many actors, musicians, athletes, and other publicly exposed people use a visualization method that is closely related to a positive mindset. Tafra-Vlahović (2013) believes that the effectiveness of visualization is based on the fact that such stimuli act on a subconscious

level and then control further, so a person who really believes that is not a good speaker and thus thinks and feels about itself gets back such a stimulus that really makes it impossible to be a good speaker. As one of the main techniques in public speaking and communication workshops, visualization is carried out in two phases. In the first phase, the individual develops positive speech towards itself, using positive words and expressions that replace the negative or binding ones, for example "I have to" or "I need". In the second phase, the person imagines itself in a future situation in the role of a speaker in as much details as possible, with the characteristics that are wished to have possessed and as well the good reactions of the audience to the speech. Since everyone is free to make their own mental outline of the presentation before facing the audience, it is important that it is a positive one. A person should visualize itself as an interesting, eloquent, calm, confident speaker and as someone who easily conveys all thoughts and messages, fulfills the goals and the one whome the audience listens to with understanding. At the end of the presentation/speech performance, mutual satisfaction is felt - of the speaker and of the audience that received new information (ibid). It is great if the speaker has the opportunity to see in advance the space in which presentation will take place, because that way the visualization can be properly and completely implemented. The audience can also be imagined in the same way. If it is known in front of which type of audience the performance will take place, one can prepare and visualize better. It is important to remain realistic and concrete in the visualization, with an emphasis on the positive outcomes of the performance (ibid). Lucas (2015) considers it to be an extremely effective method that in combination with others leads to superior results.

Knowing the audience helps in choosing the appropriate content. vocabulary, way of presenting the speech, how to establish contact with the audience and how to keep attention and prepare visual aids (Tomić, Radalj, Jugo, 2020). Therefore profiling the audience is recognized as a good method to reduce speech fright. It is not the same to speak in front of a group of retired professors, at a conference for national minorities or a panel on environmental care where the audience is high school students. The speaker can use several methods to determine how to tailor the message to a particular type of audience. These are targeted analyzes according to demographic, psychological and situational factors. If the speech is given in front of people who have a certain knowledge of the topic to be exposed, it can be concluded that they want to learn more and learn something new. If there is insight into who will be listening to the speech, one can think in advance about how the topic will be presented, whether a more relaxed friendly approach will be used or whether something more serious needs to be taken (McKay, Davis, Fanning, 2009). It is rarely that one knows absolutely all the characteristics of the audience before the speech, such as political views, so it is better to remain indifferent to such topics and intuitively adapt to the speech. Information that the speech will be given in front of a specific group of people, for example students, can be helpful, as it gives the speaker background information about the age of the audience and their general interests can be more easily guessed. The age of the

needs to be adapted and the amount of humor that will be used should be well measured. It can also be expected that part of the listeners will wander in their thoughts, and that part will actively follow and possibly ask questions. Therfore it is to be known in advance that it is important to stay dynamic and keep the attention of those who wander. The most important thing is to pay attention to the audience and be guided by intuition when speaking, monitoring reactions and then change the direction or manner of speaking if necessary (Tafra-Vlahović, 2013). Situational analysis of the audience refers to situational factors, which are the physical environment, the size of the audience, the attitude of the audience towards the topic and the like. What can usually be known before the performance is whether the audience will attend voluntarily, how many people are expected, whether there are people in the audience who already have some knowledge about the topic to be talked about and what they expect from the speech performance. Audience size is a very important piece of information that can be obtained, because as a rule, the larger the audience - the more formal the speech or performance. Speaking time also carries its importance, although it is rarely paid attention to. If the presentation is prepared in the evening, fatigue can be expected, which is why it is necessary to make an additional effort to maintain the concentration of the audience. Every occasion expects an adequate speech, so the evaluation of the occcasion as to define whether it is a classic lecture, a speech on a panel, a solemn occasion or something else is of great importance. Audience profiling can be helpful in many ways, although the speaker will not fully adapt to the audience until the duration of the very public speech. When the one steps on stage, greeting by one of several types of audience can be expected: friendly, neutral, disinterested, or hostile (ibid). It is possible to address a friendly audience in a warm and open way, use humor, anecdotes and talk about their experiences, while a neutral audience likes controlled speech, without exaggeration and "performances" and presentation of facts, statistics, expert opinions, and humor is used less often. . If the audience's disinterest is obvious, the performance should be as dynamic as possible, using short and simple structures, powerful quotes, and colorful visuals. With a hostile audience, any jokes are avoided, objective information is given, and the performance must be as calm and controlled as possible, without a major change in voice dynamics (ibid). Good preparation before public speech performance is the most important method that should always be used. Perparation of the subject/topic as well can be vieved as to ensure previously described phenomenon of social

audience is very important because people's attitudes are not the same across all age groups. In addition to the attitudes, there is an expression that

Good preparation before public speech performance is the most important method that should always be used. Perparation of the subject/topic as well can be vieved as to ensure previously described phenomenon of social facilitation where people perform easy tasks better in the presence of others as it can be concluded that well preparad and familiar subject/topic becomes an easier if not easy task. Along with preparing the content of the speech and getting familiar with the speech flow, preparation may involve making additional materials or aids that can contribute the success. Especially if statistics are presented, visual representations can be of great benefit when presenting (Lucas, 2015). The person expecting a public

appearance must ensure a good knowledge of the topic being presented, but this does not apply exclusively to the preparation of materials and learning the content. Preparation includes thinking about possible questions that the audience will have and might ask and preparing for answering and discussing, and preparing clues in a logical sequence that will help the speaker not to get lost during the performance. The clues can be prepared on simple paper, in the form of terms that will remind the speaker what to talk about if the flow of thought is accidentally lost during the speech. It is by no means recomended to write an entire presentation or speech on paper and then read it in front of an audience. Preparation will in itself reduce the nervousness and drive away most of the mistakes that might otherwise occur.

When one faced the speech fright, reconciling all elements of communication is difficult. Fear convulses the person, pulls him in, and the hands tremble along with the voice. The audience receives a large part of the message through non-verbal signals, so it is easier to trust a speaker whose non-verbal communication is aligned with the verbal and when the audience feels self-confidence of the speaker. The method of reducing anxiety is a preparation that also includes assessing one's own non-verbal communication management skills and putting nonverbal signals under control. Paraverbal communication that refers to the way something is said (Mehrabian, 2009) is of a significant role and a significant element of nonverbal communication. It is necessary to speak clearly, loudly enough, at an appropriate pace (neither too slow nor too fast), and long pauses should be avoided (especially those such as "mmm" sounds between words or sentences). Mehrabian advises maintaining eye contact, which gives the impression of persuasiveness, and each listener will feel that the speaker is addressing him and that the speaker cares about the reaction of each one in the audience. During the presentation, it is not good to stand in one place, but to move as needed (except when the situation requires standing still, in front of a speaker, etc.). A person should ensure standing upright, not hunching over. It is important to please the audience from the very beginning, so it is good to have a smile on your face to show listener's friendly approach and so the audience would return it with their reactions. The guestion of "where to put your hands" often arises, as it is not convenient to keep your hands in your pockets when presenting. It is best to have some kind of aid, such as a ballpoint pen that can be held in the hands with appropriate gesturing, but the recommendation is to be careful not to overdo it. A presnter/speaker should keep in mind that dressing is also an integral part of non-verbal communication and that the choice of clothing sends messages to the audience about the speaker himself as well as about perception of the situation and the topic that is being the speaker's presented. By making the wrong choice, especially if it is about uncomfortable clothing, a person will increase the level of nervousness and make it impossible to control and reduce speech fright.

Tafra-Vlahović (2013) presented combined therapeutic methods such as systematic desynthesis which involves deep muscular relaxation and deep breathing and then visualization of a situation that causes fear. Cognitive

restructuring as the other combined exercise is based on the belief that irrational thoughts that create unrealistic expectations and negative images cause oratory and rhetoric therapy that concentrates on speaking skills with the goal of improving interpersonal communication skills.

#### Conclusion

Public speaking causes mental and physical feelings of discomfort that correlate with the success of the communication outcome and can negatively affect the speaker's goals. That is why control and management of the speech fright in public appearances is of great importance in all professions and all business situations in which an individual is expected to speak in front of others, regardless of whether it is a smaller or larger audience. Therefore the fright should not be neglected or underestimated. Secondary research presented in this paper has shown that there are a number of techniques that can be used to influence anxiety as well as that any professional could use these to improve its business communication. Business success depends on many factors, and the quality of communication success is definitely one of them, so this topic should be given an appropriate place in business communication and research on speech fright should be continued in terms of determining the direct impact of this form of fear on business success and specifically what experiences with techniques and the methods of speech fright management successful business people use. The results of such research would provide important guidelines for educating businessmen and their preparation for more successful business based on quality and efficient business communication.

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## ASSESSMENT OF A CIRCULAR ECONOMY: CIRCULARITY INDICATORS AND ECONOMIC GROWTH

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#### **Abstract**

The transition from a linear to a circular economy offers many opportunities: resource preservation, implementation of new. technological solutions, creation of new business models and new jobs, to the reduction of the environmental impact of these changes. The aim of this paper is to assess the impact of the circular economy on the economic growth in EU countries. The analysis was conducted for 28 European Union countries during the time frame 2008-2018. The paper highlights that the economic development measured by gross domestic product, private investments, jobs and gross value added related to circular economy sectors affects the analysed circular economy variables and sustainable development.

#### **Key Words**

circular economy, economic growth, sustainable development, circularity indicators

#### 1. INTRODUCTION

The implementation of a circular economy has appeared as a response to the need to challenge the flaws of the current linear economic system. The current linear production method uses energy in all production phases; it is based on the "extract-produce-use-dump" model and represents an unsustainable production model. Contrary to linear production methods, circular economy systems retain added value from products for as long as possible with the aim of eliminating the generation of waste. Waste has become extremely present across the whole planet, and raw materials are in demand more than ever. It is estimated that around 80% of all materials and consumer goods are disposed of and that upon entering the food supply

chain, over 30% of processed food is thrown away (Scheel et al., 2020). In a circular economy, waste generation is minimized through the careful design of new products and an industrial process in which materials constantly circulate in a "closed-loop system" (Fischer & Pascucci, 2016). The circular economy enables economic growth and prosperity in accordance with environmental protection and sustainable development. With the aim of a more successful implementation of the circular economy in the European economy, in 2015 the European Union adopted the "Circular" Economy Strategy and Action Plan" and in 2020 adopted a new "Circular Economy Action Plan for a cleaner and more competitive Europe". The European Commission has assessed that transitioning to a circular economy would mean an additional 600 billion euros in annual economic gains for the European Union manufacturing sector (Korhonen et al., 2018). The transition from a linear to a circular economy offers many opportunities: from resource preservation, implementation of new, innovative technological solutions, creation of new business models and new jobs, to the reduction of the environmental impact of these changes. However, these changes are inseparable from the investments and challenges that must be overcome in order to achieve the goals of the circular economy. The research question is what impact the circular economy makes on the economic development? The aim of this paper is to assess the impact of the circular economy on economic growth. In this paper, a literature review encompasses the theoretical consideration of a circular economy concept. A methodology section describes the data and variables used and the methodology applied to target the main objectives of the research. In the research results section by using the Eurostat indicators and Historical Dataset of World Economic Forum, the economic development impact of members of the European Union in relation to the implementation of a circular economy was researched. The discussion and conclusions section analyses, discusses and concludes the obtained results. Considering the fact that evaluations of circularity and its influence on the national or macro level are insufficient, this paper represents a contribution in that field.

#### 2. LITERATURE REVIEW

#### 2.1. Concept of a Circular Economy

The circular economy concept has deep-rooted origins and cannot be traced back to one single date or author. Its practical applications to modern economic systems and industrial processes, however, have gained momentum since the late 1970s as a result of the efforts of a small number of academics, thought-leaders, and businesses (Ellen MacArthur Foundation, 2013). Pearce and Turner, who studied the impact of natural resources on economic systems and impact for linear and open-ended perspectives, have provided significant contributions (Ghisellini et al., 2015; Murray et al., 2017). Bouding (1966) has also influenced such a line of thinking because he studied the Earth as a closed circular system with a limited assimilative capacity and concluded that the economy and environment should coexist

in balance (Geissdoerfer et al., 2016). Stahel and Reday stated specific features of a circular economy with a focus on an industrial economy. They envisioned the economy as a closed loop with materials circulating, thus preventing the generation of waste, creating new jobs, achieving resource efficiency and the dematerialization of the industrial economy. Stahel argued that using the term 'consumption' instead of 'ownership' of goods is the most relevant sustainable business model for a circular economy, thus enabling the industry to profit without the need for external costs and risk regarding waste (Ellen MacArthur Foundation, 2013; Geissdoerfer et al., 2016). A circular economy can be defined in different ways. Lieder and Rashid (2015) point out that "there are various possibilities for defining circular economy", while Kirchherr et al. (2017) write that "there is no commonly accepted definition of circular economy". They define a circular economy as "an economic system that is based on business models which replace the 'end-of-life' concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution consumption processes, thus operating at the micro level (products, companies, consumers), meso level (eco-industrial parks) and macro level (city, region, nation and beyond), with the aim to accomplish sustainable development, which implies creating environmental quality, economic prosperity and social equity, to the benefit of current and future generations". "Geng et al. (2008) reveal that it is "an economy based on a spiral loop, i.e., a system that minimizes matter, energy flow and environmental deterioration without limiting economic growth or social and technical advancement. Ellen MacArthur Foundation (2013) presents a circular economy as "an industrial system that is restorative or regenerative by intention and design. It replaces the 'end-of-life' concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models". Allwood et al. (2011) state that circular economy would be about reduction, reuse, recycling and recovery, but that "in reality much policy has been oriented towards promoting the third".

The main aim of the circular economy is considered to be economic prosperity, followed by environmental quality; its impact on social equity. Economic prosperity is most frequently mentioned by practitioners who are oftentimes said to view circular economy as a pathway to boost growth (Ghisellini et al., 2015). "A circular economy aims to 'design out' waste". Waste does not exist—products are designed and optimised for a cycle of disassembly and reuse. With the adoption of a circular economy, unlimited resources like labour take on a more central role in economic processes, and resources that are limited by natural supply play more of a supporting role". A circular economy has benefits that are operational as well as strategic, on both a micro- and macroeconomic level. The transition to circular economy needs to occur at three levels which can be interpreted as three levels of the circular economy system: The macro, the meso and the micro system. While the macro-systems perspective highlights the need to adjust industrial composition and structure of the entire economy, the meso-systems

perspective usually focuses on eco-industrial parks as systems and this level is also called the 'regional level' at times. Meanwhile, the micro-systems perspective usually considers products, individual enterprises and what needs to happen to increase their circularity as well as consumers (Kirchherr et al., 2017).

The economic benefit of transitioning to this new business model is estimated to be worth more than one trillion dollar in material savings. This is a trillion-dollar opportunity, with huge potential for innovation, job creation and economic growth. "The corresponding shift towards buying and selling 'performance' and designing products for regeneration should also spur positive secondary effects such as a wave of innovations and employment in growth sectors of the economy, whilst increasing Europe's competitiveness in the global marketplace" (Ellen MacArthur Foundation, 2013). The circular approach offers developed economies an avenue to resilient growth, a systemic answer to reducing dependency on resource markets, and a means of reducing exposure to resource price shocks as well as societal and environmental 'externality' costs that are not picked up by companies. A circular economy would shift the economic balance away from energy-intensive materials and primary extraction. It would create a new sector dedicated to reverse cycle activities for reuse, refurbishing, remanufacturing, or recycling on the technical side, and anaerobic digestion, composting and cascading on the biological side. The circular economy will generate benefits for stakeholders on every level—customers. businesses, and society as a whole (Ellen MacArthur Foundation and McKinsey & Company, 2014). Meyer assessed that increasing the efficiency in resource consumption can save 17%-24% of raw materials, as well as 630 million euros in costs in Europe. Based on product-based modelling, it has been assessed that applying the circular economy concept could increase the European Union's GDP by 3.9% by 2030 (Grdic et al., 2020).

#### 2.2. Core principles of the circular economy

In the beginning, the circular economy concept was based on the 3R principle (reduce, reuse, recycle), which were at the core of the 2008 Circular Economy Promotion Law of the People's Republic of China (PRC, 2008). The 4R framework was presented in the European Union (EU) Waste Framework Directive (European Commission, 2008) introducing 'Recover' as the fourth R. More recently scholars have proposed R frameworks beyond the 4R framework, such as the 6Rs (reuse, recycle, redesign, remanufacture, reduce, recover) (Jawahir & Bradley, 2016) or even 9Rs with the latter framework, possibly the most nuanced one, depicted in Fig. 1. (Kirchherr et al., 2017).

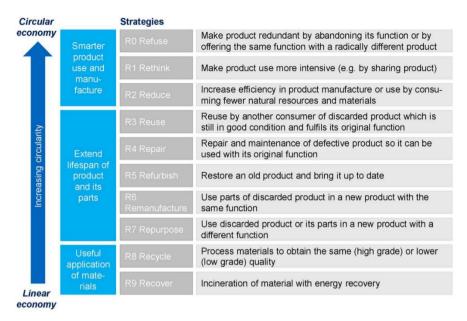


Figure 1: The 9R Framework (Kirchherr et al., 2017)

#### 2.3. Circularity and economic development indicators

Geng et al. (2008) point out that indicators are very important for the evaluation, monitoring, and improvement of various policies and programmes aiming for the implementation or improvement of the circular economy concept. Most research of the implementation of a circular economy concept focused on the particular products or parts of the manufacturing process or the possibility of implementing a circular economy concept in a particular company, therefore the knowledge base has truly increased in recent years for some elements of the manufacturing cycle, as well as for the possibility of implementing the circular economy concept in a particular company or industry. For instance, Sassanelli et al. (2019) proposed to measure circular economy sites and how they can be characterised and classified. They concluded that circular models can be measured taking care of different aspects. Silvestri et al. (2020) built two composite indicators — the Circular Economy Static Index and the Circular Economy Dynamic Index — that permitted both a static and a dynamic evaluation of the circular economy performance of European regions. Garcia-Bernabeu et al. (2020) used a multi-criteria approach to construct a circular economy composite index based on Technique for Order Preferences by Similarity to Ideal Solutions methodology. Robaina et al. (2020) used cluster analysis with three econometric estimation methods: panel unit root test, panel cointegration tests, and vector autoregression model. Momete (2020) developed an index which intends to provide the best/worst performers within the EU area in terms of readiness of EU nations to pass to a sustainable circular economy. Scheel et al. (2020) developed the linear production model with the United Nations Environment Program current four decoupling indicators in order to propose a more robust model. Moraga et

al. (2019) gave the classification framework to categorise circular economy indicators according to the reasoning on what (circular economy strategies) and how (measurement scope). Howard et al. (2019) provided a framework for developing circular economy indicators which link to the core goals, principles, and building blocks of a circular economy. Many authors used Eurostat indicators for their research. Busu and Trica (2019) present the economic factors that are at the basis of the development of a circular economy on the European Union level. They proposed a methodology that enables the evaluation of a circular economy model's sustainability by monitoring various indicators pertaining to the environment in order to determine the model's effect on the economic growth of the EU Trica et al. (2019) conducted research about the economic factors of the sustainable development of a circular economy based on the findings of economic literature in the field. George et al. (2015) constructed a circular economy model with two types of economic resources, namely, a polluting input and a recycling input. The results they obtained point towards several factors playing a key role in the development of economy. These factors are the levels of pollution stemming from using the polluting input, the expenses incurred from using the polluting input, the recycling ratio, and recycling input in the sense of its marginal product. Ghisellini et al. (2015) et al. evaluated the transition to a circular economy in Italy. Nonetheless, allencompassing assessments of circularity on the national or macro level are rare.

In this paper, real GDP per capita, Global Competitiveness Index (GCI) and Eurostat circular economy monitoring framework are used for the analysis of the implementation of the circular economy and economic development. Eurostat circularity indicators are defined as "a quantitative or qualitative factor or variable that provides a simple and reliable means of measuring achievement" and are divided into four areas, as depicted in Fig. 2:

- Production and consumption. Economic sectors should decrease the amount of waste they generate. In the longer term, this behaviour may contribute to an increasing self-sufficiency of selected raw materials for production in the EU;
- Waste management. Increasing recycling is part of the transition to a circular economy. This area focuses on the share of waste which is recycled and actually returned into the economic cycle to continue creating value;
- Secondary raw materials. To close the loop, material and products need to be re-introduced into the economy, for example in form of new materials or products. Recycled materials replace newly extracted natural resources, reduce the environmental footprint of production and consumption and increase the security of the future supply of raw materials;
- Competitiveness and innovation. The circular economy contributes to the creation of jobs and growth. The development of innovative technologies improves product designs for easier re-use and promotes innovative industrial processes.

#### Circular economy monitoring framework



Figure 2: Circular economy monitoring framework (Indicators - Circular Economy - Eurostat)

These groups of indicators are further divided into individual indicators calculated for all EU member countries.

#### 3. METHODOLOGY

To answer the research question and to estimate relations and find out the values of the relevant variables the econometric model was formed. Conducting correlation and regression analysis, only normally distributed and linearly related indicators of the circular economy monitoring framework were evaluated. Statistical analysis explored the Pearson correlation between the stated variables: real GDP per capita and GCI identified as independent variables while the observed dependent variables include generation of municipal waste generation per capita, recycling rate of municipal waste, recycling rate of packaging waste, recycling of biowaste, circular material use rate and recycling rate of all waste excluding major mineral waste. The second part of the analysis explored the following regression model:

$$y_i = \alpha_i + \beta_i x$$

where y is one of the dependent variables and x is the independent variable. A regression analysis of real GDP per capita and dependent variables was performed using logarithmic scale while the regression analysis of GCI using linear scale. The statistical analysis was made in SPSS software package. The variables were calculated independently for each member country of the EU (28) for the period from 2008 to 2018. The sources of the indicators are the

Eurostat database and Historical Dataset of 2007-2017 World Economic Forum, however some data for particular years and countries were unavailable.

Further, TwoStep clustering has been applied to group countries into clusters and to determine to which cluster each country belongs to.

#### 4. RESEARCH RESULTS AND DISCUSSION

GDP is obviously the most important macroeconomic variable which measures aggregate activity. Employment is the other variable which is important aspect of how an economy is performing. This paper analyses whether economic development measured by real GDP per capita and GCI affect the analysed circularity indicators of the EU countries such as Municipal waste generation per capita, Recycling rate of municipal waste, Recycling rate of packaging waste by type of packaging, Recycling of biowaste, Recycling rate of all waste excluding major mineral waste, Circular material use rate and what is the growth of Private investments (Gross investment in tangible goods), jobs (Persons employed) and Gross value added at factor cost related to circular economy sectors. The other indicators of the circular economy monitoring framework were not investigated as they were not linearly related or normally distributed.

The analysis of the economic development indicators reveals that the top 5 countries with the highest average real GDP per capita are Luxembourg, Denmark, Ireland, Sweden, and the Netherlands (see table 1), the country with the lowest average real GDP per capita is Bulgaria (5692 Eur) which is more than 14 times lower compared to Luxembourg. The top 5 countries with the highest average GCI are Sweden, Finland, Germany, the Netherlands, and Denmark (see table 2), contrary Greece shows the lowest average GCI which is approximately equal to 3,997. Denmark, Sweden, and the Netherlands are the countries which not only generate the highest average real GDP per capita but also are the most competitive in the EU.

highest average real GDP per capita highest average GCI (Eur)

Country	Average
Luxembourg	80 488
Denmark	45 734
Ireland	44 455
Sweden	41 473
Netherlands	39 454

Table 1: Top 5 countries with the Table 2: Top 5 countries with the

Country	Average
Sweden	5,5116
Finland	5,4765
Germany	5,4612
Netherlands	5,4186
Denmark	5,3780

The circular economy has the potential to contribute to the creation of jobs and economic growth. Innovation and investments - on eco-design, on secondary raw materials, on recycling processes and on industrial symbiosis - are a key element of the transition to a circular economy. Specific sectors that are closely related to the circular economy such as the recycling and repair and reuse sectors are particularly job intensive and contribute to local employment (Indicators - Circular Economy - Eurostat). The analysis of

private investments, jobs and gross value added related to circular economy sectors reveals that the top 5 countries with the highest value added are Germany, United Kingdom, France, Italy and Spain (see table 3), in contrast. the country with the lowest value added indicator is Cyprus (163 Mn Eur).

highest Value added (Mn Eur)

Country	Average
Germany	29 420
United Kingdom	24 406
France	20 957
Italy	17 467
Spain	10 789

Table 3: Top 5 countries with the Table 4: Top 5 countries with the highest Gross investment in tangible goods (Mn Eur)

Country	Average
United Kingdom	3 973
Germany	2 620
France	2 285
Italy	2 182
Spain	986

These countries except the latter are also the biggest investors in tangible goods and the biggest employers of the recycling and repair and reuse sectors (see table 4 and 5). The least number of people employed in recycling and repair and reuse sectors is in Cyprus (6916).

Table 5: Top 5 countries with the greatest number of Persons employed

Country	Average
Germany	598 546
Italy	517 642
United Kingdom	470 885
France	445 949
Spain	350 851

For ten years period the greatest growth of value added of these sectors shows Hungary (111%), Lithuania (66%) and Slovakia (59%). However, in 2018 in Greece value added decreased by 32% and in Latvia - by 4% (see Pict. 3). Nevertheless, the value added of the recycling and repair and reuse sectors of the EU28 countries increased by 20% compared to 2018 and 2008.

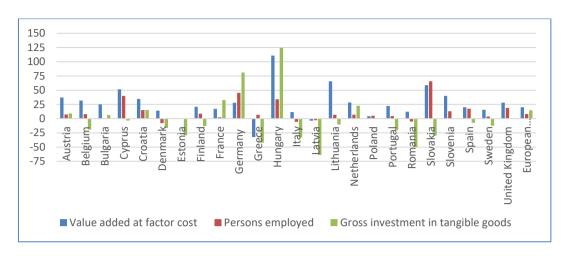


Figure 3: The growth of value added, persons employed and gross investment of the recycling and repair and reuse sectors in 2008 and 2018

The analysis of persons employed in these sectors reveals that the highest growth was achieved in Slovakia (66%), Germany (45%) and Cyprus (40%). Contrary, in 2018 a number of persons employed in the recycling and repair and reuse sectors declined in Denmark (8%), Italy (6%), Romania (5%) and Latvia (3%) compared to 2008. Nonetheless, during the period the total number of persons employed in these sectors increased by 8% in the EU28 countries. The research point out that the growth of gross investment in tangible goods in the recycling and repair and reuse sectors boosted in Hungary (125%) and Germany (81%) during analysed period. In contrast, in 2018 the gross investment significantly diminished in Latvia (64%), Romania (50%) and Greece (42%) in comparison to 2008. Yet, the gross investment of the EU28 countries raised by 15% during the decade. In conclusion, the increase of circularity indicators such as value added, investments in tangible goods and persons employed of the recycling and repair and reuse sectors make a positive impact on economic growth and sustainable development.

Looking at municipal waste generation per capita, the top 5 leading countries are Denmark, Luxembourg, Cyprus, Malta and Germany (see table 6), in contrast, the country with the lowest municipal waste generation per capita indicator is Romania (288 kg per capita). An important indicator as well is the recycling rate, which indicates that, even though particular countries generate large amounts of waste, they also measure high in the recycling rate of packaging waste — Denmark (70%), Luxembourg (66%) and Germany (71%), excluding Cyprus (55%) and Malta (48%) which recycle about a half of packaging waste.

Table 6: Top 5 countries with the highest average municipal waste generation per capita (kg)

-	\ <b>J</b> /
Country	Average
Denmark	819
Luxembourg	702
Cyprus	657
Malta	631
Germany	615

Table 7: Top 5 countries with the highest average recycling rate of packaging waste (%)

Country	Average
Belgium	81
Netherlands	73
Germany	71
Czechia	71
Denmark	70

Countries with less than average real GPD per capita value and weaker purchasing power such us Spain, Slovenia, Portugal, Czechia, Slovakia, Estonia, Lithuania, Hungary, Croatia, Poland, Latvia, Romania and Bulgaria generate less than average municipal waste per capita, except Cyprus, Malta and Greece.

The results of correlation analysis reveal a positive correlation between the real GDP per capita and all other variables which indicate that by increasing GDP it can be expected that the other variables will increase as well. All correlations are statistically significant (see table 8). Correlations between 0.3 and 0.6 can be considered moderate, so a greater impact is expected. In this case, recycling rate of all waste excluding major mineral waste, recycling rate of packaging waste and circular material use rate will be influenced much more. Coefficients over 0.6 imply a strong correlation, thus making the impact great as well. Among the researched variables, they are the municipal waste per capita, the recycling rate of municipal waste and the recycling of biowaste. The regression analysis indicates that increasing GDP per capita by 1% would mean an average increase of around 1.35 kg municipal waste per capita, 0.18 kt recycling rate of municipal waste, 0.14% in the recycling rate of all waste, around 0.08% in the recycling rate of packaging waste, around 0.59 kg per capita in the recycling of bio-waste, and around 0.05% in the circular material use rate.

Table 8: Relations between GDP and circularity indicators of EU countries

Statistic al Indicato r	Generati on of municipa I waste per capita (kg)	Recycli ng rate of munici pal waste (kt)	Recycling rate of all waste excluding major mineral waste per GDP unit (%)	Recycli ng rate of packag ing waste (%)	Recycli ng of biowas te (kg per capita)	Circul ar mater ial use rate (%)
Correlat ion coeffici ent (Pearso n)	0,664	0,641	0,514	0,455	0,712	0,468

R						
Square	0,453	0,476	0,319	0,262	0,550	0,259
Coeffici						
ent	134,76	17,898	14,454	8,033	59,211	4,942
		< 0,001	< 0,001	< 0,001	< 0,001	<
<i>p</i> -value	< 0,001					0,001
t-						
statistic	15,841	16,580	6,877	10,298	18,630	8,240
N	305	305	103	300	286	196

Further analysis defines the positive correlation between GCI and all other variables, which indicates that by increasing GCI, it can be expected that the other variables will increase as well. All correlations are statistically significant too (see table 9). The greater impact is expected on municipal waste per capita, recycling rate of all waste, the circular material use rate and recycling rate of packaging waste. The recycling rate of municipal waste and the recycling of biowaste are expected to be affected much more because they have strong correlation. The regression analysis indicates that increasing GCI by 1% would mean an average increase of around 1.1 kg municipal waste per capita, 0.25 kt recycling rate of municipal waste, 0.14% in the recycling rate of all waste excluding major mineral waste, around 0.1% in the recycling rate of packaging waste, around 0.71 kg per capita in the recycling of bio-waste, and around 0.07% in the circular material use rate.

Table 9: Relations between GCI and circularity indicators of EU countries

Statistic al Indicato r	Generati on of municipa I waste per capita (kg)	Recycli ng rate of munici pal waste (kt)	Recycling rate of all waste excluding major mineral waste per GDP unit (%)	Recycli ng rate of packagi ng waste (%)	Recycli ng of biowas te (kg per capita)	Circul ar mater ial use rate (%)
Correlat ion						
coeffici						
ent (Pearso						
n)	0,436	0,769	0,415	0,517	0,708	0,590
R	0.100	0.504	0.172	0.267	0.502	0.249
Square Coeffici	0,190	0,591	0,172	0,267	0,502	0,348
	110,94	25,350	14,233	10,437	71,168	7,387
ent						
	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0.004
<i>p</i> -value						0,001

t-						10,18
statistic	8,438	20,945	4,583	10,430	16,914	0
N	305	305	103	300	286	196

TwoStep cluster analysis was performed to group countries into two categories with low and high real GDP per capita, recycling rate of municipal waste, recycling rate of all waste, recycling rate of packaging waste and recycling of biowaste. The second cluster analysis grouped countries into two categories with low and high GCI, recycling rate of municipal waste, recycling rate of all waste, recycling rate of packaging waste and recycling of biowaste. The cluster profiles are depicted in picture 4.

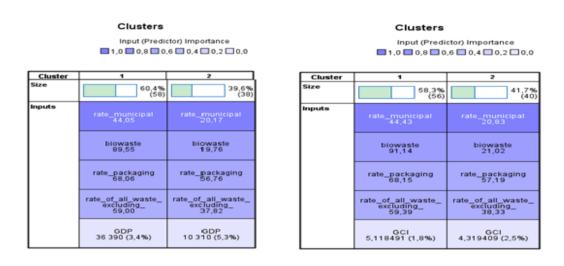


Figure 4: Cluster profiles

The centroids of both analyses are almost the same. The most important predictor is recycling rate of municipal waste (importance 1), in contrast, the least significant predictor is the real GDP per capita (importance 0.02) and GCI (importance 0.02). The size of clusters of the two analyses are also almost equal. The first cluster analysis reveals that the size of the first cluster is 60,4% while the scope of the second cluster is 39.6%. The cluster distribution of the second analysis is very similar: the magnitude of the first cluster is 58.3% whilst the second cluster is 41.7%. As the profiles of the clusters of the two analyses are similar thus the enrolment of the countries into clusters is quite identical as depicted in table 10.

Table 10: Cluster membership of the EU28 countries in 2008-2018

Country	Analysis with real GPD per capita		Analysis with Global Competitiveness Index		
	1 cluster	2 cluster	1 cluster	2 cluster	
Austria	+		+		
Belgium	+		+		

Bulgaria		+		+
Cyprus		+		+
Croatia		+		+
Czechia	+ (from 2012)	+ (untill 2010)	+ (from 2012)	+ (untill 2010)
Denmark	+		+	
Estonia		+		+
Finland	+ (from 2012)	+ (untill 2010)	+ (from 2012)	+ (untill 2010)
France	+		+	
Germany	+		+	
Greece				
Hungary		+		+
Ireland	+		+ (from 2012)	+ (untill 2010)
Italy	+		+ (from 2012)	+ (untill 2010)
Latvia				
Lithuania	+ (from 2016)	+ (untill 2014)	+ (from 2016)	+ (untill 2014)
Luxembourg	+		+	
Malta		+		+
Netherlands	+		+	
Poland		+		+
Portugal	+ (from 2014)	+ (untill 2012)	+ (from 2014)	+ (untill 2012)
Romania		+		+
Slovakia		+		+
Slovenia	+ (from 2012)	+ (untill 2010)	+ (from 2012)	+ (untill 2010)
Spain	+		+	
Sweden	+		+	
United				
Kingdom	+		+	

The first cluster consists of the countries with the higher real GDP per capita, GCI and circularity indicators than the mean value of these indicators of the EU28 countries, except Czechia, Lithuania, Portugal, Slovenia, and Spain. Contrary, in the second cluster there are listed countries with the lower than average value of these indicators. Czechia, Finland, Lithuania, Portugal, and Slovenia changed their position of cluster membership because of the growth of the analysed indicators, especially Lithuania which recycling rates boosted in 2016 compared to 2014, i.e. recycling rate of packaging waste jumped by 63%, recycling rate of municipal waste increased by 18%. In conclusion, countries that generate higher real GDP per capita and have higher Global Competitiveness Index recycle more waste.

#### 5. CONCLUSIONS

The most common linear economic model is based on the conviction that resources are unlimited and that there is limitless space for waste disposal. Such a model is clearly unsustainable, and changes must be made. Transitioning to a circular economy requires not only to change one single activity, but systemic changes in industry, social components, energy, transportation, agriculture, and more. Each country in the EU has its own

specificities and limitations, which results in different approaches and time frames for transitioning to a circular economy (Grdic et al., 2020).

In this paper, real GDP per capita, Global Competitiveness Index and Eurostat circular economy monitoring framework were used for the analysis of the implementation of the circular economy and economic development. The variables were calculated for each member country of the EU (28) for the period from 2008 to 2018. The sources of the indicators are the Eurostat database and Historical Dataset of 2007-2017 World Economic Forum. however some data for particular years and countries were unavailable. The analysis of the circularity indicators of recycling and repair and reuse sectors such as value added, investments in tangible goods and persons employed presents that all the indicators increased from 2008 and 2018 and therefore made a positive impact on economic growth and sustainable development. The correlation and regression analysis reveals that there is a positive connection between economic development and circular economy indicators and between the Global Competitiveness Index and circularity indicators. However, some variables have low R<sup>2</sup> value and moderate correlation therefore GDP and GCI will have a weaker predictive value for those variables. TwoStep cluster analysis affirms that countries with the higher real GDP per capita and Global Competitiveness Index recycle more waste. Overall, the application of the circular economy concept can ensure economic growth, GDP growth and global competitiveness while reducing the use of natural resources and ensuring greater environmental protection. Taking in to account that assessment of the impact of the circular economy on the national or macro level are insufficient, this paper represents a contribution in that field.

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# PROPOSED INTEGRATED MARKETING COMMUNICATION STRATEGY TO INCREASE REVENUE OF BIG DATA CONSULTING COMPANY (PT. METROCOM JADDI TECHNOLOGY)

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#### **Abstract**

Big data is big business in today's commercial world. Information is precious, and with big data, the business stands to become more powerful. As the world of digital continues to mature, more big data metrics are being created from an ever-expanding range of sources, meaning businesses like this can really drill down and find out everything they need to know about their customers.

PT. Metrocom Jaddi Technology, as one of the companies involved in the industry of business consulting and systems integration, is increasingly experiencing fierce competition. The growth often results in weak productivity, minimal profitability, and negative job creation, even though the growth of the needs IT capital market in Indonesia is very rapid. So based on this reason, the author proposes research to evaluate, identify problems exist on the sales and marketing activity, and propose recommendation as an improvement for Big Data solution services selling strategy which will be impacted to business productivity as a part of company achievement.

The research was conducted by conducting the study for the internal and external conditions of Metrocom Jaddi Technology. External analysis is using the PESTEL framework, Porter's five forces, Competitor Analysis by comparing 7p of Metrocom Jaddi Technology, and Customer Analysis through interview. While internal analysis is using Segmenting, Targeting, Positioning (STP), VRIO Framework, Business Model Canvas, and internal interview with several members from management and internal team. The result from the analysis will be processed using SWOT analysis to find the real root cause of the reduction of sales in Metrocom Jaddi Technology.

SWOT Analysis, TOWS Analysis, low brand awareness, sales decrease

#### INTRODUCTION

The technology consulting industry has gone through a significant number of changes over the past few years. Refer to the <a href="https://linchpinseo.com/">https://linchpinseo.com/</a>, Since preparation and knowledge can often be vital, most firms may need to know what these trends are. Though they will have varying impacts on the industry, they should make their presence known. As such, it is in every technology consulting company's best interest to know what may be lying ahead for them. (Team Linchpin, 2020)

Data, information, collecting, and analyzing data have played a crucial part in humankind's ability to survive and thrive since the dawn of consciousness. Gartner's definition, circa 2001 Big data, contains greater variety arriving in increasing volumes and with ever-higher velocity. Big Data is known as the four Vs. Put, big data is more extensive, more complex, and valuable data sets, especially from new data sources. These data sets are so voluminous that traditional data processing software cannot manage them.

Considering the importance of Big Data Solution Services, it is necessary to research marketing strategies to increase sales revenue of PT.Metrocom Jaddi Technology. Specifically, based on an interview with the President Director, PT. Metrocom Jaddi Technology has a problem with marketing programs that are not conceptualized yet and not run effectively. For instance, leaders operating mature small businesses might associate slow growth with inadequate marketing plans, informal control structures, and managers' lack of vision. This research focused on strategies that a mature small IT business uses by big data solution services to grow and possible improvements to continue to grow.

#### **THEORY**

Technology will keep evolving, and it's the nature of the beast. However, an Information Technology consulting organization can survive only if it's profitable. Based on High Value IT Consulting Sanjey Purba and Bob Delaney (2003: P.3), the bottom line has some flexibility timeframe and measurement methods, especially for complex mission statement in the organizations. IT Consulting organizations are B2B businesses selling services. Some products or frameworks may occasionally become part of the transaction, but usually, these play a smaller role in the sale. (Delaney, 2003)

As mentioned in the book Principle of Marketing published by University Of Minnesota Libraries 2015, Business-to-business (B2B) markets different from business-to-consumer (B2C) markets. The number of products sold in business markets petite the number sold in consumer markets. Many transactions had to happen before the client could purchase the product or services. (University of Minnesota Libraries, 2015). Many people in the

company can be part of the buying process and basically what gets earned, from whom and how much of it. Having different people proved makes business marketing much harder. (brainrider, 2010)

Therefore , in this sub-chapter below will explain each marketing B2B process step using several theories & frameworks such as PESTEL, VRIO, Porter Five's Forces, etcetera. The conceptual framework will be formed by many aspects, including analyzing environmental aspects, which are divided by the external and internal analysis, business strategy formulation, business model development, and the implementation (Camp, 2001). In terms of this research, the author uses the conceptual framework to breakdown the idea from problem identification until suggesting an implementation plan.

Business Issue Problem Formulation Research Method Secondary Data Primary Data References, Observation & interview Data Analysis External Analysis Segmenting, Targeting, Positioning (STP) PESTEL Analysis BMC Porter's Five Forces VRIO Competitor Analysis Marketing Mix (7P) **Customer Analysis** Internal Interview SWOT Analysis Root cause analysis Marketing Strategy Formulation: TOWS Analysis Propose Integrated Marketing Communication Implementation Plan

Figure 1 Conceptual Framework

#### **External Analysis**

External analysis means examining the industry environment of a company, including factors such as competitive structure, competitive position, dynamics, and history. For external analysis, the researcher using PESTEL Framework, Porter's five forces, Competitor Analysis and Consumer Analysis.

#### PESTEL Framework

PESTEL model is a framework that categorizes and analyses an important set of external factors (political, economic, sociocultural, technological, ecological, and legal) that might impinge upon a firm (Rothaermel, 2017).

#### Poster's Five Forces

Poster's Five forces Analysis is an important tool for understanding competition in business—Porter's Five Analysis analyses industry attractiveness and profitability. The five forces model allows strategic leaders to analyze all players using a wider industry lens, which in turn enables a deeper understanding of an industry's profit potential. Moreover, a five forces analysis provides the basis for how a firm should position itself to gain and sustain a competitive advantage (Rothaermel, 2017).

Table 1: Resume Five Forces Analysis

The threat of New Entrants	The Bargaining Power of Buyers	Bargaining Power of Supplier	Threat of Substitute	Rivalry among Existing Competitor
Medium	Medium	Medium	Low	Low

#### **Competitor Analysis**

The researcher conducted a competitor analysis. Competitor analysis is a process that included assessing the objectives, strategies, strengths and weaknesses, and reaction patterns of the competitor and also selecting which competitors to attack or avoid (Rothaermel, 2017).

Table 2: Competitor Analysis

	metrocom jaddi technology	Mastersystem ICT Solutions	MITRA INTEGRASI INFORMATIKA	(á) cybertro
Webs ite	https://metroc omjaddi.com/	https://www.mast ersystem.co.id/	https://ww w.mii.co.id/	https://cy bertrend- intra.com/
Prod uct	• Infrastructu re: (Server, Storage, Network, IT Security,	<ul> <li>Data Center &amp; Cloud Infrastructure</li> <li>Enterprise Collaboration</li> </ul>	<ul><li>Cloud services</li><li>Big Data</li><li>Security</li></ul>	<ul><li>Data wareho use</li><li>Busines s</li></ul>

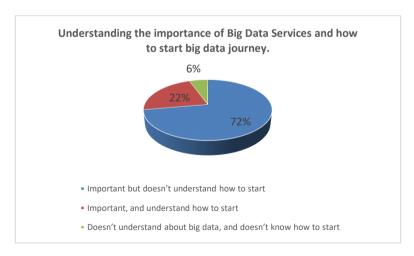
	Performance Management, Database Integration)  • Enterprise Solution  • Value Chain Integration (Mobile Apps, B2B, Value chain integration)  • Big Data Solution  • Strategy & Consultatio n  • IT Managed Services	<ul> <li>Big Data &amp; Analytics</li> <li>Digital Business Management</li> <li>Adaptive Security Architecture</li> <li>Services</li> </ul>	<ul> <li>Hybrid IT Infrastruc ture</li> <li>Business Application</li> <li>Digital Business Platform</li> <li>Consulting &amp; Advisory Services</li> <li>Managed Services</li> <li>Business Service Management</li> <li>Consulting and Advisory Services</li> <li>Managed Services</li> </ul>	Intellig ence  Big Data Analyti cs  Data Science & AI  Enterprises Applica tion Develo pment  Acade my
Peopl e	>200	>500	>200	>200
Price	depend on scope of project	depend on scope of project	depend on scope of project	depend on scope of project
Place	Jl. Warung Buncit Raya No.21, Pejaten Bar Jakarta Selatan - 12740	<ul> <li>Jakarta:</li> <li>Sudirman 7.8</li> <li>Tower 1, 25th</li> <li>floor. Jl. Jend.</li> <li>Sudirman Kav. 7-</li> <li>8. Jakarta Pusat</li> <li>10220, Indonesia</li> <li>Surabaya:</li> <li>Darmo Galeria</li> <li>Center B-3</li> <li>Jl. Mayjen</li> <li>Sungkono No. 75</li> <li>Surabaya 60225</li> </ul>	APL Tower Lantai 37 Jl. Letjen S. Parman Kav. 28 Jakarta 11470	Jl. Kenanga Terusan No.9, RW.3, Cilandak Tim., Kec. Ps. Minggu, Kota Jakarta Selatan - 12560 Surabaya
Prom otion	Website, Linkedin,	Website, Linkedin, Instagram, Facebook	Website, Linkedin, Instagram,	Website, Linkedin, Instagram,



#### **Customer Analysis**

Research design is a framework or blueprint for conducting the research project and it will specify the details of the procedures necessary for obtaining the confirmation needed to structure and solve the research problems (Maholtra, 2017). In order to get deeper understanding about the customer analysis on B2B segment, the author conduct an interview to some of people as represent their company as a primary data collection for Big Data Solution and awareness PT. Metrocom Jaddi Technology.

Figure 2 Summary Understanding the importance of Big Data Service and How to Start Big Data Journey



Based on data interview, almost all interviewees understand the importance of big data, but only 22% understand how to start a big data journey. As many as 72% interviewees doesn't know how to start a big data journey. Big

data is something familiar, but not many people know how to start and how to get the impact of Big Data.

Has your company implemented Big Data technology?

50%

50%

Not Implemented yet

Figure 3 Information company has implemented Big Data or Not

There are 50% company already implemented big data and 50% company doesn't implement big data technology yet. During interview, author trying to find out why their company doesn't implement big data yet. There's four analysis big reason why the company doesn't implement big data namely:

- Internal organization not ready yet
- Budget limitation
- Data is not ready
- The system is not ready

Criteria Purchasing Software Solution

Solved the problem Support business Integrated Solution

Customisable Affordable Price Easy to use

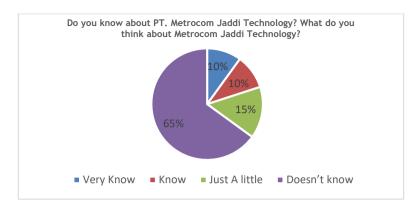
0 1 2 3 4 5 6 7

Figure 4 Criteria Purchasing Software Solution

From this, the author can summarize that the most important for the customer is the software solution must be easy to use and has guarantee to secure the data. After that, effective and efficient following up the next categorize prioritize

From this data, the author can analyse that the brand awareness of PT. Metrocom Jaddi Technology is quite low, because only 10% interviewee aware about it

Figure 5 Summary brand awareness of PT. Metrocom Jaddi Technology



## **Internal Analysis**

The company's internal analysis is the analysis to examine the company's internal condition to assess the resources, capabilities, competencies, and economic advantages as maximum as possible. In this analysis, the researcher will use the STP Analysis, Business Model Canvas (BMC) Framework, VRIO Framework, Marketing Mix 7P and internal interview.

#### **Business Model Canvass**

In this research, the concept of business model by Osterwalder will be used to analyze the relation between each component of business in PT. Metrocom Jaddi Technology.

Figure 6: Business Model Canvass Analysis

		Designed for	r:	Designed by:		Date:		Version
Business Model Canvas								
Key Partners	Key Activities	Value Prop	ositions	Customer Relationship	ps	Customer Segn	nei	ıts
- Frontera (Big Data Consultant) - Vonute (Data Analytic Parners) - Knowesis (Data Platform Partners)	-Sales -Project Management -Implementation -Guarantee after Go Live -Maintenance  Key Resources -People (sales, project manager, business analyst, engineer, IT Support) -Company asset (laptop, server development) -Cash Flow	-Premium B services -End to End from infrast Data Analyt -Not limited tools data ar -Adjustable depends on budget -Term of pa negotiable	Solution, ructure until icc lusing one nalytic solution needs and yment are fter Go Live intenance rdware	-Strategic Partnership Joint Development -Key account / Exclusiv partnership  Channels -Face to face meeting and sales forces (offline channels) -Online meeting -Third party from another partners	/e	-Tbk company Owned Corpor -Medium to Hig size -Company with 1000 employees - Should have re more than 15 Tr usually spare all budget for Tech more than IDR. year.	rati gh l me s eve rilli	State on Market ore than nue on IDR ation logy
Cost Structure -License cost			Revenue Streams -Structured & Analyzed data with long-term use case					
-Included Cost -Tax -Mandays -Expense & travelling cost			& Analyzed data with lon depend on client needs	g-t	erm use case			

### **VRIO** Analysis

The VRIO Analysis is an acronym of Value, Rareness, Imitability, and Organization. To analyze a business using VRIO Analysis, there are four assessment should be made to reflect to company's condition. For a resource to be the basis of competitive advantage, it must be valuable, rare, costly to imitate and the firm must organize to capture the value of the resource (Rothaermel, 2017).

Table 3: VRIO Analysis

Core Competencies	Valuable ?	Rare ?	Costly to Imitate ?	Organize d to Capture the Value?	Competitiv e Advantage?
Outstanding Product/Service s Performance	Yes	Yes	Yes	Yes	Sustainable Competitiv e Advantages
One-stop shopping Big Data Solution	Yes	Yes	Yes	Yes	Sustainable Competitiv

					e Advantages
Provide Installation Services	Yes	No	Yes	Yes	Competitiv e Parity
Short Lead Time Implementation	Yes	Yes	Yes	No	Temporary Competitiv e Advantages
Premium After Sales Services (Warranty & Maintenance)	Yes	No	No	Yes	Competitiv e Parity

#### Marketing Strategy Formulation

In this chapter, it will be discussed about the business solution by defining marketing strategy for Big Data Solution Services in the PT. Metrocom Jaddi Technolgy. Marketing strategy formulation will consist of four steps:

- 1. SWOT Analysis
- 2. Root cause Analysis
- 3. TOWS Matrix
- 4. Integrated Marketing Communication

#### **Swot Analysis**

The strength and weakness are summarize from the existing STP of Metrocom Jaddi Technology, BMC, VRIO, Marketing Mix 7p, and internal conducted in internal sales team and internal services team. Meanwhile, the external analysis is based on the analysis in PESTEL framework, Porter 5 forces, competitor analysis and customer analysis. From all of the information then translated into the SWOT Matrix as described in Table 3.

Table 4: SWOT Analysis

### STRENGTH

- Metrocom Jaddi Technology get full support from Metrocom Group on premium services with end-to-end solution.
- Big Data is one of outstanding product/services
- Strategic location
- Flexible, adjustable solution depends on needs and budget.
- Market awareness of Big Data Services is high.

#### **WEAKNESS**

- Limited internal resources
- Lack of Marketing Promotion
- Brand awareness of PT.
   Metrocom Jaddi Technology is very low

#### OPPORTUNITY

- Full support from government and regulator
- Low Competition
- People doesn't know how to start Big Data Implementation.

#### THREAT

- Covid-19 pandemic impact
- Corporate political interests in the customer side
- Budget limitation on the client side

#### **TOWS Matrix**

In this subchapter the researcher developed the solution based on internal and external analysis by using TOWS Matrix. In accordance with the strength and weaknesses of PT. Metrocom Jaddi Technology, researcher also facilitate the external environment to find the possible solution that can be implemented. The TOWS Analysis shown on the table below.

Table 5 TOWS Matrix

TOWS Matrix	Opportunities (O)  1. Full support from government and regulator  2. Low Competition  3. People doesn't know how to start Big Data Implementation.	<ol> <li>External Threat (T)</li> <li>Covid-19         pandemic impact</li> <li>Corporate political interests</li> <li>Budget limitation on the client side</li> </ol>
Internal Strength (S)  1. Metrocom Jaddi Technology get full support from Metrocom Group on premium services with end to end solution.  2. Big Data is one of outstanding product/services  3. Strategic location  4. Flexible, adjustable solution depends on needs and budget.	<ul> <li>Strengthen the recruitment program to ensure a sustainable high-quality internal resource (W1, O2, O3)</li> <li>Industry expansion to gather more leads and opportunities Big Data by industry specialization (S2, S3, S5, O3)</li> </ul>	Making approach strategy to the prospect client which doesn't have enough budget this year, by create blueprint / timeline / package planning to propose budget for the next year. (S4, T2, T3)

5. Awareness of Big Data Services is high.		
Internal Weaknesses (W) 1. Limited internal resources 2. Lack of Marketing Promotion 3. Brand awareness of PT. Metrocom Jaddi Technology is very low	Promoting value of the Big Data Services (end to end solution) by partnership collaboration (W1,W2,W3,O2,O3)	Run a continuous marketing program using digital marketing to increase brand awareness (W1, W2, W3,T1)

#### CONCLUSION

Referring to the observation of SWOT, internal and external analysis, the researcher observes and concludes that the root cause of falling sales number in the PT. Metrocom Jaddi Technology due to low brand awareness. Brand awareness is something important which can help to improve sales, especially during Covid-19 pandemic. With changes in people's behavior patterns in spending their money, digital marketing is becoming a prerogative for brands to interact with new consumers, and marketers need to reassess priorities in measuring their marketing goals in order to stay connected with consumers. That's why digital marketing function is becoming more important. Here, the author analyses that the sales performance underperform because of there are not enough leads creation due to new distancing regulation covid-19 impact. Furthermore, brand awareness Metrocom Jaddi Technology is very low, not many people know about this company. This becomes more difficult to team make sales with a condition like this. Therefore, the author finds out that Metrocom Jaddi Technology needs a marketing communication strategy in covid 19 pandemic situation to increase brand awareness and give impact with sales activity.

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# PARKING SERVICES IN THE SUPPLY CHAIN - AN ELEMENT OF HOTEL-OFFERING COMPETITIVENESS

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#### **Abstract**

The hotel industry of the twenty-first century shares the same fate as tourism, with regard to dynamic and wide-reaching changes focused on continuously improving the quality of the hotel product. To deal with emerging challenges and unpredictable market conditions, hotel managers are increasingly using logistics and supply chains because they drive innovativeness and enhance the ability to adjust rapidly to market change. Hotel business systems are opening up to their environments and developing networks in cooperation with stakeholders based on shared business objectives. There are very few theoretical studies dealing with hotel supply chains. A likely reason is that the hotel industry is a service industry, and its bases, influential factors and elements differ from those of material production, making research more complex. Hence, this paper aims to take a closer look at the specific features of a hotel supply chain and it places special emphasis on parking services in the hotel product by analysing demand management and capacity management, two primary activities in a service supply chain. Similarities and differences, as well as opportunities and limitations, are identified based on the results of research conducted in several hotels and destinations in Croatia, and a universal model is formulated.

# **Key Words**

parking service, supply chain, hotel, hotel product

#### 1. INTRODUCTION

Dynamic and unpredictable changes in the economic and political environment, together with the rapid decision-making of potential service users thanks to the Internet, social networks, mobile applications and other IT tools, are driving hotel business systems to continuously challenge their business decisions and correct them accordingly, adjust their hotel offerings to satisfy the new requirements of demand, and enhance quality while cutting prices.

To be able to do so as efficiently as possible, hotels develop various forms of cooperation with interest-based partners, in which they encounter numerous challenges, the most taxing being how and in what ways to efficiently manage their own capacities in conditions of seasonality and highly changeable demand, while at the same time acknowledging the business objectives of partners and satisfying the requirements of demand.

Therefore, parking, becomes a first-rate problem for the hotel management because transport, which has actually enabled development of many tourist destinations, increasingly appears as a limiting factor in terms of quality of tourist destinations. It is realistic to expect that parking problems in hotel facilities will continue to grow and the effective solution of the problem requires new ideas and interdisciplinary approach. In conditions when even 64% of the total number of tourists arrive by cars. as it is the case with the Republic of Croatian (Čorak, Marušić, et. all, 2015). it is of particular interest to provide enough space for cars in a stationary state on locations of particular interest to visitors which is important both for each destination and for providers of certain elements of the tourist offer as well. Accordingly, parking belongs to a segment of services that make up the hotel product at the micro level, representing the interruption in the process of movement of tourists, aimed at staying in the hotel. Being exposed to many different factors, hotel companies follow different criteria in order to provide parking spaces for their guests.

Effective organization and management of hotel offer, which should also include parking, is not possible without knowing the characteristics of tourist demand - dynamics, seasonality, structure by means of transport, length of stay at a hotel, purchasing opportunities, age, education, special interests etc. All year or seasonal nature of business operation is certainly one of the most important elements when choosing a model of parking. Hotels opened all year round are in great advantage in securing parking spaces for their guests, if compared to hotels with pronounced seasonality in their business operation - the regularity and a certain level of income is a prerequisite for greater investment in quality parking facilities, usually a garage if conditions in a destination allow it.

In this paper the following scientific hypothesis is defined: securing a parking space is considered by hotel guests an essential element of hotel product quality. Auxiliary hypotheses are also defined: an available parking space is an essential element when choosing a particular hotel; guests recognize the differences in the ways on how parking is solved and their

satisfaction depends on that; guests identify the differences in the methods of payment of parking and it also affects their satisfaction; securing a parking space by the hotel is also an essential element of hotel product quality, as well as the quality of accommodation, food and drinks.

The study was performed on one of the most developed regions of the Republic of Croatia - Primorje-Gorski Kotar County. Various tourist destinations were included, and in them different hotels, in order to further test the universality of the conclusions about the importance of parking services.

# 2. SUPPLY CHAIN IN THE HOSPITALITY INDUSTRY - THEORETICAL BACKGROUND

Unlike logistics that is focused on flows within a business system, a supply chain goes beyond the boundaries of the business system, approaching all those who have or could have an interest in the production of a hotel product. It forms "...a network of organizations that are involved in different processes and activities that produce value in the form of products or services provided for the ultimate consumer" (Christopher, 1992.). A supply chain builds upon this "framework and seeks to achieve linkage and co-ordination between the processes of other entities in the pipeline i.e. suppliers, and customers and the organisation itself" (Christopher, 2011). Its primary objective is always to create added value for the users and stakeholders in the network.

Song (2012) defines a tourism supply chain as "...a network of enterprises which are engaged in different functions ranging from the supply of raw materials through to the production and delivery of the end products to the target customers."

The hotel industry is a service industry. Services are always intangible, inseparable, variable and perishable, and they cannot be stored (Mrnjavac, 2010). Tourism services (hotel services included) are heterogeneous, a combination of tangible and intangible components, costly, subject to seasonality and dependent upon numerous influences from the environment (Mrnjavac, 2010). Unlike the management of tangible production processes, the management of service production is about "...capacity management and the coordination of service delivery to users" (after Bloomberg, Lemay, Hanna, adapted by the authors). In contrast to certain other services in tourism, such as agency services and transport services, which are intangible in nature, in the hotel industry it is a "...specific mix of services and products that the target market should perceive as a homogeneous whole, the value and quality dimensions of which exceed those of competitors (Maršanić, Mrnjavac, 2015).

A supply chain always refers (Waters, 2003) to "...an ongoing relationship between firms, which involves a commitment over an extended time period, and a mutual sharing of information and the risks and rewards of the relationship". Because of continuous and frequent change in demand for hotel services, long-term cooperation within the supply chain with outcomes that are to the satisfaction of all members implies process management. In

a network that operates like a supply chain, all members do not have the same roles. The hotel enterprise has a greater responsibility in defining obligations and rights and in managing the chain. Each member brings to the chain the amount of business "sovereignty" that they deem optimal from the viewpoint of achieving their objectives in the supply chain and, accordingly, participating in the benefits (Stipanović, Rudan, 2016).

Stock and Lambert (2001) identified the elements of a supply chain that need to be managed. They are customer relationship management, customer service management, demand management, order fulfilment, manufacturing flow management, procurement, product development and commercialization, and returns.

When the product is a service, the emphasis is on demand management. In the hotel industry the supply provider is the hotel - a facility with supporting equipment - and this implies the need of engaging considerable capital in investments and fixed costs. As seasonality of demand is typical of hotel operations, demand management is a major tool in ensuring better occupancy (management) of accommodation capacities. The commercial policy measures that hotel managers give priority to, will depend upon the characteristics of demand. Once an action plan for the market has been devised and the relationships in the marketing and distribution supply chains, defined, the network of stakeholders participating in the design, preparation and production of the hotel offering is put into operation (Scheme 1).

MARKET
RESEARCH

DESIGN
THE HOTEL
PRODUCT

ANALYSING OWN
POSSSIBILITIES FOR
PRODUCING ROTEL
PRODUCT

FINAL HOTEL
PRODUCT

FINAL AGREEMENT
WITH
STAKEHOLDERS

HOTEL PRODUCT

FINAL AGREEMENT
WITH
STAKEHOLDERS

FINAL AGREEMENT
WIT

Scheme 1. Service demand management and the hotel supply chain

Source: Adapted by the authors, after Bloomberg D. J., Lemay, H. & Hanna, J.B., 2006., Logistics, p. 83, Mate, Zagreb, Croatia

Hotel service quality is perceived through a prism of three elements: waiting time for a service, capacity dimensioning in service production, and ensuring service delivery in the manner stipulated. Service realization time is an essential element of the contract between the hotel and the guest. A hotel's general accommodation offering includes a detailed time plan of hotel room usage and defines other service elements, so there should be no waiting time for a service or it should be as short as possible. Possible waiting time mostly occurs in other hotel services but should be reduced to a minimum by various operative measures of the hotel management.

In the hotel industry, capacity is primarily defined by the number of rooms and the number of restaurant seats, but also by other elements of the hotel offering such as the number of parking spaces, tennis courts and pool lounge chairs. Maximal occupancy of hotel capacities such as the restaurant, kitchen, playroom and animation programmes depends on the number, structure, professional skills and allocation of human resources.

Providing exactly the kind of hotel service agreed upon is an extremely important point of reference for performance, because a part of hotel promotion is still carried out by conveying one's own experiences to family, friends or acquaintances through word of mouth, as well as through various hotel-offering evaluation models available on social networks, forums, etc. For most potential service users these methods of gathering information about a hotel's offering are the criteria based on which they choose hotel accommodations.

#### 3. PARKING SERVICES IN THE HOTEL SUPPLY CHAIN

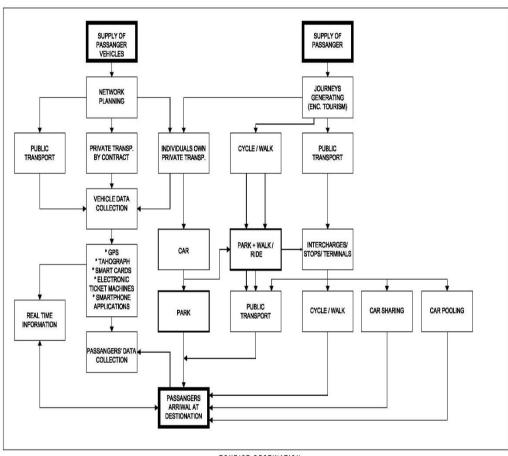
In contemporary tourism activities car is playing a very important role. Therefore, one of the elements of a hotel product is the parking service, that is, the provision of space for the automobiles of hotel guests when not in use, because in automobile usage periods of movement alternate with periods of stasis. Despite this, parking service is rarely the subject of scientific research and when it is, the studies usually take the traditional approach to parking that only marginally - if ever - takes into consideration modern development concepts in the environment.

As a rule, tourism policies, and development policies in general, are focused on increasing primary accommodation capacities. The need of tourists for keeping their vehicles in stasis in a destination is a basic element of traffic-related tourism demand. Studies of the satisfaction of visitors in a destination show a lower level of satisfaction if sufficient parking space is not available, suggesting that sufficient numbers of properly located parking spaces help to enhance tourist satisfaction and, in turn, the quality of the tourism product.

An essential element within the broader context of mobility in a destination is that of satisfying traffic-related tourism demand for movement/stasis in terms of both quality and quantity. This makes it all the more important to replace the traditional approach to studying parking services as an isolated phenomenon with a holistic approach capable of identifying and suggesting parking models with regard to mobility and

multimodality as a precondition to ensuring better mobility and better use of the tourism offering (Scheme 2).

Scheme 2. Passenger supply chain with reference to parking



TOURIST DESTINATION

Source: Adapted by the authors, after Fawcet P., 2000., Managing Passenger Logistics - a Comprehensive Guide to People and Transport, London, The Institute of Logistics and Transport, p. 25.

The parking problem puts a special strain on hotels in destinations that visitors can travel to in road vehicles, especially, in passenger cars, although "airline" destinations tend to have the same problem due to extensive rent-a-car usage. Trends in the structure of traffic modality in tourist flows show no indication of any significant decline in the role of road traffic. While the share of road traffic in tourist flows at the world level is in regression in favour of airline traffic, it is hardly likely that a substitute for road traffic will be found in the near future as no means of transportation of comparable features exists nor is likely to emerge. All efforts to reduce car usage have not lead to desired goal, but there will be a drastic change towards ecology modes of propulsion. Hence, the parking problem in hotel facilities can be

expected to continue or even to exacerbate, and new supply-chain-based concepts will be required for its efficient resolution.

It is not possible to efficiently organize and manage a hotel offering, which should include parking services, if the characteristics of demand are not known. Researching the dynamics, seasonality and structure of transportation means, the length of hotel stays, purchasing ability, age, education and special interests is vital to demand management.

Whether a hotel operates year-round or seasonally is clearly one of the most important factors in selecting a parking service model. When it comes to providing parking spaces for their guests, hotels with year-round operations have a great advantage over hotels that operate only seasonally. A certain level of regular revenue justifies substantial investment into building well-designed parking capacities, most often parking garages, if allowed by the spatial and zoning conditions of a destination.

By "taking care" of the cars of its guests, a hotel helps to reduce the pressure placed on public parking areas, while enabling guests to move about in the destination without having to worry about their cars. Guests are then able to focus on the activities they plan to take part in (recreation, sports, entertainment, relaxation...) and places they intend to visit (historical and cultural sites, events, food and wine offering...), without having to concern themselves with questions such as "Where am I going to park? Will I find a parking place? If I do find one, what then? How long can I leave the car? How much will I have to pay for parking?" (Maršanić, 2019).

To enable visitors to freely plan their activities and movements in the destination without the use of their own cars, certain conditions are required. This means putting in place a functional system comprising other traffic modalities and based on the principles of multimodality. Hotel guest parking is affected by a series of factors from the environment that should be included in the supply chain. In this way, the need of people for movement to achieve a desired goal or simply to get around is brought to the forefront. The focus should be on a providing a feeling of comfort, ensuring environmental protection, and encouraging exercise and healthy living habits.

# 4. MANAGING DEMAND AND CAPACITY - HOTEL MANAGEMENT VS. GUESTS IN PARKING SERVICES

The aim of a supply chain is to create added value for both users/guests and hotel enterprises. The meaning of added value, however, is not the same for the two sides. Through capacity management, the hotel enterprise is interested in harnessing its capacities to the greatest extent possible. When using hotel capacities, guests want to have at their disposal every element of the hotel's offering in its integral form, at all times, with no waiting and for as long as they want. Hotel managers have a responsibility as well as great opportunities in operationally aligning processes and conflicting interests.

Research dealing with parking capacities in tourist destinations and the level of satisfaction of tourists with that service indicates a shortage of capacities and a relatively low level of guest satisfaction with parking services.<sup>2</sup> Hotels are expected to provide parking spaces for their guests' cars for the duration of their stay. Otherwise the failure to provide such services can be expected to cause guest dissatisfaction with the hotel product as a whole.

Hotels mostly recognize the need of guests for parking spaces and see this service as a part of the hotel product. The management of parking capacities varies greatly from one hotel to another, depending on the availability of parking space. Hotels that have on-site parking capacities enjoy a great advantage because they can manage their parking spaces in accordance with the usage of accommodation capacities by guests. By charging for parking space on an hourly basis and employing a parking attendant, capacity management can ensure maximal usage of capacities while fully satisfying demand.

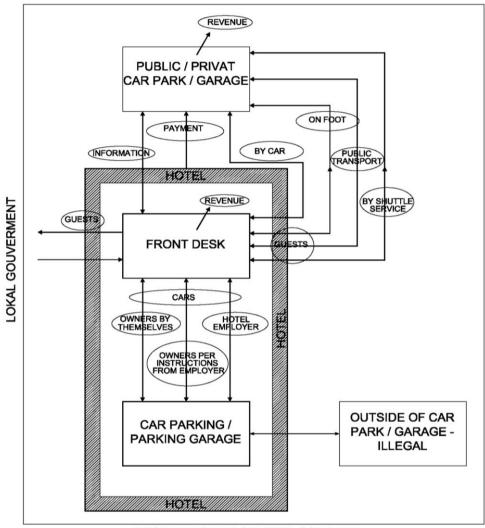
As a rule, hotels of the highest category with on-site parking garages (the highest standard of car accommodation) do not have a sufficient number of parking spaces relative to the number of accommodation units. The reasons for this vary and include location, availability of space for building a parking garage, construction feasibility, construction costs, the structure of guests with regard to transportation means, guest profiles, the usual activities of guests during their stay at a hotel that affect car usage, etc. Good knowledge of demand certainly contributes to the efficient management of parking capacities and the supply chain. Nevertheless, the need occasionally arises for the use of public parking lots.

In the following section, a parking service model is proposed together with an attendant hotel supply chain. The model takes into consideration mobility and multimodality in the tourist destination (Scheme 3).

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<sup>&</sup>lt;sup>2</sup> Research has been carried out in the period from 2012 to 2018 as part of two scientific projects, namely: "Managing Logistics Processes in a Tourist Destination" and "Managing Supply Chain in Catering" funded by the University of Rijeka. More about the results of these researches: 1) Maršanić, R., Mrnjavac, E.: Role of parking in the hotel supply chain managemet, LogForum, Scientific Journal of Logistics, 2015, 11(4), p. 387-397, Poznan, Polska, 2015. i 2) Mrnjavac, E.; Maršanić, R.: Parking – An Element of Hotel Product Quality, Scientific Project Supply Chain Management in Hospitality Industry, University of Rijeka, Faculty of Tourism and Hospitality Managemnt Opatija, p.19-32, Opatija, 2018.

Scheme 3. The proposed parking service model and hotel supply chain



**DESTINATION MAGEMENT COMPANY** 

Source: Authors

Networking at the destination level is essential in ensuring the efficient flow of the supply chain in providing parking spaces for hotel guests. The stakeholders involved are destination managers (who provide a well-designed, integrated destination product), the local government and self-government (that ensures good traffic organisation for people and businesses) and the enterprises/providers of parking services (that charge for parking). Despite the fact that tourism is subject to highly dynamic change, networking within the supply chain to satisfy the parking needs of guests outside the hotel should be of a long-lasting nature to ensure that in case the need arises, the hotel can provide guests with a good substitute solution through the rapid exchange of information via pre-determined channels.

It is unlikely that hotel facilities located in city centres, which are often pedestrian zones as well, will be able to provide parking spaces for guests in the near vicinity of the hotel. In such cases, the supply chain should include transfers to get guests to off-site car parks, especially at arrival and departure, either in vehicles of the hotel, rented vehicles or by a local carrier, for no special charge or for a token charge. A shuttle service could be the best solution when there is a high frequency of guests travelling between the hotel and off-site car parks. The usage of parking capacities could be made more efficient by engaging a person who would be directly in charge of managing the hotel car park or by using hotel chauffeurs to drive the cars of hotel guests to and from the hotel's on-site car park or a public car park/garage. A supply chain comprising off-site public car parks and a hotel can also engage buses and bus drivers who are also familiar with the not so small problems of driving and parking in "roadway" destinations.

Hotels have a certain number of accommodation units and parking spaces and this number cannot be changed. Despite the efforts of hotel managers to efficiently manage capacities, difficulties may occur in peak periods of the tourist season. The number of accommodation units is always the measure of hotel capacity, while the capacities of other elements, including parking spaces, are smaller because it is assumed that not everybody will want to use all services at the same time. The coordinated delivery of services to users is the product of capacity alignment, as well as the alignment of processes that functionally connect all parts: information, employees, guests, means of transportation, materials, products, money... Added value for guests is the result of the proper coordination of all capacities and processes.

Typically, before selecting a hotel, guests check whether the hotel provides parking services and if so, under which terms. From the perspective of potential users, parking services are also seen as an element of the hotel product. Upon a guest's arrival, the hotel should gather any special information about habits, needs and expectations regarding car parking. Prolonged waiting for a free parking spot could result in guest dissatisfaction, which the hotel management will need to manage through various measures based on the hotel's commercial policy. There is no guarantee, however, that the guest will not check-out of the hotel earlier than planned; leave the hotel, disgruntled with the quality of the hotel product as a whole; and ultimately express a negative opinion about the hotel to the public. A two-party relationship can facilitate the better usage of capacities and ensure provision of services in the manner expected by the guest. If the provision of parking services of specific characteristics is indeed very important to a guest, timely knowledge of the requirements of demand will enable the hotel management to better coordinate capacity elements (time, labour, equipment, business premises) within the existing supply chain or the hotel management could resort to organizing an ad hoc supply chain if it deems there is a special reason for doing so with regard to the guest.

# 5. PARKING SERVICE MODEL IN THE HOTEL SUPPLY CHAIN - THE EXAMPLE OF THE REPUBLIC OF CROATIA

The Republic of Croatia belongs to the group of Mediterranean tourist destinations. Fully 79% of tourists arrive by road, 64% of the total number arrives in passenger cars, 85% of all tourist traffic takes place in coastal areas, and 39% of tourists use hotel accommodations (Čorak, Marušić, et. all., 2018).

The insufficient capacities of traffic infrastructure, obsolete concepts, poor organization and ineffective traffic management in coastal destinations result in traffic congestion. The same applies to traffic in stasis.

Destinations differ with regard to their tourism offerings but also by the way they address the parking problem. Most seek to resolve this issue by building public car parks that charge motorists for parking. Such an approach is reasonable considering that seasonality is a major characteristic of tourism in Croatia. Only a small number of destinations have resorted to building parking garages. Such destinations are usually towns with a larger population that generates a certain level of year-round demand for parking services.

Research involved the managers and guests of hotels of different categories, located in city destinations on the coast and seaside destinations. There is an exceptionally high level of congruency in the attitudes of both sides to the effect that the problem of parking is present in hotels, that parking services are very important relative to other elements of the hotel product, that providing timely information to guests concerning parking possibilities is essential, and that the hotel management plays a large role in the operational management of parking and is often crucial to the resolution of possible problems.

The ways of providing parking spaces for guests vary from hotel to hotel. Some hotels have no parking spaces at all, and some lease parking spaces at public car parks or parking garages, while others have on-site car parks with boom gates or on-site parking garages.

There is a correlation between high-category hotels, the quality of parking services for guests, and the supply chain managed by hotels to ensure quality services for guests. These hotels either have on-site garages or organize and manage a supply chain aimed at ensuring a high level of parking service in public or private car parks or parking garages. The result of the supply chain is added value for the hotel and its guests, as well as for members of the supply chain. Regardless of the type and capacity of hotel parking, it is always functionally connected with its surroundings through traffic solutions and their providers.

The study also highlighted two rather unexpected findings.<sup>3</sup> First, in destinations where there are still hotels with no on-site car parks, hotel guests sometimes even resort to illegal parking, with all its consequences. Second, when a hotel paid special attention to inform its guests that there was no on-site parking and refered them to a public car park, the guests

<sup>&</sup>lt;sup>3</sup> Ibidem.

expressed an especially high degree of satisfaction with the hotel's services despite having to go to and from the car park on foot.

The entire study was performed in two stages. In the first stage the study included the "desk research" in order to define a theoretical framework of the study, namely: functional role of parking in process of transport, especially in the area of a tourist destination, with special emphasis on the specifics of transport and tourist demand and consequently the impact on parking. Recent findings on the role of parking in the hotel offer are featured. Based on that a scientific hypothesis, and two auxiliary hypotheses were defined.

Second part of the study was a field research. It was based on a questionnaire filled out by hotel guests. The survey was conducted in the period from 15 July to 01 September 2016. The questionnaire return rate was 23%, and 502 questionnaires were collected. This method was chosen because filling out a questionnaire with offered answers requires minimal involvement by guests, so that it was considered the optimal way to get a higher number of filled-out questionnaires, which was one of the fundamental objectives.

The survey was anonymous, guests did not have any obligations in terms of filling out the surveys. Questionnaires in 3 languages were offered: Croatian, English and German. The survey has included the guests of 16 hotels and 1 resort: 4 hotels in the area of the city of Rijeka, 4 hotels in the area of the town of Opatija, 1 hotel in the town of Krk, 1 hotel in the town of Omišalj (island of Krk) and six hotels in the town of Crikvenica (Mrnjavac, Maršanić, 2018).

Following the general type of data on sex, age, education and country of guest's origin, experience of parking a car during the stay at a hotel was examined. Collected were pieces of information on: the existence of problems with parking at the hotel, the sufficiency of parking spaces at the hotel, ways of parking, performance of managers in resolving problems of parking, parking payment modalities, the role of parking for hotel guests both at the hotel car park and generally in the destination, and the importance of parking in relation to other elements of the product.

Results of the performed research can be systematized into two parts. The first part consists of the results of general type obtained by analysis and synthesis of responses to the questionnaires. The second part consists of special results correlated to additional information in order to check whether it is a random deviation from the prevailing attitude or are there in the destination, hotel etc. reasons for such deviation and to what extent can such results suggest the occurrence of significant character, which for, the recommendation of further examination would be valid. Thus, the results of general type indicate the following (Mrnjavac, 2018):

1) The sample included 61% of men and 39% women. At the age of 18-25 years there were 13% of guests, at the age of 26-35 years there were 21% of the guests, and at the age of 36-49 years there were 30% of guests, with only a slightly higher share of the guests aged 50-64 (31%). Share of guests who have declared to be 65 or more years was 5%. The educational structure

is dominated by guests with university degree 52%, followed by 36% of guests with a completed secondary school education.

- 2) In the structure of outbound markets the most represented ones are: Croatia 26%, Austria 15%, Germany 12%, Slovenia and Italy 9%, followed by Slovakia, Hungary, Bosnia and Herzegovina, Czech Republic, Serbia, Montenegro, Switzerland, Poland, etc.
- 3) All examined hotels in destinations have some organized parking facilities for their guests.
- 4) Examination of the type of parking spaces provided by hotels to their guests showed that 40% of hotels offer on-street parking spaces, and 21% off-street parking spaces, 20% in garages, that is hotel's private garages, and 19% in some other way.
- 5) While staying at the hotel 76% of respondents have no problems with parking, while the other 26% say they have problems with parking during their stay.
- 6) When asked about the opinion if the hotel they are staying at lacks parking spaces, 56% of respondents believe that the hotel does not have enough parking spaces, while others think there are enough parking spaces.
- 7) Parking fee as a separate service is paid by 47% of the guests, 33% of guests said it was free, and for 20% of respondents parking fee was included in the price of hotel product..
- 8) When asked about the role of a parking space when choosing a hotel, 91% of respondents think this service is important, while the rest do not think so.
- 9) The option to park in front of the hotel they are accommodated at is considered as

positive by 84% of the guests, while the rest considers it negative.

10) When asked to grade by mark the importance of parking in total tourist offer, the majority of respondents opted for grade 7, in range from 1 to 10.

A relatively large sample of respondents in destinations and hotels, who differ significantly, provide an opportunity to draw attention to the deviations of dominant positions and to put them in correlation with additional findings on tourism trends and traffic in general related to the above mentioned destinations. Among the specific results that differ from the average the following ones are listed separately (Mrnjavac, 2018):

1) In the city of Rijeka tourists stay for relatively short period (2.2 days), (Scarpa, 2016). In all hotels domestic guests prevail, most of which (70%) arrive by their own cars (Maršanić, 2015). The majority of respondents, and that in 3 of 4 hotels consider they didn't have problems with parking; in two hotels located in the heart of the city, even all the guests included in the survey consider there were no problems. One hotel does not have a private car park at all, so that guests are suggested to park their cars in the public civic car park. In conclusion, most of the guests think the hotels have enough parking spaces. The results are quite unexpected because Rijeka is the city that despite several public garages with significant capacity and a number of car parks, still has a problem with shortage of parking facilities.

- 2) Town of Opatija mainly hosts tourists from Austria, Italy, Croatia and from countries in immediate vicinity. Most of the guests surveyed did not have problems with parking during their stay at a hotel, due to the fact that a part of the hotel has its own private garages. Parking is charged separately (75-90 kunas / daily). The guests differ in the assessment whether the hotel they were staying at has a sufficient number of parking spaces or not. It is also worth mentioning that the guests of one hotel, and that is ¼ of the respondents indicated they do not use the hotel parking space (of a street type), but choose some other way, which means they manage the theproblem by using public civic car parks or they park in places not provided for parking and so they don't have to pay a fee for parking.
- 3) Town of Crikvenica is mainly visited by domestic guests, who in some hotels generally have no problems with parking. On the other hand, all guests accommodated at the hotel in the city center have this problem. In all cases, guests use street parking, and guests of one hotel, and that is a half of those surveyed, chooses some other way of parking. Hotels do not have their car parks, but instead, they have in the civic car parks a certain number of parking spaces under lease. Number of leased parking spaces is much lower than the capacity of hotel accommodation.
- 4) Town Krk on the island of Krk, according to the rating of hotel guests has no problems with parking. Majority of guests come from Germany, Slovakia, Austria and other neighbouring countries. Hotel guests use all ways of parking, except the garage. Half of the examined guests think the hotel does not have enough parking spaces, and also most guests pay a fee for parking.
- 5) In the town of Omišalj on the island of Krk most of guests are domestic guests and from neighbouring Slovenia. About ¾ of the surveyed guests have no problem with parking during their stay at a hotel, almost all use street parking and think that the hotel does not have enough parking places, and do not pay for parking service separately.

Research results have confirmed the hypothesis of importance of providing a parking place as an integral element of hotel product. A cognition was defined about the the determinants of of the hotel guests parking model based on supply-chain. The supply chain is detected as an optimal concept in satisfying demand for parking services, which guests see as an essential element of the hotel product and the quality of which, ultimately, will determine the guest's level of satisfaction with staying at the hotel. The model encompasses mobility and multimodality as modern concepts of moving about tourist destinations.

#### 6. CONCLUSIONS

Tourist trends in the twenty-first century are characterised by a steady increase in the quality of hotel offerings. Regardless of individualization and personalization, hotel offerings are becoming more complex and richer.

The study of the role of parking in the hotel product quality has from the perspective of users - guests confirmed the set scientific hypothesis that ensuring a parking space is considered by hotel guests an essential element

of hotel product quality. The auxiliary hypotheses have also been confirmed. Availability of a parking space is taken into account by hotel guests and is considered an important element in choosing a hotel. Ensuring a parking space by the hotel is perceived as an integral part of hotel product, such as accommodation, food and drinks, so that all of them together determine the quality of hotel product.

The auxiliary hypothesis through which the guests recognize the differences in the ways the hotel deals with the issue of parking and that their satisfaction depends on it, is partly confirmed. Hotel guests consider securing a parking space an essential element of hotel product quality and securing a parking space is in many cases a decisive factor when choosing hotel accommodation. Parking service is a constituent part of a hotel product as well as to food and drinks, accommodation, additional hotel services like wellness, entertainment, recreation etc. In the study the importance of parking compared to other hotel services was not researched but it could be the subject of future studies.

Guests recognize the differences in the ways the hotel deals with parking problems, but guest's satisfaction does not always depend on it, so that it would be interesting to explore the elements of parking services which to a greater or lesser extent make an impact on guest's satisfaction. This study showed that undercapacity is omnipresent, but its level varies. For hotels with a larger shortage of car parks, a general situation with parking in a destination plays an important role and cooperation with local stakeholders respectively, because hotels lease a certain number of places in public car parks. Park capacity, quality of service and price are proportional to the hotel category.

The study conducted on a sample consisting of hotel managers and guests in Croatian city destinations and seaside destinations points to congruency in assessments concerning the importance of parking services to hotel-product quality.

A correlation is observed between high-category hotels, the quality of parking services for guests, and the supply chain managed by hotels to ensure quality services for guests. These hotels either have on-site garages or organize and manage a supply chain aimed at ensuring a high level of parking service in public or private car parks and parking garages.

The few studies that focus on hotel supply chains and their role in enhancing the competitiveness of hotel offerings suggest the possibilities of creating added value for both the users and producers of the hotel product.

The results of the research have enabled the validation of a hotel guest parking model based on a supply chain, which is an optimal concept in satisfying demand for parking services. The model also encompasses mobility and multimodality as modern concepts of moving about tourist destinations.

The results of this research should be considered indicative, due to a relatively modest sample. The references are poor becouse similar researches have not been performed. Therefore it would be advisible to go on with more detailed researched based on larger sample and more complex methodology. It should be interesting to deepen knowledge about the difference in parking services among different kinds of hotels.

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# DIGITAL COMPETITIVENESS AND INTEGRATION OF DIGITAL TECHNOLOGY INTO BUSINESS

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#### **Abstract**

business marked by the effects of globalization internationalization as well as new market trends leads to the so-called. digital revolutions where digitalization and new digital technologies are changing everyday business. The rapid and constant development of new digital technologies is of great importance for the development of society as a whole, the company, and its business environment. Recognition of external knowledge (innovation) and their integration into the company's existing knowledge related to digital technologies (tools and techniques) in the company's business provides many benefits that ultimately reflect on creating added value and achieving competitive advantage. Strong technological development affects and changes the way the company is managed, it changes the level of corporate culture inside and outside the organization. The importance and significance of digitalization and digital business transformation are also monitored by the European Commission, which since 2015 has been monitoring the digital competitiveness of Member States through the Digital Economy and Society Index (DESI) report. The DESI index monitors and measures the performance of EU member states in digital connectivity, digital skills, networking activities, and digital public services. This paper aims to investigate and analyze the importance of new technologies and their integration into business and their impact on digital competitiveness in the market.

# **Key Words**

digitalization, digital transformation, digital technology, business, competitiveness

#### INTRODUCTION

Being competitive in today's global and international marketplace is a major challenge for businesses. Creating sustainable competitiveness means being innovative and creative, ensuring and creating sustainable business and visibility that leads to long-term competitiveness. Digitalization of business and new digital technologies are important factors for company development which ultimately leads to sustainable market competitiveness. Without innovation, new technologies and digital transformation, there is no competitiveness. The success of an economy is determined by its level of competitiveness, so the goal of each country is to strive to improve the competitiveness of its economy.

New digital technologies are changing the way of doing business but also a way how to enter new markets. Modern, ie new digital technology achieves rapid and constant growth, advances in all segments and creates easily accessible spaces through which there are new ways and new business models that increase business productivity. The way companies communicate, advertise and sell their products thanks to new digital technology is becoming faster, more efficient and more productive. The digital transformation of business is a key determinant of creating a sustainable competitive advantage. The implementation and use of information and communication technologies (digital technologies) affects the business processes of the organization which become more efficient and effective. The fact that the European Commission publishes the Digital Economy and Society Index (DESI) every year proves the importance of digitalization and its development for companies business and society as a whole. The Digital Economy and Society Index (DESI) is a complex index that summarizes relevant indicators of European digital performance and monitors the development of EU Member States through digital competitiveness.

This paper is sectioned into four parts. The first part is explaining methodology, second part of the paper is dedicated to understanding basic terms related to digitalization and digital transformation of business, competitiveness, digital competitiveness and digital technologies. The third part is focused on Digital Economy and Society Indeks (DESI) and its correlation to business (digital) competitiveness. Lastly, the fourth part is a discussion about the conducted research and conclusion.

#### METODOLOGY

For the purposes of writing this article, new Croatian and world literature has been used and analyzed and authors can be considered as representative authors in the field of interest of this topic. The papers were selected by searching various databases, such as Web of Science, Scopus and Google Scholar, using the search phrase ("digitalization" OR "digital transformation") AND ("digital technology OR "digital competitiveness").

The papers were analyzed in order to review the importance of new digital technologies and their integration into business operation in function of ensuring digital competitiveness of company.

#### THEORETICAL BACKGROUND

#### Digitalization and digital transformation

The market in which companies operate today is under the constant influence of new and modern technologies. Technology and its rapid and constant development bring with it the emergence of numerous innovations which in turn carry a certain degree of risk. Digitalization and digital business transformation are two different concepts. To understand the process of digitization, digitalization, and business transformation one needs to understand the clear distinction between them. Many authors approach and explain these terms differently.

Digitization is a process of converting something physical and analog into something that becomes virtual and digital (the process of converting movies, books, music in digital form) (Brennen and Kreiss, 2016), while Coreynen et al. (2017) defines digitization as the use of digital technology that achieves faster and better connection of people, systems, companies, products and services. Digitalization is a new way of doing business by using new technologies and new business models based on technology. Digitalization means the process of converting text, image, sound, video, or film into digital form, while digital transformation includes the process of transforming business processes and products that achieve maximum use of the possibilities provided by digital technology. The development of digitalization is studied by many authors, emphasizing that the development of digitalization creates two-way communication through the digital world (as one of the main features of digitalization), communicates through new channels and media, which facilitates business compared to previous outdated trends and business models (Caywood, 2012). For Brennen and Kreiss (2016) digitalization means recognition, adoption and use of new digital technologies by the organization, industry, state, consumers, etc. For the author Clerck (2017) digitalization represents the use of digital technologies and digital data thus influencing the improvement and transformation of business processes, revenue generation and improving business productivity, and creating an environment for digital business in which digital information is crucial.

Digitization and modern trends of new digital technologies are changing the basic concepts of business. The digitalization of economy (and companies) implies a transition to a new technological order, which leads to the creation and acceleration of changes, both technological and organizational but also economic (Gumba et al., 2021). Digitalization provides a simpler, faster and so-called two-way communication with consumers and all stakeholders, ensures easier use, processing, storage and exchange of digitized data of

any kind. Data collection, communication with the environment and company management are becoming more flexible, interactive and innovative, which leads to increased of efficiency and effectiveness. Thanks to digitalization, it is possible to build and maintain quality business relationships with consumers and all other stakeholders. Data collection, processing and analysis is faster and more efficient and communication is simplified.

Precisely because of the many benefits that digitalization provides to consumers, and where consumers want to get a service quickly and affordably and expect from businesses to meet their needs, businesses need to accelerate the digitalization of their business processes (Averina et al., 2021). Changing the current business model into a new digital business model implies analysis and change of the current state of doing business and the existing business model, by creating new strategic directions. There are three groups of strategic directions for the digital transformation of the business model: "(1) operational and technological excellence (redirection the focus to improving the efficiency of the value chain and introducing new production technologies); (2) excellence in customer solutions (redirection the focus to creating high levels of products and services); (3) the proximity of the customer (redirection the focus to presenting value to the customer)"(Averina et al., 2021:4).

Digital business transformation implies a new direction and way of doing business whereby digital technologies change current business business models and create digital business models, affect the products and processes of the organization but also create changes in the organizational structure of the company (Thomas et al., 2016). Traditional business models are being replaced by digital business models, which is a process of digital business transformation that leads to increased efficiency and effectiveness and affects the business of the entire organization and creates a sustainable competitive advantage (Vial, 2019).

#### Competitiveness and digital competitiveness

The concept of competitiveness has been the subject of research and scientific thinking by many theorists throughout history, and throughout history and to this day, various notions and reflections have developed that define the concept of competitiveness. All the reflections of theorists studying the concept of competitiveness emphasize the importance of developing innovations and applying new technologies. Porter (1990) states the factor conditions based on knowledge, developed infrastructure, high technology and innovation, while through the general model "Five Competitive Forces" Porter (1985) provides a framework for considering possible strategic orientations of companies and their profitability (Tipuruć, 1999). The competitiveness of companies is in the focus of all companies that participate in market competition. Building and constantly raising competitiveness is the task of quality management in order to achieve the

set goals. It is not enough to be competitive, it is necessary to achive competitive sustainability in the market. Companies need to be proactive, adaptable, flexible and prone to change and adaptation so that they can respond to all the challenges and unpredictable changes in the environment.

Competitiveness can be observed from the aspect of company (micro level), competitiveness of industry and competitiveness of the state (national and international, macro level). By doing business in the domestic and foreign markets, companies create recognition through digitalization and digital technologies and build competitiveness (micro level), while with the same competitiveness they contribute to the growth and development of the national economy (macro level). Micro competitiveness, competitiveness of company contributes to the competitiveness of the economy as a whole, which allows us to argue about their causal relationship, competitiveness the impact of company competitiveness of the national economy (Martinčević, 2020). Globalization and internationalization of the market opens borders and enables and encourages the growth, development and innovation of companies. Companies that base their business on newer information communication technologies base their strategic decisions on innovation and fostering competitiveness based on the internationalization of business (Onetti et al. 2012). New technologies provide a higher level of innovation for the company and are one of the key resources for creating a sustainable competitive advantage (Lopez Rodriguez and Garcia Rodriguez, 2005). Research conducted by the authors Boban and Babić (2014) in the Republic of Croatia on a sample of 500 large Croatian companies proves that information and communication technologies and their use leads to revenue growth and ultimately leads to higher profit and higher growth rates and consequently to competitiveness growth.

Technological innovation are key to economic growth and development. By recognizing new digital technologies, their implementation and use, an appropriate technological and technical infrastructure is achieved, which leads to technological and technical competence and consequently to competitiveness and competitive position in the market. Companies are required to recognize and invest in new digital technology and to adapt their business to new business models and define corporate strategies based on innovation, new technologies and new digital business models that will be the foundation of long-term and sustainable competitive advantage in the market.

### Competitive advantage and digital technologies

The fourth industrial revolution Industry 4.0 is associated with digitalization and digital business transformation, which affects the creation of new business models and company management processes. Traditional business concepts are no longer sustainable precisely because of new digital technologies that create a competitive advantage for those companies that

have recognized the importance of new digital technologies and thus become technological leaders in the market. "Digital technology is changing the way value is created as well as the outcome of innovation, (Averina et al., 2021). Digital technologies are tools and new service systems (services). As tools they create new innovations while as services they are an integral part of new digital products thus generating digital data (Averina et al., 2021). The application of new digital technologies places new demands on employees and their competencies regarding the use of new technologies within the organization, which implies the acquisition of new knowledge and skills for performing tasks and activities (Nyikes, 2018).

Due to globalization and internationalization and with the rapid development of markets and technologies, customers are becoming more demanding in terms of products and services, so the process of digital transformation should enable companies to quickly adapt to customer needs putting them at the center of corporate strategy in terms of providing new technologies (Henriette et al., 2016). Sustainable development of companies today can be achieved only through the growth of innovation and based on digitalization, ie digital technologies in business processes. Based on this, we can talk about the concept of systemic competitiveness based on a sustainable competitive advantage (Gumba et al., 2021). Information technology is changing the way of doing business, and it is the information provided by information technology that gives a company a competitive advantage (Porter and Milllar, 1985). Competitive advantage is constantly being rebuilt and the company needs to be capable of identifying all internal and external capabilities (Tipurić, 1999).

Companies resort to digital business transformation and apply digital technologies in their business models to influence consumer preferences (Vendrell-Herrero et al., 2017: 71), to improve their competitiveness and consumer relations (Dellarocas, 2003), to improve internal processes (BarNir et al. 2003) and to create added value (Lusch et al., 2010). The application of new digital technologies affects and changes the value of existing organizational resources and facilitates the creation of new and valuable organizational resources thereby affecting competitive outcomes and competitive advantage (Knudsen et al. 2021). "Today, digital technologies have evolved into a state where the implications for competition and competitive outcomes are much more fundamental" (Knudsen et al. 2021: 361).

The Strategic Document entitled "Monitoring the Digital Economy and Society 2016-2021" (Official Journal of the European Union Evidence, 2018), defines the main development policies and requirements for monitoring European digital policies, information and communication technologies, as well as their impact on the economy and society in the period 2016-2021. The focus of the document is on monitoring companies and monitoring new technologies in terms of their recognition, implementation and use as an important strategic choice of company direction, which will ultimately

reflect on increasing business performance, market performance and creating a competitive advantage.

#### THE DIGITAL ECONOMY AND SOCIETY INDEX (DESI)

Technological changes and the constant and accelerated growth of new digital technologies bring with it flexibility and simplicity in doing business, but also affects the strengthening of competitiveness. New, modern digital technologies provide a number of advantages in business and lead faster and more efficiently towards the achievement of pre-set goals. Thanks to digital technologies, we can talk about the digital economy. The Annual Digital Economy and Society Index measures the progress of EU Member States in their steps towards the digital economy and society, based on Eurostat data as well as specialized studies and data collection methods.

In order to be able to monitor the importance and significance of digital technologies and its impact on digital competitiveness, the European Commission has developed and monitors on an annual basis the Digital Economy and Society Index (DESI). »The Digital Economy and Society Index (DESI) is a composite index that summarizes relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness« (Digital Economy and Society Index, 2020). DESI consists of five key indicators: (1) Connectivity, (2) Human Capital/Digital skills, (3) Use of Internet Services by citizens, (4) Integration of Digital Technology by businesses, (5) Digital Public Services (Digital Economy and Society Index, 2020).

Every year, the European Commission publishes DESI, the index of the digital economy and society, while the current latest data are related to 2020. DESI monitors the level of digital performance of EU members and their progress in terms of digital competitiveness. DESI 2020 indicates that all Member States have made progress in all key areas measured in the index. It is this positive trend and growth of indicators that shows how crucial digital technologies are in today's business, and they have especially proved to be a benefit and an increasingly important element in the context of the corona virus pandemic, enabling companies to normally continue their work.

# Integration of digital technology in business

Given that the emphasis of this research is on digital technologies and their involvement and integration into business, emphasis will be placed on the mentioned area, integration of digital technology in business. The European Commission itself emphasizes that digital technologies enable gaining a competitive advantage, improve services and products and and impact expansion into new markets, while the digital transformation of business opens new opportunities and encourages the development of new technologies (Digital Economy and Society Index, 2020). Every year, the European Commission measures company digitalisation and e-commerce

through the digital integration dimension. DESI 2020 shows that there is a visible change and increase in the use of digital technologies by companies as follows: (1) Electronic information sharing 34% (in 2019 was 34%), (2) Social media 25% (in 2019 was 21%), (3) Big Data 12% (in 2019 was 10%), (4) Cloud 18% (in 2019 NA), (5) SMEs selling online 18% (in 2019 was 17%), (6) e-Commerce turnover 11% (in 2019 was 10%), (7) selling online cross - border 8% (in 2019 was 8%) (Digital Economy and Society Index, 2020).

DESI within the Integration of digital technology tracks the Digital Intensity Index (DII). The Digital Intensity Index (DII) measures the use of different digital technologies at company level. The DII rating (0-12) of a company is determined by the number of selected digital technologies it uses. Figure 1. shows the structure of DII in 2019. It also shows the degree of penetration and the rate of adoption of the various technologies that DII monitors. DII shows that large companies are more digitalized than small and medium companies. Although some aspects appear to reach saturation (at least for large companies) there is still scope for improvement for most aspects (Digital Economy and Society Index, 2020).

**Figure 1.** Digital Intensity Index indicators tracking digitisation processes (% companies), 2019.

	Large	SMEs
Use anyICT security measures	99%	92%
Make persons employed aware of their obligations in	91%	61%
ICT 'security related issues		
Maximum contracted download speed of the fastest	80%	49%
internet connection is at least 30 Mb/s		
Use ERP software package to share information	78%	33%
Use any social media	78%	52%
Use social media for any purpose	76%	50%
Use customer relationship management (CRM)	62%	32%
software		
>50% of employed people use computers and the	55%	44%
internet		
>20% of workers with portable devices for business	46%	36%
use		
Sell online (at least 1% of turnover)	39%	18%
Receive electronic orders (web or EDI) from	23%	8%
customers from other EU countries		
> 1% of the total turnover web sales and B2C web	10%	8%
sales> 10% of the web sales		

**Source:** Digital Economy and Society Index - Integration of digital technology, 2020.

Countries with a very high DII greater than 10% (i.e. possessing at least 10 of the 12 monitored digital technologies) are Denmark and Sweden, followed

by Finland and Belgium with 9%. Very small investments in digital technologies (countries with very low DII) have Greece, Bulgaria, Poland and Hungary.

# Adoption of digital technologies by companies

Companies increase their productivity and efficiency by applying digital technologies, so today it is necessary to accept and adopt new technologies in business, which is determined through the determinants of acceptance of technologies in business, ie, is defined and determined through models of information technology acceptance. Generally accepted and well-known models of acceptance of new technologies are: (1) technology acceptance model (TAM) (Davis et al.1989), (2) theory of planned behavior (TPB) (Ajzen,1985), (3) unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003), (4) diffusion of innovation theory (DOI theory) (Rogers 1983), (5) technology, organization, and environment framework (TOE framework) (Tornatzky and Fleischer, 1990). In addition to all of the models of acceptance of new technologies, the whole process of acceptance and adoption of new technology is monitored through institutional pressure and absorption capacity that have a great impact on the adoption and application of new knowledge and technologies.

According to research by the European Commission, large companies are adopting new technologies more often. The ratio of large and medium and small companies regarding the adoption of new technologies is as follows (figure 2): (1) the application of electronic information exchange via business resource planning software (ERP) in large companies is 78%, in SMEs only 33%, (2) the use of customer relationship management (CRM) for the analysis of customer data for marketing purposes in large companies is 62% and in SMEs 32%, (3) activity on social networks in large companies is 78% and in SMEs 52%, (4) e-commerce for large is 39% and for SMEs is 18% (sales via the Internet) while cross-border via the Internet is 8% for SMEs and 23% for large companies, (5) the use of cloud services for large companies is 38.5% while is for SMEs is 17%, (6) the use of big data analytics in large companies is 32.7% and in SMEs 12%.

90 80 70 60 50 40 30 20 10 0 Social media e-Commerce Cross border Cloud service analytics information relationship e-Commerce sharing (ERP) management (CRM) ■ Large companies ■ SMEs

Figure 2.: Adoption of digital technologies (% companies), 2019.

**Source:** Digital Economy and Society Index 2020 (Integration of digital technology)

Research conducted in the Republic of Croatia by the company "Apsolon" shows the obstacles that Croatian companies face in the implementation of digital transformation and the application of new digital technologies such as: (1) excessive financial costs, (2) lack of time, (3) too much focus on existing business priorities. Therefore, it is still necessary to make great efforts in order for companies to be fully digitalized and to experience the digital transformation of business in terms of the adoption and application of new technologies. In order for companies to increase and improve their digital competitiveness, it is necessary to take several measures to achieve this: (1) prioritization of digital transformation, (2) development of digital transformation strategy, (3) engagement of experts, (4) creation of digital culture, (5) implementation of an appropriate digital transformation management structure, (6), quality human resource management, (7) greater agility and better preparedness for the unexpected, (8) developing cooperation and partnerships.

#### DISCUSSION

The corona virus pandemic has affected all dimensions measured through DESI, but the effect of member states and the European Commission for managing the crisis is visible in the application of digital technologies through the introduction of a number of measures such as various applications and platforms. DESI 2020 shows that Finland, Sweden, Denmark and the Netherlands are the leading countries in the overall digital

<sup>4</sup> https://apsolon.com/digitalna-transformacija-hrvatska-2020-hrvatski-digitalni-indeks/

<sup>&</sup>lt;sup>5</sup> https://apsolon.com/digitalna-transformacija-hrvatska-2020-hrvatski-digitalni-indeks/

performance in the EU, while the top EU performers in the digitalization of businesses are Ireland, Finland, Belgium and the Netherlands (Digital Economy and Society Index (DESI) 2020). The EU's largest economies are not digital leaders, which indicates the need for faster digital transformation in order for the EU to successfully achieve double digital and green transformations. Looking back over the last 5 years, the biggest and most significant progress has been made by Ireland followed by the Netherlands, Malta and Spain. These countries are also more successful above the EU average, as measured by the DESI (Digital Economy and Society Index (DESI) 2020).

In order to have an insight into the state of indicators measured by DESI, presented will be the key conclusions of DESI 2020 as currently available data related to connectivity, digital skills, Internet use by individuals, integration of digital technologies by companies and digital public services. Looking at broadband connectivity, collected data show positive movement and a better result compared to 2019, while 4G network covers almost the entire European population. Looking at 5G coverage, we are talking about 17 Member States where Finland, Germany, Hungary and Italy are the most advanced in 5G readiness. From the point of view of digital skills, further progress is needed, where in the corona crisis appropriate digital skills have proved to be crucial so that citizens can access key information and services. Although the corona virus pandemic noted an increase in Internet use, this trend was present also in the year before. Companies, on the other hand, are becoming more and more digital and understand the importance of digital business transformation, where most notable are large companies, them 38.5% from the aspect of increasing use of cloud service, and 32.7% from the aspect of big data analytics. The top EU performers in the digitization of businesses in 2020, are Ireland, Finland, Belgium and the Netherlands. As for e-commerce in 2020, there is a visible trend of growth at the company level (mostly large companies) while the trend of using digital public services in the areas of e-government and e-health is growing, which allows greater efficiency and savings for governments and companies, better transparency and greater citizen participation in political life (Digital Economy and Society Index, (DESI) 2020). The use of advanced digital technologies (artificial intelligence, Internet of Things, cloud computing and big data analysis) opens new opportunities for European companies, which will increasingly affect productivity and improve business efficiency, which will be crucial for economic recovery (Digital Economy and Society Index). DESI) 2020).

According to the Digital Economy and Society Index (DESI) for 2020, Croatia is in 20th place among the 28 EU member states, as it was according to the DESI index in 2019. The Republic of Croatia achieved the best result in 2020 in the element of digital technology integration in companies, which shows that Croatia companies are progressively integrating digital technology into its business process, thus achieving a share of 23% of companies with a high

and very high level of digital intensity, which lags slightly behind the EU average of 26%.

#### CONCLUSIONS

Today, competitiveness is associated with new digital technologies through which companies achieve greater recognition through easier and faster communication with consumers that becomes interactive, provides faster access to more information, which achieves flexibility and simplicity in business and strengthening the competition. Doing business without new digital technologies is unthinkable and they are the ones that increase business performance and create digital competitiveness. The fact that the European Commission publishes the Digital Economy and Society Index (DESI) every year proves about the importance of digitalization and its development for the business of companies and society as a whole. The index tracks Europe's overall digital performance and tracks EU countries' progress in terms of their digital competitiveness. In achieving digital competitiveness, it is necessary to fully approach the digital transformation, allocate significant resources, encourage engagement at all levels of the company and ensure organizational determination.

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# SUSTAINABILITY ACCOUNTING: A RESEARCH TREND ON HOSPITALITY ACCOUNTING

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#### **Abstract**

This paper aims to identify research trends on hospitality accounting. A quantitative bibliometric analysis is conducted on papers specifically focused on accounting hospitality published from 2001 to 2020 in journals indexed on Web of Science database by assessing temporal evolution and trends in scientific production. Findings show that there are relatively few published articles on hospitality accounting. We found 57 articles on this subject being the first published papers in 2003. Most papers were published during the last 10 years although the highest interest in hospitality accounting study among scholars concentrates on a short period around 2017. We have identified that the main research trend will be in "sustainability accounting" although much of research is focused on "management accounting" subtopic. This study is the first to do bibliometric analysis on hospitality accounting and guides researchers in this area.

## **Key Words**

sustainability accounting, hospitality accounting, hospitality industry, bibliometric analysis

### 1. Introduction

In its most simplistic sense, hospitality as an industry is related to food, drink and accommodation services (Kandampully et al., 2014). Hospitality and service industries are inseparable phenomena and therefore the hospitality context has provided a vital context for research for many years (Kandampully et al., 2014). Park and Jang (2014), based on the need for interdisciplinary research analysis, suggest paths for conducting

interdisciplinary hospitality, namely finance and management research, such as behavioral finance, marketing-finance interface, human resource management. In fact, hospitality industry has attracted attention of academics and professionals. In hospitality industry, as in any other industry, accounting is important to control activities and results.

Accounting provides useful information to a wide range of users (İbicioglu et al., 2010). Eierle and Schultze (2013) mention that, according to International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) framework, the main purpose of financial statements is to provide useful information to existing or potential investors and other company stakeholders. Ibrahim et al. (2020) state that managers should be aware that financial information, when analysed, can help keep their financial situation under control and, consequently, enhance business growth. For Akhtar and Liu (2018, p. 390) benefits of using accounting information are obvious and it "should be used by the external and internal evaluators of the company, to guide better decisions".

In hotel industry, managers and accountants also consider accounting information systems useful in decision-making process (Gaidienié & Skyrius, 2006). Esparza-Aguilar et al.' (2016) results show that managers of non-family companies utilize accounting and financial information for decision-making process to a greater extent than managers of family companies. The same study indicates that family companies maintain less formalised management control systems than non-family businesses in terms of timeliness, aggregation and integration of economic and financial information in decision-making process.

For a long time, uniform systems of accounts have been developed in many industries for the purposes of accounting, control and management of enterprises (Georgiev, 2016). In hotel accounting, for many years, uniform accounting systems have been published for the hotel industry. "The Uniform System relates effectively to the operating characteristics of hotels and other similar establishments on one level in that it is based on departmental accounting principles, reflecting the fact that rooms, food and beverage, and other services are produced in departments rather than in production lines, as in the case of manufactured products" (Harris & Brown, 1998, p. 163). Hotel industry has a uniform accounting system, called Uniform System of Accounts for the Lodging Industry (USALI). This uniform system is "created as far back as 1926, has been successfully adopted worldwide as a useful model for creating accounting information for the purposes of financial accounting and management accounting for the companies in the hospitality sector" (Georgiev, 2016, p. 154). USALI requires hotels to prepare detailed financial statements according to their business units (Pajrok, 2014). USALI includes responsibility centers, namely investiment centre, profit centre, revenue department, cost centre and cost pool (Pairok, 2014). USALI has gone through several editions. However, Halmi (2020, p. 466) suggests updating current USALI standards with addition of environmental and social indicators, as it could provide a methodological framework to improve sustainability information for internal and external users in hospitality industry. However, hospitality accounting is not limited to USALI. For instance, there are also the uniform system that applies to restaurants - Uniform System of Accounts for Restaurants (USAR) and to SPAS - Uniform System of Financial Reporting for Spas (USFRS).

In fact, in recent decades, accounting has increasingly embraced accounting for sustainability, which is also important for sustainability reporting and corporate accountability, as a result of increased transparency (Gray, 2010; Gray et al.,1996). Conventional accounting and sustainable accounting are types of accounting that are observed from different points of view. Bebbington et al. (2017, p. 27) state that "conventional accounting seems most suited to clearly defined objects, linear cause-effect relationships, single outcomes, consensus over valuation protocols and the presence of information systems", which contrasts with sustainable development accounting, as it relies on "a radical transformative programme, rather than a discrete object or entity".

In respect of research trends, Park and Jang (2014), based on a literature review to identify the main research topics in hotel accounting and management field, propose interdisciplinary research, which could integrate finance/accounting with other management topics in hospitality field. On the other hand, Halmi (2020) stresses also the importance of accounting for sustainability. In this context, this study seeks to analyse scientific production in hospitality accounting area and identify research trend. Specifically, this paper aims to develop a systematic bibliometric analysis hospitality accounting in order to: (1) quantify the published articles by per year and research subtopic; (2) identify research trend on hospitality accounting.

Since sustainability reporting is becoming an important means of communicating with stakeholders and "a sophisticated way of suggesting a business entity's sustainable approach to generating profit" (Halmi, 2020, p. 463), in this study, we expect sustainable accounting to be a research trend.

After this introduction, the next section sets out empirical framework of bibliometric study, after which we present the main findings. Finally, in section four, main study conclusions are drawn, findings implications are discussed, study limitations are acknowledged and some topics for future research are suggested.

### 2. Data and methods

This research aims to understand scientific production trends on hospitality accounting, based on bibliometric analysis. Bibliometrics, according to Tang et al. (2018, p. 2), "refers to the field that investigates groups of publications by quantitative analysis methods". In recent years,

bibliometrics analysis has become popular to assess the state of the art and trends of specific theme of study (e.g., Mallawaarachchi et al., 2020; Tang et al., 2018).

This type of research involves choosing the source and defining data collection process, as well as analysis procedures. Firstly, a search was performed to identify words or keywords to be used in the search for papers related to research topic. Table 1 presents search criteria.

Table 1. Search criteria.

Tuble 1: Scarch checha:
Keywords (combined)
TÓPIC: ("accounting") AND TÓPIC: ("hospitality" OR "hotel*" OR "Lodging
Industry" OR "Restaurant*" OR "USALI"
Document type
All
Years
All

From the search, 460 publications were generated, 356 articles, 71 proceedings papers, 8 early access, 5 book reviews, 5 book chapter, 5 editorial material, 5 review and 1 note. Only the articles were selected and of 356 articles generated in the search, 299 were excluded as they did not relate to the topic under research. In the end we obtained a total of 57 articles selected on 27 March 2021 from WoS database. This study includes all articles published until the date of collection.

This study is based on quantitative approach, taking as reference bibliometric indicators of production according to their impact on WoS databases. We use Excel tool and software VOSviewer. VOSviewer is a software that pays attention to graphical representation of bibliometric maps and it is considered useful for displaying large bibliometric maps in an easy-to-interpret way (van Eck & Waltman, 2010). Bibliometric indicators, among main research indicators, are an important information tool to support science development (Smyrnova-Trybulska et al., 2018).

## 3. Performance analysis

A bibliometric analysis is carried out for the 63 publications.

## 3.1 Production on hospitality accounting

## a) Publications per year

In this research, we verified that the first publications on hospitality accounting emerges in the year 2003. The year with most publications is 2017. Most articles were published in the last 10 years. Graph 1 presents the total publications distribution per year.

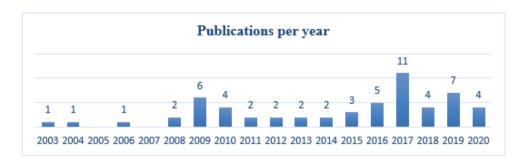


Figure 1. Evolution of scientific production on hospitality accounting

## b) Research subtopic

In this research, we found that main subtopic on hospitality accounting is "management accounting", with 27 publications (Table 2). The first publication in this subtopic was in 2008 and the last one in 2019. Regarding the most cited publication in this research field, we highlight Makrygiannakis and Jack's (2016) paper. In this paper, authors suggest a strong structuration-based framework for management accounting change analysis. The second most cited work is Grechkina et al.'s (2019) authors, which describes organization features of accounting process and principles of cost management at enterprises of sanatorium-resort complex of Russia.

Table 2. Publications in accounting management subtopic

Authors	Year	Title	Tc
Jones, TA	2008	Improving hotel budgetary practice - A positive theory model	5
Andersson, TD; Carlback, M	2009	Experience accounting: an accounting system that is relevant for the production of restaurant experiences	5
Pavlatos, O; Paggios, I	2009	A survey of factors influencing the cost system design in hotels	15
Pavlatos, O; Paggios, I	2009	Activity-based costing in the hospitality industry: evidence from Greece	4
Raab, C; Mayer, K; Shoemaker, S	2010	Menu engineering using activity-based costing: an exploratory study using a profit factor comparison approach	0
Turner, MJ; Guilding, C	2010	Accounting for the furniture, fittings & equipment reserve in hotels	12
Vaughn, P; Raab, C; Nelson, KB	2010	The application of activity-based costing to a support kitchen in a Las Vegas casino	9
Mattimoe, R; Seal, W	2011	Pricing in a Service Sector Context: Accounting and Marketing Logics in the Hotel Industry	8
Ni, SS; Chan, W; Wong, K 2		Enhancing the Applicability of Hotel Uniform Accounting in Hong Kong	0
Pavlatos, O 20		An empirical investigation of strategic management accounting in hotels	1
Sifontes, DG; Marin, C; Cedeno, S	2015	Factors influencing the cost model applied to the process of making management decisions for the hotel companies in the state of Nueva Esparta.	0

Campa-Planas, F; Banchieri, LC	2016	Study about homogeneity implementing USALI in the hospitality business	0
Esparza-Aguilar, JL; Garcia- Perez-de-Lema, D; Durendez, A	2016	The effect of accounting information systems on the performance of Mexican micro, small and medium-sized family firms: An exploratory study for the hospitality sector	0
Makrygiannakis, G; Jack, L	2016	Understanding management accounting change using strong structuration frameworks	23
Auzair, SM; Amir, AM	2017	Strategic Priorities of Malaysian Hotels: The Role of Management Control Bureaucracy	1
Campa-Planas, F; Banchieri, LC; Kalemba, N	2017	A study of the uniformity of the USALI methodology in Spain and Catalonia	0
Peña, FM; de Monteys, RMS; Silvente, VB	2017	American USALI and the historical evolution of the uniform cost systems: A Spanish challenge?	20
Turner, MJ; Way, SA; Hodari, D; Witteman, W	2017	Hotel property performance: The role of strategic management accounting	11
Volkovska, I	2017	Inspection of management accounting status at the enterprise	0
Biancolino, CA; Gheller, AA; Maccari, EA; Bueno, RLP	2018	ERP cloud: characteristics and differentials in food and beverage management	0
Faria, AR; Ferreira, L; Trigueiros, D	2018	Analyzing customer profitability in hotels using activity-based costing	0
Schmidgall, R; Kim, M	2018	Operating budget processes and practices of clubs: a repeated cross-sectional study over four decades	9
Yuliansyah, Y; Inapty, BA; Dahlan, M; Agtia, IO	2018	Budgetary participation and its impact on individual performance	0
Arasli, H; Alphun, C; Arici, HE	2019	Can balanced scorecard adoption mediate the impacts of environmental uncertainty on hotel performance? The moderating role of organizational decision-making structure	0
Cengiz, E; Cengiz, F; Cavusoglu, M; Cobanoglu, C	2019	Managerial perceptions of cost-system obsolescence and factors that might affect it A case study in the Turkish hotel industry	0
Grechkina, TV; Golushko, EV; Galcheva, DD; Krasnyuk, LV; Kosinova, EA	2019	Features of accounting process organization the costs at the sanatorium complexes	22
Suarez, MM	2019	How to perform a cost management in the hotel sector for the best decision making?	1
Legend: Tc, Total citations			

The Second research subtopic is related to "sustainability accounting", with six articles. Publications in this subtopic appear in 2009. In 2020 two publications were published related to "harmonization of sustainability reporting system" and "green reputation, green accounting and harmonious culture". Most cited publication is by authors Chan, Wong and Lo (2009) with the title "Hong Kong hotel sewage: environmental cost and saving technique". Table 3 presents publishes papers on sustainability accounting subtopic.

Table 3. Publications in sustainability accounting subtopic

Authors	Year	Title	Tc
Chan, W; Wong, K; Lo, J	2009	Hong Kong hotels' sewage: environmental cost and saving technique	31
Gunarathne, N; Lee, KH	eco-control approach		0
Nyide, CJ	2017	The role of environmental management accounting and voluntary self-regulatory initiatives in improving resource efficiency in South African hotels	18
Mayor, JJD; Rodriguez, JJB	2017	Disclosing information on corporate social responsibility in Canary Islands hotels	15
Halmi, L	2020	Harmonization of sustainability reporting system in the hotel industry	26
Raka Sukawati, TG; Astawa, IP; Silaen, P	2020	Green Reputation of Hotel Improvement through Green Accounting and Harmonious Culture	1
Legend: Tc, Total citati	ons		

"Earnings management" is the third subtopic with more publications. There are papers published for the period 2004 to 2011 The most cited paper belongs to Neg et al. (2009). Table 4 presents publishes papers on sustainability accounting subtopic.

Table 4. Publications in earnings management subtopic

persistence of abnormal earnings and systematic risk gn and Validation of a Novel New Instrument for suring the Effect of Moral Intensity on Accountants'	
suring the Effect of Moral Intensity on Accountants'	
ensity to Manage Earnings	
relationship between persistence of abnormal ings and usefulness of accounting information in hotel panies	6
ings Management in the Spanish Hotel Industry	4
	ings and usefulness of accounting information in hotel panies

In this study, we found 2 subtopics with 3 publications, namely "costumers accounting" and "accounting education". Table 5 shows paper on subtopic "costumers accounting". We highlight Assaf and Mignini' (2012) study. These authors' study provides empirical evidence that excluding customer satisfaction may lead to substantial difference in the mean and ranking of hotel efficiency scores. Table 6 presents publications on "accounting education". Goh and Scerri' (2016) work is the most cited. These authors investigate an important misconception about studying accounting among undergraduate hospitality students.

Table 5. Publications in costumers accounting subtopic

Authors	Year	Title	
Assaf, AG; Magnini, V	2012	Accounting for customer satisfaction in measuring hotel efficiency: Evidence from the US hotel industry	50

, =		Customer accounting and marketing performance measures in the hotel industry: Evidence from Australia		
Yasir, MA; Amir, AM; Maelah, R; Nasir, AHM	2020	Establishing Customer knowledge Through Customer Accounting in Tourism Industry: A Study of Hotel Sector in Malaysia	0	
Legend: Tc. Total citations				

Table 6. Publications in accounting education subtopic

Table 6. Fabilitations in accounting cadeactor subtopic					
Authors	Year	Title	Tc		
Chen, BH; Hsu, MS; Chen, MH	2013	The relationship between learning attitude and anxiety in accounting classes: the case of hospitality management university students in Taiwan	3		
Goh, E; Scerri, M	2016	I Study Accounting Because I Have To: An Exploratory Study of Hospitality Students' Attitudes Toward Accounting Education	22		
Chiou, CC; Tien, LC; Tang, YC	2020	Applying structured computer-assisted collaborative concept mapping to flipped classroom for hospitality accounting	1		
Legend: Tc, Total citations					

With two articles, we have identified "accounting research" and "accounting skills" subtopics. In these subtopics we highlight Park and Jang (2014) publication. This paper presents a brief overview of hospitality finance/accounting research and it propose the utility of interdisciplinary research in hospitality finance/accounting field. Table 7 and 8 present published papers in these subtopics.

Table 7. Publications in accounting research subtopic

Autores	Year	Title	Tc	
Hesford, JW; Potter, G	2010	Accounting Research in the Cornell Quarterly: A Review with Suggestions for Future Research	10	
Park, K; Jang, S	2014	Hospitality finance and managerial accounting research Suggesting an interdisciplinary research agenda	15	
Legend: Tc, Total citations				

Table 8. Publications on accounting skills subtopic

Autores Year Title		Tc	
Kim, M; Schmidgall, RS; Damitio, JW	2017	Key Managerial Accounting Skills for Lodging Industry Managers: The Third Phase of a Repeated Cross-Sectional Study	4
Kim, M; Schmidgall, RS	2019	Key managerial and financial accounting skills for private club managers: Comparison to lodging managers	0
Legend: Tc, Total citations			

There are other research subtopics (12) but only 1 article. Most cited papers are Lamminmaki (2008) and Skalpe (2003) (table 9).

Table 9. Publications in other subtopics

Autores	Year	Title	Tc	
Skalpe, O	2003	Hotels and restaurants - are the risks rewarded? Evidence from Norway	22	
Penela, D; Estevao, J; Gregory, A	2019	Accounting and financial antecedents of corporate spin- offs in the lodging industry	1	
Baker, CR	2016	From care of the poor to the great confinement: an exploration of hospital accounting in France	0	
Baldarelli, MG	2017	Accounting, creativity and charity in hospitality enterprises: the case of "Lentil as Anything"	0	
Seetah, K	2017	The effect of financial and eurozone crisis on accounting quality of the hospitality sector	1	
Silva, CON; Macas, MEL; Espinosa, MJP	2017	Accounting control rules: essential operation in business management: an ecuadorian case	0	
Lamminmaki, D	2008	Accounting and the management of outsourcing: An empirical study in the hotel industry	23	
Dutescu, A; Popa, AF; Ponorica, AG	cu, A; Popa, AF; 2014 Sustainability of the tourism industry, based on financial		11	
Smeral, E	2009	Growth Accounting for Hotel and Restaurant Industries	9	
Penela, DCD; Morais, AI; Gregory, AM	2019	Is timeshare good for firm value and profitability? Evidence from segment reporting	0	
Legend: Tc, Total citations				

## 3.2 Research trend on hospitality accounting

In this research we identified that research subtopic with most publications is "management accounting". However, publications ended in 2019. When analysing publications in 2020, we found 2 publications on "sustainable accounting", 1 on "costumers accounting" and 1 on "accounting education". Given that sustainability theme is on the agenda, everything indicates that "sustainability accounting" subtopic will be a research trend.

### 4. Conclusions

Today, due to globalization and intensity market competition hospitality managers need accounting information about firms' operations (Pajrok, 2014).

A comprehensive bibliometric review of hospitality accounting publications was completed. Several conclusions can be drawn from results: (1) the number of publications in hospitality accounting publications has been increasing year by year, especially in the last few years; (2) the main research subtopic are "accounting management", "sustainability accounting", "earnings management", "costumers accounting", "accounting education"; and (3) the research trend is on "sustainable accounting" subtopic.

In addition, in this study we Identify that the most influential publications on hospitality accounting belong to customer accounting and sustainability accounting subtopic. Most cited articles are: Assaf and Magnini (2012) customer accounting, Chan and Wong (2009) sustainability accounting, Gunarathne and Lee (2015) sustainability accounting and McManus (2013)

customer accounting. Articles with most publications belong to customer accounting and sustainability accounting subtopic.

This paper performs bibliometric review, analyses contributions made to hospitality accounting development and reveals insightful bibliometric findings. However, this study is not exempt from limitations. We have included only WoS database as a source of data collection. Other databases, like Google Scholar and Scopus, should also be considered to analyse research on employee-related disclosure. In order to address this limitation, future studies could extend the sample of research articles by selecting more databases to develop comparative studies based on different databases. Future research may also perform a qualitative analysis to bring more in-depth knowledge about this research area.

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# DIGITAL ACCOUNTING: A BIBLIOMETRIC LITERATURE REVIEW

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#### **Abstract**

Digital accounting is an emerging alternative to paper-based accounting. Given the importance of technological evolutionary process to accounting, this paper aims to analyse scientific production in this topic. This study reviews papers on digital accounting from Web of Science database. A quantitative bibliometric analysis was conducted using VOSviewer software. In the period from 2010 to March 2021, we found 59 publications. First article published in the area was only in 2010 and currently the line of publication is trending upwards. Most cited author, journal, organisational and country are respectively: Troshani; Journal of Emerging Technologies in Accounting; Edinburgh University; and America. Most used key words were information, transparency, management, performance and big data. This research provides evidence of research growth in a recent research area and provides research trends which currently focus on digital accounting development, digital accounting practices, digital reporting transformation and evolution of accounting information.

**Key Words** 

digital accounting; digitalization; bibliometric review

### 1. Introduction

Digital Accounting is used as a summary term for a variety of research developments on digitisation and automation of accounting processes based on emerging technologies (Quattrone, 2016). According to Lehner et al. (2019), digital accounting research field will have to be interdisciplinary, as it includes digital technology discipline, i.e., information and accounting. Given the importance of technological innovation in organisations, more and more sophisticated accounting information systems are increasingly being designed to meet strategic objectives and improve organisational performance (Naranjo-Gil et al, 2004). Despite being recent, the importance of research in this area is recognised in literature. This research aims to provide an overview of the state of the art in digital accounting field, in order to systematize existing studies and identify trends in academic research on this topic.

This study will take Contingency Theory as its theoretical lens, accepting that business environment is affected by its external environment. In this way it accepts that technology evolution affects the entire business environment, specifically accounting information system and its users and company performance (Hayes, 1997).

To achieve this overall objective, a bibliometric analysis is carried out on papers specifically focused on digital accounting in journals indexed on Web of Science (WoS) database by assessing impact of authors, journals and topics as well as their temporal evolution. Thus, this study has three specific objectives: (1) to analyse scientific production on digital accounting by quantifying the published articles per year (2) to analyse published articles influence on digital accounting by identifying the most cited articles, journal, authors, organizations, country/regions; and (3) to analyse research subtopics and research trends.

Bibliometric analyses have become popular in recent years to explore, organize, and evaluate scientific production that has been developed on a specific subject of study (Mallawaarachchi, Sandanayake, Karunasena, & Liu, 2020; Rajan, Dhir & Sushil, 2020). This type of analysis provides a better understanding of a subject identifying issues that have received greatest research attention and assessing published papers characteristics and impact (Sáez-Martín, López-Hernandez & Caba-Perez, 2017), which allows researchers to identify trends in academic research on a subject.

Study's findings depict the current status of research on digital accounting and provide a reference frame that could guide researchers regarding the direction of future studies on this subject.

## 2. Digital Accounting

"Digitization could be described as the transformation of analog information into digital formats" (von Schmidt-Pauli, 2018). Digital accounting is a recent phenomenon that aims to replace paper-based accounting to technology-based accounting (Gullkvist, 2011). This concept is related to innovation. Digital accounting innovation considers several factors and it is necessary to verify where it is inserted. Passey et al (2019) frames digital accounting within digital agency which is dependent on digital responsibility, digital skills, digital literacy, digital confidence, digital competence and digital autonomy.

Technological innovation in organizations (public and private companies, governments, institutions, among others) is increasingly designing more sophisticated accounting information systems to meet strategic objectives and improve their performance (Naranjo-Gil et al., 2004).

Given the impact of external environment on organisations, this study is based on Contingency theory as it argues that the impact of accounting information system characteristics on organisational effectiveness depends on contingent variables such as external environment, competitive strategy, technology used, firm size, firm diversification, organisational structure, industry variables and so on. This approach has been widely explored by accounting researchers, since seminal works such as those by Hayes (1997), Otley (1980), and Chapman (1997).

For instance, Naranjo-Gilet et al. (2019) study states that digital accounting, acting through a prospecting strategy, has an indirect effect on performance which may be more or less favourable depending on organization business strategy (Gullkvits, 2011). In addition to its impact on organisations literature suggests that there are several gaps in regulations, cultures and practices between different countries that may hinder diffusion of digital accounting practices internationally.

In medical offices, "the benefits of digitization include the automatization of work processes, the processing of accounting information, the visibility of accounting vouchers and generated accounting records, and the near-term evaluation of accounting periods" (von Schmidt-Pauli, 2018).

Given this topic importance, we will carry out a survey of all WoS database existing studies in digital accounting field in order to analyse published articles and identify most studied topics and future research trends.

## 3. Research questions

As stated earlier, through a bibliometric analysis this study aims to analyze scientific production on digital accounting to answer the following research questions Research Question (RQ):

RQ 1: How many articles specifically focused on digital accounting and how has been their evolution?

RQ 2: Which is the influence of published articles on digital accounting by identifying the most cited articles, journal, authors, organizations, country/regions?

RQ 3: What is the research trend?

#### 4. Data and methods

Following previous studies (e.g., Sáez-Martín et al., 2017), we first conducted a comprehensive research to collect papers specifically focused on digital accounting. Papers were selected from WoS database.

Firstly, a previous search was performed to identify words or keywords to be used in search for papers related to research topic.

The most used keywords in WoS database to identify published articles in research area were "Digital Accounting", "Digital technology", "Digital models", "Digital methods", "Digital reporting", "Digital disclosure", "Transformation of accounting" and "E-accounting". From the search, 2012 publications were generated, 1532 articles.

Only articles were selected and of 1532 articles generated in the search, 1472 were excluded as they did not relate to the topic under research. In the end we obtained a total of 59 articles selected on 01 April 2021 from WoS database. Study includes 59 articles published until the date of collection on digital accounting (including articles on digital reporting)

This study is based on a quantitative approach which takes as reference bibliometric indicators of scientific production according to their impact on WoS database. In analysing publications and their associated citations, we use bibliometric analysis, this analysis applies statistical techniques to examine bibliographic data (Kumar et al., 2020). In this regard, bibliometric studies use as main indicators articles, authors, journals or sources, institutions, countries/regions and keywords (Ahmed & Huang, 2019; Lafont et al., 2020; Llanos-Herrera & Merigo, 2019).

To carry out data analysis, we use VOSviewer. VOSviewer is a software that pays attention to graphical representation of bibliometric maps in an easy-to-interpret way (van Eck & Waltman, 2010).

## 5. Findings

## 5.1. Scientific production on digital accounting

In this subsection, we aim to answer the first two research questions.

**RQ 1:** How many articles specifically focused on digital accounting and how has been their evolution?

In this research, we found that the first article published in WoS was in 2010, by Rúbia Martins titled "The probatory value of electronic accounting documents in the Brazilian legal system" which shows that digital economy is a recent theme. In a total of 59 articles, from 2010 to date, there is an increasing trend line of publications in the area. The year with more publications was 2020 with 22 and 2019/2018 with 9. The year 2021 only includes articles published before April 1st. Figure 1 shows scientific production on digital accounting per year.

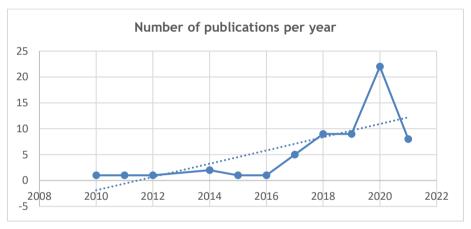


Figure 1. Temporal evolution of publications on digital accounting (Source: Data collected from the WoS database)

**RQ 2:** Which is the influence of published articles on digital accounting by identifying the most cited articles, journal, authors, organizations, country/regions?

The most cited article was from Coyne and McMickle (2018) titled "Can Blockchains Serve an Accounting Purpose?" with a total of 38 citations. This was followed by Quattrone's (2016) article titled "Management accounting goes digital: Will change make it wiser?" with a total of 38 citations. Most recent articles, namely Moll and Yigitbasioglu (2019) "The role of internet-related technologies in shaping the work of accountants: New directions for accounting research" and Al-Htaybat et al., (2018) "Educating digital natives for the future: accounting educators' evaluation of the accounting curriculum" have obtained 26 and 16 citations, respectively. All other

articles published in digital accounting area have 14 or less citations, as shown in Table 1.

Table 1. The top 10 most cited publications on digital accounting

RO	Author(s)	Year	Title	Journal	TC
1	Joshua G. Coyne; Peter L. McMickle	2017	Can Blockchains Serve an Accounting Purpose?	Journal of Emerging Technologies in Accounting	38
2	Paolo Quattrone	2016	Management accounting goes digital: Will the move make it wiser?	Management Accounting Research	38
3	Jodie Moll; Ogan Yigitbasioglu	2019	The role of internet-related technologies in shaping the work of accountants: New directions for accounting research	The British Accounting Review	26
4	Al-Htaybat, K; Hutaibat, K; von Alberti-Alhtaybat, L	2018	Educating digital natives for the future: accounting educators' evaluation of the accounting curriculum	Accounting Education	16
5	Indrit Troshani; Marijn Janssen; Andy Lymer; Lee D.Parker	2018	Digital transformation of business-to- government reporting: An institutional work perspective	International Journal of Accounting Information Systems	14
6	Indrit Troshani, Joanne Locke, Nick Rowbottom	2019	Transformation of accounting through digital standardisation: Tracing the construction of the IFRS Taxonomy	Accounting, Auditing & Accountability Journal	7
7	Thomas Edward Marshall ; Sherwood Lane Lambert	2018	Cloud-Based Intelligent Accounting Applications: Accounting Task Automation Using IBM Watson Cognitive Computing	Journal of Emerging Technologies in Accounting	7
8	Indrit Troshani, Joanne Locke, Nick Rowbottom	2018	Transformation of accounting through digital standardisation: Tracing the construction of the IFRS Taxonomy	Accounting, Auditing & Accountability Journal	7
9	Petros Lois, George Drogalas, Alkiviadis Karagiorgos, Kostantinos Tsikalakis	2020	Internal audits in the digital era: opportunities risks and challenges	EuroMed Journal of Business	5
10	Julia Kokina; ShayBlanchette	2019	Early evidence of digital labor in accounting: Innovation with Robotic Process Automation	International Journal of Accounting Information Systems	5

RO: Ranking; TC: Total Citation (until July 15, 2020); AC: Average Citations per year Source(s): Data collected from WoS database using VOSviewer

Table 2 shows top 10 most cited authors, articles, organizations, and countries in WoS of the subject under study. This way we conclude that most cited journals were Journal of Emerging Technologies in Accounting with 47 citations, Management Accounting Research with 38 and British Accounting Review with 26. Most cited authors were Troshani, Indrit with 28 ciations, followed by Al-Htaybat, Khaldoon with 20 and Von Alberti-Alhtaybat with 20. Organisations with most citations were Univ Edinburgh, Univ Memphis and Univ Adelaide. Countries/regions with most citations were United States of America (USA) with 61 citations and England with 60 and Australia with 54.

Table 2. Top 10 most cited journals, authors, organizations, and countries

R O	Journal	Тс	Author	Тс	Organizations	Тс	Count ry or Regio n	Тс
1	Journal of Emerging Technologies in Accounting	47	Troshani, Indrit	28	Univ. Edinburgh	38	USA	61
2	Management Accounting Research	38	Al-Htaybat, Khaldoon	20	Univ. Memphis	38	Englan d	60
3	British Accounting Review	26	Von Alberti- Alhtaybat, Larissa	20	Univ. Adelaide	28	Austra lia	54
4	International Journal of Accounting Information Systems	23	Locke, Joanne	14	Univ. Birmingham	28	Scotla nd	52
5	Accounting Education	18	Rowbottom, Nick	14	Queensland Univ. Technol	26	Jordan	20
6	Accounting Auditing & Accountability Journal	14	Blanchette, Shay	5	Univ. Manchester	26	Saudi Arabia	20
7	Euromed Journal of Business	5	Kokina, Julia	5	King Abdulaziz Univ.	20	Nether lands	19
8	Geoderma	5	Martic, Vladan	3	Philadelphia Univ.	16	South Africa	14
9	Journal of Management Control	4	Helfaya, Akrum	2	Open Univ.	14	People s R. China	5
10	Journal of Intellectual Capital	4	Mosweu, Olefhile	0	Univ South Africa	14	Cypru s	5

RO: Ranking Order; TC: Total Citations; St: Subtopic.

Source(s): Data collected from WoS database using VOSviewer

# 5.2 Research trends in Accounting digitalization

### RQ 3: What are the research trends?

Before identifying research trends, we identified main research subtopics. In area of digital accounting, we identified four research subtopics.

First subtopics is focused on "digital accounting development". In this subtopic, we highlight Chiu et al. (2019) study because authors investigated methodologies used in accounting and emerging technologies fields on Accounting Information Systems Journals. This study stands out because it presents the first bibliometric analysis on emerging technologies in accounting. On the other hand, Kokina and Blanchette's (2019) study focuses on Robotic Process Automation, an emerging technology that enables automation of rules-based business processes and tasks through the use of software "bots". Lois et al., (2020) examined continuous auditing in digital

age from audit firms' employees perspective. In a more original way, Marshall et al. (2018) study presents a cognitive computing model, based on artificial intelligence technologies, supporting task automation in accounting industry. In this way authors present the impact of task automation on accounting functions and consequent creation of new accounting functions supporting innovation. In another study, Moll et al. (2019), reviews accounting literature that focuses on four internet-related technologies that have potential to dramatically change and disrupt accountants and accounting researchers work in the near future.

Second subtopic research is "digital accounting practices". In this area we highlight Al-Htaybat et al. s, (2019) study because they explore the intersection of accounting practices and new technologies in the age of agility as a form of intellectual capital by sharing conceptualisation and real-world implications of accounting and accountability ideas in exploitation and implementation of new technologies. On the other hand, Al-Htaybat et al. (2018) study how global digital revolution has irrevocably transformed societies and industries. Authors conclude that accounting profession is predicted to experience a significant change in the future, due to technological developments. Practices will be automated and related positions obsolete, thus accounting graduates need to be educated for new and different tasks and positions.

In the same ambit, Bhimani (2020) studied digitisation impact on accounting research given the rise of Internet, mobile technologies and digital economy tools that generate depth, breadth and variety of data far exceeding what researchers have had access to in the past.

Third subtopic addresses "digital reporting transformation". According to Bonson (2014) blockchain has enabled successful creation of decentralised digital currency networks. Due to the use of blockchain as a ledger, author looked into whether blockchain could become a more secure alternative to current ledgers. In the study they concluded that while blockchain-based digital currencies only exist within blockchain, economic transactions exist outside accounting ledgers. This distinction prevents an acceptable level of verification of transactions using blockchain model. Moreover, security benefits of blockchain that make it ostensibly immutable are not fully available or reliable in an accounting environment. Given the administrative burden on firms of traditional accounting reporting between firms and governments Troshani et al. (2018) identified this burden as an obstacle hindering business efforts to achieve the core objectives of efficiency and innovation. Study findings conclude that institutional work to develop digital business-to-government reporting across jurisdictions has been shaped by international influences and local factors. Thus, and in line with institutional theory, institutional work carries enormous weight as they have shaped the path of these transformations. In the same theme, Troshani et al. (2019) delved into IFRS taxonomy as it is a key element of digital accounting infrastructure underlying international business reporting. In their study they traced the development, governance and adoption of IFRS taxonomy to highlight implications for accounting practice and standard setting.

The latest subtopic is about "evolution of accounting information" into digital culture. In this subtopic we highlight that Locke et al. (2018) and Quattrone (2016). Locke et al. (2018) analysed the process by which 'analogue' business reports produced under a 'paper paradigm' are translated into a machine language as required by digital reporting. The paper examines how digital translation of reporting information into atomised data affects infrastructure and practice of accounting. In the study it was possible to conclude that machine translation is no longer marginalised but is the 'primary' text with effects on infrastructure and practice of accounting. It extends speech act theory by applying it to digital domain and in the context of translation between languages. Quattrone (2016) confronts digital revolution in historical and cultural contexts with the evolution of management accounting as a practice involved in production of knowledge for decision-making. In his analysis author argues that although effects of digital revolution on management accounting and decision-making are not yet clear, these effects will certainly not fulfil the dream of perfect information and rational decision-making as one might be led to believe by the growth of data-driven organisations and societies.

From sample under study, it was possible to verify that most recently used keywords were: information, transparency, management, performance and big data, as shown in figure 1.

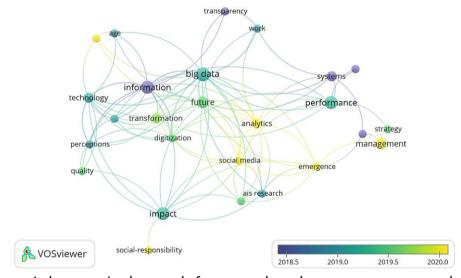


Figure 1 shows major keywords frequency based on co-occurrence analysis.

## 6. Discussion and concluding remarks

This study reviews digital accounting literature and highlights, based on most influential studies, its importance in the way it is used for a variety of research developments on digitization and automation of accounting processes based on emerging technologies.

Given the importance of research in this recent but much needed area, this paper aims to provide an overview of the state of the art in digital accounting field (including digital reporting), in order to systematize existing studies and identify trends in academic research on this topic.

In this study a bibliometric analysis was carried out on papers specifically focused on digital accounting in journals indexed on WoS database by assessing most influential authors, journals, countries/regions and organizations, main research trends, as well as their temporal evolution in order to systematize existing research and answer several research questions.

Based on 59 articles published in WoS from 2010 to April 2021, results show that the first article published in that area was from authors Martins (2010) study analyses changes that occurred in Brazilian legislation during 2000's concerning legal legitimization of electronic accounting documents use. Author concluded that there were considerable changes in Brazilian legislation concerning electronic accounting documents, starting mainly as of 2007 with the advent of Public Digital Bookkeeping System. However, the years with more publications were 2020 with 22 and 2019/2018 with 9 were 2018 and 2019, in 2020 there is a growing trend of publications in this area. Most cited author, journal, organization, and country are: Troshani; Journal of Emerging Technologies in Accounting; Edinburgh University; and America. Most used key words were information, transparency, management, performance and big data. Main research in digital accounting is focused on four subtopics: digital accounting development, digital accounting practices, digital reporting transformation and evolution of accounting information into digital culture. In addition, we suspect that digital accounting trend is on digital accounting development, digital accounting practices, digital reporting transformation and evolution of accounting information.

This paper attempts to contribute to digital accounting information literature in several ways. Firstly, this research provides robust evidence on scientific production growth in this very recent area. Secondly, this study provides the area new research trends and most studied topics, paving the way for possible studies of other topics. On the other hand, it takes into

account the contingency theory, accepting that everything is relative because environment conditions cause transformations within organizations.

In future studies, we suggest the community of scholars interested in digital accounting to take into account various perspectives specific to digital accounting field in order to holistically map digital accounting. Similarly apply this study in other databases like Scopus and compare with our results.

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# CHALLENGES OF GAMIFICATION IN THE TOURIST DESTINATION BAR

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#### **Abstract**

Purpose: The present research focuses mainly on one issue: "Tourism in crisis: How gamification may help increase the interest of tourists in visiting a destination" The purpose was to find out and determine the views of SMEs and tourists in Bar, as a tourist destination, with regards to the offer of tourist gamification.

Methodology: In order to conduct the research, a quantitative and qualitative study was applied. Main target group is the business sector operating in the tourism industry and tourism support industry, such as: local businesses, tourist service providers, accommodation providers, travel agencies, public institutions operating in the fields of tourism and culture. The second target group are the tourists, themselves. A total of 40 SMEs and 111 tourists participated. The gathered feedback was analysed using SPSS.

Results: The result of reviews of gamification literature showed that: boosting data driven gamification, customer loyalty, brand awareness, user generated content, virality, online engagement and, of course: revenue can be a useful tool for success of online advertising activities. Gamification of tourism can contribute to a more rewarding interactions and a higher level of satisfaction, as well as increase in brand awareness and loyalty to the destination. Research has shown that there is a potential for gamification

development in Bar. This is all the more important at the time when tourist flows are being disrupted due to Covid-19. Gamification could extend the time of stay at the destination and its greater integration into the daily tourist offer.

## **Key Words**

smart tourism, gamification, tourist, SME, Montenegro, bar

#### INTRODUCTION

As a new approach to the promotion of tourist destinations, gaming, i.e., the concept of gamification, offers the opportunity for those employed in tourist organisations and destination marketing to create an informative and entertaining setting for a successful creation of destination brand awareness, interaction and communication. The use of games offers a plethora of advantages for tourism marketing and may increase brand awareness, attract potential buyers, improve the overall experience and provide immediate engagement of the tourists.(Xu idr., 2016)

While some tourist gamers are still concerned with their social media strategy, others have already started implementing games in their marketing strategies, in order to engage both buyers and employees in new ways and create a culture of playfulness and fun. (Weber, 2014)

The subject of research related to this abstract is the use of the concept of gamification in the destination marketing through the development of mobile apps based on location(Xu idr., 2016) (play while you're there), which are mostly used to incentivise the higher engagement on location, so that the tourists' in person experience may improve in a more entertaining and informative manner.

In this research, by using the survey and interview methods, the possibility of introduction of the most modern concept of game-based marketing in tourism shall be explored. The main motivation tourists have for playing games while at the destination shall be examined, along with their requests (as it pertains to gaming) and the matter of traditional gaming motivation and suitability to tourist gamers. Hence, the questions of why the tourists play games, when do they play, which types of game do they prefer, what do they expect from the game-based marketing and which are the critical aspects of game design, etc., shall all be treated in this text.

This is a brand-new field of research in implementation of destination marketing and management.

The main goal of the research is the study of application of games in tourism marketing and how gaming while travelling and staying at a tourist destination may benefit the tourists.

### THEORY BACKGROUND

Currently, vast theoretical corpus regarding gaming and the use of games in tourism already exists.

In considering several definitions of the very concept of games, Seaborn i Fels sum up a few key features of games, such as: rules, structure, voluntariness, uncertain outcomes, conflict, representation, resolution, etc (Seaborn & Fels, 2015).

Feifei Xu, Jessika Weber, and Dimitrios Buhalis deem the concept of gamification to be distinct from the process of gaming itself, seeing how the process of gamification uses the elements of game design in a different context and for a different purpose to that of a game. (Xu idr., 2013) Citing the research by Deterding (Deterding idr., 2011), these authors point to the term "gamification" appearing for the first time in 2008, while the concept of gamification gained popularity starting in 2010, according to (Epstein, 2013). The said authors highlight the definition of "gamification" as the use of game design elements in non-game contexts, as formulated by Deterding et al..

In this regard, it is necessary to make a distinction between the game-for-game-sake and the gamification system which uses some game mechanics. Gamification is, therefore, different from the game-for-game-sake. Gamification is oriented toward behavioural changes of the player in relation to their environment and other players which can be either customers or service providers with the purpose of meaningful interaction and potential reward. On the other hand, games-for-game-sake are focused on entertainment and enjoyment. (Xu idr., 2017)

Citing several authors, D. Stadler and V. Bilgram define gamification as the application of game elements in a non-gaming context based on several important elements of games: (Stadler & Bilgram, 2016)

- Compelling narrative
- Clear rules and goals
- Reasonable and well-balanced challenges
- Quick and open feedback
- Presence of social interactions and relations

These authors(Stadler & Bilgram, 2016) also highlight the potential of "gamified" elements in the process of market research, which drive consumer engagement and increase their willingness to participate in the research. Noting the low level of attractiveness of traditional methods of

market research and subsequent decrease of participation in research, they recommend the "gamified" research. (Stadler & Bilgram, 2016)

Comprehensive overview of gamification in tourism is given by Negruşa et al. (Negruşa idr., 2015) in their research in the context of tourism sustainability and the link between the concept of gamification and sustainability. The authors stress the effects of sustainable gaming through three types of relations and aspects (economic, social, ecological) tourist organisation-tourist (goal: higher frequency of consumption), ourist organisation-employee (higher level of productivity) and tourist organisation-community (energy saving and waste reduction).

The goals of gamification in tourism can be divided into two groups. (Xu idr., 2013)

First, gamifications will increase motivation of tourists and tourism employees, causing a behavioural change (purchase of tourism products, efficient work etc.)

Second, gamification will enable tourists and tourism employees to cocreate value, thus incentivising intrinsic motivation.

In tourism, gamification might be applied through marketing, sales and incentivise customers (external application) and through human resources, training improving of productivity and crowdsourcing<sup>6</sup> (internal application). (Xu idr., 2013)

Gamification, as a process, entails the use of an existing things such as a website, business applications, internet pages, etc. and inclusion of game mechanics within the community in order to boost user participation engagement and loyalty. Gamification uses techniques grounded in databases (big data) used by game designers to engage with the players and applied to non-gaming settings in order to initiate an action which adds value to the business. (BI Worldwide, b. d.)

The application of gamification in tourism, which is specified as, primarily, a service industry, may be a strong contributing factor to interactivity in consumption with strong marketing potential. Several destination management organisations (DMO) have designed games as means of promotion and sales, namely in Thailand, Ireland and China. Tourism Ireland is the first national tourism organisation to design and launch a social game on the 16<sup>th</sup> of March 2011 called "Ireland Town on Facebook" advergames. The inclusion of the Innovation Norway Company into gamification process

<sup>&</sup>lt;sup>6</sup> The activity of crowdsourcing entails the way of delegation of certain tasks from an innovative process, which were performed by the experts within a company, to a large and undefined group of individuals outside of the company in the form of an open call. This method is based on the fact that a large community, under certain circumstances can at any point produce a better innovative effect through the capabilities and use of ICT, along with the fact that people prefer recognition of quality of their ideas rather than the level of formal academic qualifications according to: (Getejanc & Stanojević, 2016)

is a more recent example, which had two games on offer: Holmenkollen Ski Jump i Trysil Twin Tip. These DMOs are very aware of the new trends in technology and understand gamification as a marketing strategy to attract the attention of tourists. (Corrêa & Kitano, 2015)

- J. Weber suggests a dozen types of apps for gamification in tourism, covering the phases before, while and after travelling, which she analysed as cases of good practice: (Weber, 2014)
- 1. Location-based augmented reality games;
- 2. Gamified tours in rural and urban settings;
- 3. Gaming in theme parks;
- 4. Cultural heritage games;
- 5. Gamification in transmedia narration;
- 6. Gamification of a restaurant experience;
- 7. Gamification of a hotel experience;
- 8. Gamification of in-flight experience (piloting a plane, note by D.L.);
- 9. Experience of virtual, cultural heritage;
- 10. Gamification of virtual leisure and travel;

This author also claims that the mobile apps are the fastest growing segment of gaming industry, considering that this segment doubled its turnover in the period between 2013-2015 from 13 to 22 billion dollars. Such growth motivated the mobile game designers to design games in different contexts, such as tourism industry. (Weber, 2014)

Two types of games are most prevalent in tourism: (Corrêa & Kitano, 2015)

- 1) Online/offline games
- 2) Location based mobile games

Games in tourism are intended to stimulate tourist experience and engagement at the destination in an entertaining and informative manner. (Corrêa & Kitano, 2015)

Benefits of gamification in tourism may, generally, be classified in two groups: (Xu idr., 2017)

- a) Internal and
- b) external function of gamification.

External function refers to tourist experience before, during and after the holiday. Before travelling, the games offer travel information to potential tourists, which may generate interest and stimulate inspiration to visit a certain tourist destination, which in turn, may be transformed into the sale/purchase of travel arrangements.

During the travel, location-based games may enhance the experience of stay in an entertaining way. After the travel, gaming may affect the creation of pleasant memories of the journey and motivate the user to share the experience with friends which, ultimately promotes the tourist destination. Rewards/coupons from the games and gamified loyalty programmes may motivate repeated visits.

Internal function of gamification refers mostly to the use of games for familiarisation of employees with one another (team building) and creation of staff training programmes in a new and creative way. (Xu idr., 2017)

Innovative application of marketing in tourism through gamification is oriented toward the attraction of tourists, building of tourist brands, especially when it comes to less known destinations. (Xu idr., 2017) Everyone who is a part of tourism industry may use this concept, beginning from destination management organisations (DMO), hotels, tour operators, travel agencies, restaurant chains, air carriers and everyone else who creates or takes part in the creation of such offers. Gamification provides a useful interaction, higher level of enjoyment and increases awareness and lovalty to the tourist destination. Using game design elements, the players will experience challenges, rewards, competitions, storytelling, roleplaying and enhancement of experience at the location of a tourist attraction. Gamification system creates an entertaining environment which, through an enhanced experience, increases the possibility of a deeper engagement of tourists, better understanding and discovery of the destination, which ultimately brings about higher level of devotion to the travel brand and higher loyalty, thereby increasing the profit of companies in tourism industry.

Hedonic value of the game should be particularly highlighted, especially the gameplay enjoyment as well as the utilitarian value of the game by providing travel information (received through the gameplay, note by D.L.), rewards (e.g., Free tickets or coupons for various contents of tourist offer) etc. Tourism companies gain particular benefits through the activation of the gamification system, which reflects through the dynamic engagement of customers, increased travel brand awareness and higher customer loyalty. (Xu idr., 2017)

The results of studies performed by a group of researchers, regarding gamified apps within the domain of smart tourism point to several notable discoveries. (Bozkurt & Durak, 2018)

Gaming apps in tourism enable tourist's emotional satisfaction (through gaming elements) and cognitive satisfaction.

An important conclusion of the said study is the fact that the informative motivation had no significant link to the intention of use (IU), but that the interaction motivation did, which implies that people believe they have different motives for using media, but in reality, only a few motives significantly affect actual behaviour.

Starting from the theoretical standpoint that the gamified apps in smart tourism are used for collection of information and for interaction through gaming, there is the interesting realisation that the wish of users to interact has a higher impact on their use than the need for information acquisition.

### **METHODS**

**Type of research:** The survey method through direct interview and online contact (email, online survey, social media) was used.

**Surveying period:** July and August 2020.

**Research location:** Destination Bar, Montenegro.

## Statistic sample:

- **1. Tourists.** Representative, percentual portion of number of visitors of the destination Bar in 2020. The sample consisted of 111 participants, tourists, who visited the destination Bar in July and August.
- **2. Stakeholders in a tourist destination.** The sample consisted of 40 participants, legal entities, operating on the territory of the destination Bar.

**Sampling methods:** The method of simple, random sampling was used. The participants were asked to fill the questionnaire and reply to the open questions listed in the survey. They were also asked to reply to the questions relating to gamification in tourism and whether this process is applicable at the destination Bar.

## Survey structure and content:

- **1.Tourists.** The first set of questions in the survey refers to general questions, demographic and socio-economic information (gender, age, monthly income, education, type of accommodation, country of residence). The second set of questions regards sources of information on the destination, motives for visiting the destination, tourist attractions visited at the destination. Questions regarding the scale of intensity of the source, motivation, attractions and opinions formed through the use of the Likert scale. Likert scale was formed for values from 1 to 5. The third set are general questions relating to gaming while travelling, along with introductory explanations of the concept of gamification in tourism. The questions regarding gaming while travelling, motivation for gaming and rewards were also formed by using the Likert scale.
- **2. Stakeholders in a tourist destination.** The first set of questions in the survey regards the general information regarding legal entities (type of main business activity, size of business, type of ownership, market share). The second set of questions regards the use of IT in communication, marketing activities, online services and the need for digitisation. Third set of questions are general questions regarding gamification (playing games with the purpose of discovery, the concept of the beacon, gaming experience).

**Statistic data analysis methods:** Descriptive statistics and cross-tabulation. Statistical data analysis performed through the use of SPSS Statistics 23 Suite.

#### **FINDINGS**

Table 1: General profile of visitors

			1		
Gender (%)	Male	49.5		Under 25 y. of age	35.1
Gender (%)	Female	50.5		26-35 y. of age	32.4
	High school	27.0	4.55 (0/)	36-45 y. of age	18.9
Level of	College	23.4	Age (%)	46-55 y. of age	8.1
education (%)	University	49.5		Over 56 y. of age	5.4
	degree				
	Alone	15.3	Net monthly	Less than 1,000 €	56.8
	With friends	41.4	household income	1,001-2,500 €	31.5
Travelling with	With their	23.4		Over 2,501 €	11.7
_	partner		(%)		
(%)	With their	19.8		1 day	10.8
	partner and				
	children				
	Hotel	44.1	Length of stay (%)	2-3 days	35.1
	Individual	29.7		Longer than 4 days	51.4
Type of	accommodation				
accommodation	Campsite	3.6		Missing	2.7
(%)	Personally	16.2		Travel agencies	27.0
(70)	owned		Travel erganized		
	accommodation		Travel organised		
	Other	6.3	by (%)	Groups	9.0
	Airplane	34.2		Individual	64.0
Tune of	Car	43.2			
Type of	Train	8.1			
transportation	Bus	10.8			
(%)	Cruise ship	0.9			
	Other	2.7			

Source: Direct data analysis

In research, the goal was to survey tourists exclusively. The results suggest that participants were 49.5% male and 50.5% female. According to the data 35.1% are younger population, under 25 years of age. Also, results show that the destination Bar is generally visited with friends and acquaintances, percentage of 41.4%. The tourists are mostly organising their travels individually (64%) and stay longer than 4 days at the destination. The visitors have mostly a higher education (49.5%), and approximately bipolar structure of monthly household income with clearly defined groups in less than 1,000€ bracket (56.8%) and 1,001€-2,500€ (31.5%) bracket. Hotels are prominent as a type of accommodation for tourists (44.1%). The participants arrived at the destination Bar mostly by car (43.2%), with highest percentage coming from the countries of the region (39.6%), which is not surprising, considering the ever-increasing issues caused by the virus in the surveying period.

Table 2: General profile of stakeholders

	1 55 40 11 1 1	25.0			70
	I 55.10 Hotels and	25.0		Micro business	72.
	similar				5
	accommodation				
	I 55.90 Other	12.5		Small business	22.
	accommodation		Size of busines		5
	I 56.10 Restaurants	12.5	,	Medium size business	2.5
	and mobile food		(%)		
	service activities				
	N 77.11 Rental and	5.0		Large business	2.5
Type of	leasing of cars and				
economic	light motor vehicles				
activity (%)	N 79.11-79.12 Travel	2.5		Privately owned	92.
	agency activities,	2.3		Frivatety owned	5
	Tour operator				3
	activities		Ownership (%)		
	N 79.90 Other	2.5	Ownership (%)	State owned	7.5
		2.5		State owned	/.5
	reservation service				
	and related activities				
	Other	40.0		Montenegro	79.
					5
	The company uses no	13.2	Product/Service	Foreign market	20.
	IT in communication		market		5
	with customers and		placement		
	following their				
	preferences				
	The company uses IT	47.4		Company has no	18.
Use of IT in	only for			means of marketing	9
communicatio	communication with			activity	
n with	customers				
customers and	The company uses IT	28.9		The company uses	21.
following	to communicate with			the traditional	6
, ,	consumers,			methods	
customer	understand their				
preferences	preferences and				
(%)	analyse feedback		Marketing		
	None of the above	10.5	activities (%)	The company uses	27.
			(,	the traditional	0
				methods, but intends	
				to use digital	
				marketing in the	
				future	
				Company is already	27.
				completely focused	0
				on digital marketing	"
				None of the above	5.4
			l	none of the above	5.4

Source: Direct data analysis

During the research, most surveyed stakeholders operated in the hotel or similar accommodation sector (25%) and other activities (40%). The research, also shows that most legal entities participating in the study are micro businesses with less than 10 employees (72.5%), privately owned (92.5%). Services are provided mostly on the Montenegrin market (79.5%). Legal entities use mostly two types of marketing activities: Traditional marketing methods 27% and digital marketing 27%.

Table 3: Tourist attraction rating

		Old town Bar	Spring s in the hills above the old town	Rikav ac Canyo n	Old Olive Tree	King Nikola 's palac e	Old town Prista n	Paleo christi an churc h	A church, A cathedr al or a mosque	Skada r lake	Sash lake
N	Valid	101	77	63	87	102	80	82	96	100	74
	Missi ng	10	34	48	24	9	31	29	15	11	37
M	ean	4.2376	3.909	3.523	3.965	3.823	3.562	3.658	4.1979	4.280	3.783
			1	8	5	5	5	5		0	8

Source: Direct data analysis

Highest rated attractions are Old town Bar and Skadar lake, which partly belongs to the municipality of Bar, and they were considered the main attractions.

Table 4: Previous experience with gamification in tourism

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	No, I have never heard of that	73	65.8	65.8	65.8
	feature				
	I have heard, but never used	24	21.6	21.6	87.4
	the feature				
	Yes, I have used that feature	10	9.0	9.0	96.4
	I am a regular user	1	0.9	0.9	97.3
	5.00	3	2.7	2.7	100.0
	Total	111	100.0	100.0	

Source: Direct data analysis

As shown in the table, most of the tourists surveyed had no experience with gamification and was not aware of that feature (65.8%), while 21.6% of tourists was aware, but had no experience with gamification.

Table 5: Motives for gamification in tourism

		Learning about the history,	Relaxation and	New
		natural beauty, cultural	respite from	experiences and
		sites and events	everyday life	surprises
N	Valid	104	102	105
	Missing	7	9	6
Mean		3.7885	3.7157	3.8381

Source: Direct data analysis

The tourists recognise all answers as potential motivation for gamification, and it could be said that new experiences and surprises are barely prevalent.

Table 6: Preferred type of gamification - type of game

		Multiplayer interactive games	Obstacle challenges, puzzle level games	Destination feedback with the possibility to learn about the destination	Independent exploration, i.e., Avatar- like games
N	Valid	105	103	105	106
	Missing	6	8	6	5
Mean		3.6190	3.4369	3.7048	3.3962

Source: Direct data analysis

Participants deem all types of games to be interesting as it relates to gamification. Slightly prevalent is the destination feedback with the possibility to learn about the destination and games which include interaction and group play, since younger tourists visit Bar mostly in groups.

Table 7: Preferred type of reward

			Accommodation	Food and	
			booking	beverage	Guided tours
		Small gift	discount	discounts	of the town
N	Valid	97	106	104	102
	Missing	14	5	7	9
Mean		2.5361	3.8113	3.6923	4.1176

Source: Direct data analysis

Participants equally opt for all categories. It may, also, be added that the strength of their preferences (3.78) is roughly the same... Which represents the average value, the arithmetic mean (values between 1 and 5 were chosen and three items would average at 4.0).

Table 8: Applicability of gamification in tourism (destination Bar)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Possible	28	70.0	70.0	70.0
	Certain	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

Source: Direct data analysis

Most participants (stakeholders) consider gamification in tourism to be applicable to the destination Bar.

Table 9: Expected effects of gamification

	ixpected entects of 5				
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Improved promotion	24	60.0	61.5	61.5
	Sales	3	7.5	7.7	69.2

	Improved	12	30.0	30.8	100.0
	company image				
	Total	39	97.5	100.0	
Missing	System	1	2.5		
Total	•	40	100.0		

Source: Direct data analysis

Effects of gamification expected by stakeholders consist in improved promotion of their company (61.5%) and, to a smaller extent, improved company image 30.8%.

#### DISCUSSION

A particularly interesting finding is that, according to participants, the tourists would take part in gamification, i.e., play games with destination feedback and the possibility to learn about the destination aa well as the games which include interaction and group play, since young tourists visit the destination, mostly, as a part of a group and would prefer to play to gain new experiences, rather than in search of adventure and entertainment at destination Bar. These opinions reflect those of other young players. We have no data on the elderly, since very few of them participated in the survey. Old town Bar is named as the main and most attractive location for gamification, as expected, considering that the tourists usually cite the cultural-historical sites of this destination as the most interesting to visit, more precisely, those located in the Old town. The participants mostly consider discounts on accommodation bookings to be the most desirable reward for participation and playing the games.

Stakeholders mostly agree that the process of gamification is applicable to the destination Bar and, as our partners, suggested several interesting and attractive locations for beacon instalment. The participating businesses already use the existing marketing activities, and a smaller fraction of those switched to digital marketing. Large number of stakeholders would take part in gamification in order to improve the promotion of their businesses, as well as to improve the image of the company, itself.

Motives of tourists for adopting the concept of gamification (table 8) show that new experiences and surprise may be slightly more important in relation to acquisition of information, which, to an extent, aligns with the findings of the Bozkrut and Durak study(Bozkurt & Durak, 2018) that users' wish for interaction outweighs the need for information. As a motive, new experiences and surprises are also close to the stance that gamification may enable experience sharing with friends and creation of added consumer value(Stadler & Bilgram, 2016).

The prevalence of interest in games with destination feedback and the possibility to learn about the destination (table 9) indicates the theoretically proven premise that location-based games may improve travel and stay

experience(Xu idr., 2017). On the other hand, these findings may be linked to the theoretical standpoint that the gamification system makes possible an entertainment environment whereby the enhanced experience provides a deeper engagement, better understanding and education of the tourists at the destination(Xu idr., 2017).

Visiting the town with the tour guide as the preferred reward (table 10) is somewhat aligned with the similar stance, attested by existing research into utilitarian value of games through tourist information dissemination and rewards such as free tickets and coupons regarding various contents present at the tourist destination(Xu idr., 2017). Additionally, the said findings of this study pertinent to the preferred type of reward, may be linked to the theoretical standpoint that internal rewards have a stronger effect than an external reward, i.e., Creating intrinsic motivation in an individual is the strongest feature of gamification(Xu idr., 2013).

Effects of gamification in tourism expected by stakeholders (table 38) match the majority of theoretical standpoints that gamification is an innovative application of marketing in tourism oriented toward tourist attraction (promotion), brand recognition (image), particularly as it pertains to less known tourist destinations, improving tourist experience, increased engagement etc. which in turns leads to higher brand devotion, higher level of loyalty and therefore higher profit of tourism companies(Xu idr., 2017) (Xu idr., 2017) (Sever idr., 2015).

#### **CONCLUSIONS AND IMPLICATIONS**

By applying the gamification concept, the actions of the stakeholders in tourist destination may be directed from a strategic decision aspect. Using gamification as an innovative tool of tourism marketing may significantly improve the marketing position of the tourist destination Bar and reach promotional and sale goals of all stakeholders.

In this regard, several recommendations regarding the concept of gamification stand out as the point of key benefits:

1. Rising awareness of this new component of the tourist destination brand. Gamification may help create a new component of the brand of Bar as a destination. Stakeholders at the destination may include their own brands in game design. Some games may be specifically designed to create or improve the awareness of a certain stakeholder or a key attraction at the destination. The goal is to further increase the interest of potential guests to "recognise" a destination (prior to arrival, or at departure), a specific stakeholder (hotel, travel agency, etc.) or an attraction. The game as a particular medium of a marketing experience renders possible the tourist experience in an entertaining context, which improves brand recognition, i.e., founds that recognition on an innovative component. Bar is starting to be recognised as a destination

- with an innovative tourism product within the domain of adventure and experience tourism, which constitutes a new component of its brand.
- 2. Realisation of a particular tourist experience. The experience of a tourist travelling, has lately been carefully weighed in the final rating of a tourism product. Well-designed games may, in good part, improve the experience of stay at the tourist destination, such as Bar, through fun and fantasy. By immersing themself into the role of a player, the tourist faces, as a character proxy, certain challenges outside of reality, while, concurrently spending time in the real world of the attraction and having tremendous fun at that. Thusly, the game brings the tourist to a higher level of enjoyment, through a varied and multidimensional tourism product.
- 3. Incentivising active behaviour of tourists through learning. One of major challenges for stakeholders at the tourist destination is tourist activity and how to incentivise it. Through gameplay, the tourist has a dynamic interaction, performing the task or the goal at hand, bonding with the physical environment of the tourist attraction (location-based games), facing virtual challenges, they have instant feedback regarding their achievements, and in turn have a personal emotional response. While playing and exploring the attraction location at the destination Bar, the players/tourists bond interactively with the destination and, at the same time, they learn about the attraction in particular and the destination in general. The stakeholders may take part in the game development and additionally motivate active participation of the tourists by providing rewards (free tickets to visit the Heritage Museum/King Nikola's Palace, food and beverage discounts in restaurants, etc.), which along with tourist activity and destination experience enhancement constitutes a kind of tourism product co-
- 4. Enjoyable and entertaining online engagement of the tourists at the destination. By digitising their businesses, in particular when it comes to the marketing, many stakeholders at the destination are very interested to get as many visits as possible to their respective websites and followers on their social media. Through gameplay at the destination, there is potential to, on one hand improve enjoyment and leisure, and on the other to set up an additional means of communication and research of relevant information. Through game design, it is possible to direct attention of the player/tourist to the target locations and segments of tourist offer and refer them to relevant websites and news on social media. In this case, the game is a platform from which several information and promotional content of all interested stakeholders is launched. Gamification in such setting may offer to marketing experts new solutions, which are more entertaining and attractive than the traditional offline activities.
- 5. Incentivising viral marketing. Traditional means of marketing communication, such as Word of Mouth (WOM) has a particularly interesting application in gamification. Through Social media, players/tourists may, should they find it fun and useful, incentivise and

- motivate each other to share and pass along promotional messages found within the game. E.g., the players who have solved the first location (King Nikola's Palace) inform others of the reward and possible offers in close proximity to the said tourist attraction, which are in the form of a promotional message, included in the content itself, or the background of the game.
- 6. Co-creation of online content within the tourist offer presentation. Contemporary expectation of online data user are concurrent consumption and creation of the information content. Development of the ICT and the internet of things (IoT) enables simplified creation, reception and dissemination of photos, videos, texts, audio recordings, etc., anytime, anywhere. This user-generated content made by players/tourists themselves is much more authentic compared to promotional messages of the stakeholders. Through gameplay, they are far more motivated to create their own travel content and include it in the general tourist offer presentation.

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# THE FUTURE OF OMNI-CHANNEL MARKETING IN THE RETAIL INDUSTRY IN REPUBLIC OF NORTH MACEDONIA: UNDERLING THE CUSTOMER TOUCH POINTS VIA CUSTOMER ENGAGEMENT AND THE EFFECT ON PROFITABILITY

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#### **Abstract**

In this paper, the purpose is to investigate the cause and effect between customer touchpoints and consumer engagement and, its second relationship, cause, and effect between, touchpoints and profitability of retailers, from the retailer's aspect

Omni-channel marketing is highlighting the touchpoints where the retailer could evoke shoppers' sense, to feel, think and act reactions, ensuring a more seamless experience across channels eventually building a customer engagement. The methodology used for this research was conducted through a quantitative approach with a questionnaire including different types of sub-industries under the main industry of retail, reaching responsiveness of 52 top executives. From the results, it can be concluded, the retailers in do have knowledge of omnichannel marketing strategy and are at the core of its implementation. Due to data limitations and number of responses, we were not able to study the impact on profitabilty that customer engagement has. The omnichannel research framework reported here will help guide research in this area.

#### **Key Words**

omni-channel marketing; retail; customers; touch points; profitability

#### 1. Introduction

The first wave of change occurred when retailers adopted point-of-sale systems with UPC barcode scanning. This provided companies with real-time data on purchase transactions and accurate estimates of product sales and market share. Retailers used this information in combination with shelf space allocation and product inventory information to measure the productivity of their store lead to the development of brand and category management. The second wave of change explains Burke occurred when retailers started to track and analyze the purchases of individual shoppers. Some retailers, especially in the grocery industry, launched frequent shopper and customer loyalty programs to collect these data. Shoppers who participate in such programs typically identify themselves with loyalty cards at the point of sale in exchange for price discounts or other incentives. Companies can also identify repeat customers by requesting their telephone numbers, capturing information from credit and debit cards, reading "cookies" stored on their computer disk. The third wave of change is just beginning to take hold in retail stores. The technology drivers are the digital representation of the shopping environment and the real-time tracking of customers as they enter the store, walk through the aisles and select and purchase products. Like the earlier innovations, it provides the capability to capture variations in consumer behavior over time and across people, but it adds to the mix of the critical element of context. This new wave of marketing intelligence provides marketers with the tools to measure consumer response to the in-store environment and manage the shopping process. It is the foundation for customer experience management, advises Burke. The ways in which omnichannel retailing is changing consumer habits and shopping behavior have made it the third and current wave of retailing point out Peltola et al. (2015). According to Frazer and Stiehler (2014), "a true omnichannel experience would mean that one transaction can span over more than one channel"

This paper will present some of the implications the omnichannel marketing has in the retail industry, Omni-channel marketing as an independent variable affecting a retail industry the dependent variable, for understanding how disparate customer touchpoints impact consumer engagement and profitability in an omnichannel environment from the retailer point of view, meaning the cause and effect between customer touchpoints and consumer engagement as first relationship and, second relationship, cause, and effect between, touchpoints and profitability of retailers. To date, little research in marketing management has studied this type of marketing. The omnichannel research framework reported here will help guide research in this area. The research was conducted in a form of surveys, interviews along with available literature constituted a basis for exploration of issues concerning multichannel.

### 1.1. The importance of the implementation of omni-channel marketing

According to Brynjolfsson et al. (2013), omnichannel marketing as a strategy is centered on a holistic view of all channels. From the customer's point of view, he/she can move seamlessly from one channel to another, including the widespread channels such as a manufacturer's website, retailer app, and a pick-up point. Thus, in comparison to other multiple-channel strategies. customers receive added benefits such as information visibility, cost savings, or convenience. Because in this case, the channels are managed together, the perceived interaction is not with the channel, but rather the brand [which provides additional benefits for the customer]. Further, the focus is on the interaction between the customer and the retailer's brand, not between the customer and a specific channel as Piotrowicz (2014) adds. Newer technologies, business models, and predictive analytics are reshaping the boundaries of retailing, and as a result, retailers are provided with sample tools to generate differentiating value for customers and build deeper customer engagement as Grewal et al. (2017) explains. Technological developments have helped change the nature of customerretailer interactions, giving rise to new shopping behaviors. The first is defined by Rapp et al. (2015) as the practice of "using mobile technology while in-store to compare products for potential purchase via any number of channels. At the other end of the spectrum, webrooming occurs when shoppers compare prices, features, opinions, and guarantees online, but ultimately make the purchase offline according to Wolny and Charoensuksai (2014). This behavior occurs mainly once the initial product selection has been made. Retailers are redefining the brand experience through new formats such as "click-and-collect," "delivery in 24 hours," "in-store ordering, home delivery," "order online, return to the store," "click instore," and other combinations of online and traditional retail activities that facilitate and improve the shopping process and the customer experience state Bell et al. (2014). Wind et al. (2016a), provide a concise explanation of the 5 key points as per what are the benefits of omnichannel marketing. They name: (1) science and technological advances, (2) proliferation of media landscapes, (3) skeptical and empowered consumers, (4) a turbulent and hyper-connected world, and (5) disruptive new business and revenue models. Taking into consideration the potential of the creation of such valuable touchpoint Wind et al., (2016a) would define the touchpoint as "the ongoing, synergistic orchestration and optimization of all touchpoint value creation among an enterprise, the people in its network, the people it seeks to reach and serve, and the societies and cultures in which it exists and has responsibility." Highlighting the touchpoints where the retailer could evoke shoppers' sense, to feel, think and act reactions, it is indeed needed to it can be identified and implemented, ensuring a more seamless experience across channels. A successful omnichannel strategy should not only guarantee a retailer's survival - no small matter in today's environment.

#### 2. Methodology

The methodology used for this research was conducted through a quantitative approach with a questionnaire. The aim was to prove the 5 key points as per what are the benefits of omnichannel marketing, as Wind et al. (2016a) emphasize, in which way we would acknowledge the customer touch points, the engagement, and profitability in an omnichannel environment such as the Republic of North Macedonia. As Evisi (2016) states the quantitative approach is considered because it is more reliable and objective, as well as the ability to use statistics to generalize a given result. The questionnaire was adapted to the conditions and characteristics of the working practices in the Republic of North Macedonia. The guestionnaires that were taken as guidelines for conducting the questionnaire for the purpose of this thesis are The omnichannel challenge: Strategies that work, conducted in 2014 by Oracle retail and Retail Touchpoint, with responses from 124 retailers and wholesalers who shared insights on their progress, as well as challenges they are working to overcome in the omnichannel ea, along with a combination of "The State of Omnichannel Retail, Survey of Leading Retailers", conducted by Brightpearl and Multichannel Merchant in 2017, where the primary information source is an exclusive survey of leading retail and brand marketing executives, including many of the top companies in retail, information technology, financial services, consumer products, education, and other key sectors. The questionnaire for this paper included different types of sub-industries that are under the main industry of retail, such as pharmaceutical, FMCG sector, fashion, telecommunications, banks, technological companies, and their top executives as responders. The responsiveness of this questionnaire was 52 responders conducted online, during the period of January to February 2020 in the Republic North of Macedonia. The analysis was conducted using the statistical program SPSS.

#### 3. Discussion of results

Responders with 48.08% consider omnichannel marketing by definition to be "Marketing strategies which are geared towards customers converting on any channel" while 38.46% were familiar with the correct definition "Delivering a seamless and consistent customer experience across all sales channels". Only 13.46% had the opinion that omnichannel marketing presents "Having different methods for transacting with your customer (e.g., online, physical store, phone)". Out of this question, we can conclude that the retailers are yet not familiar with the core is meaning of omnichannel marketing, although some of them are already practicing it, as it can be seen from the results below in Figure 1.

Quite a large percent of more than half of the responders with 57.69% consider their marketing strategy within the company to be in fact an omnichannel one. On the contrary, 42.31% believe that is not but they are working toward an omnichannel strategy in Figure 2.

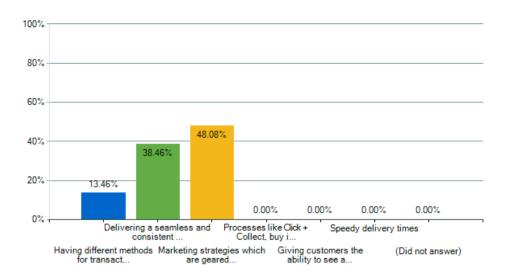


Figure 1: What does omnichannel mean to you? Source: research developed by author

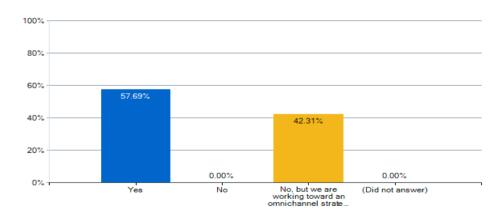


Figure 2: Do you define your retail strategy as Omnichannel (making every effort to ensure seamless interactions/transactions in all available channels to promote engagement with your brand)?

Source: research developed by author

Half of the responders have an opinion that their company is close to implementation, followed by 21.15% stating it is a work in progress. 10 responders are forming 19.23% of the pie that they have mastered omnichannel marketing. A small percent of 11.54% have an opinion it is a difficult task in Figure 3.

In Figure 4, we can see that 55.77% consider they have the right technology for implementing omnichannel marketing, yet 26.92% have not but they are planning to invest and 19.23% are already working on providing it, as answers to the question "If your company has not implemented omnichannel

marketing strategy yet, do you consider that is because of technical reasons?"

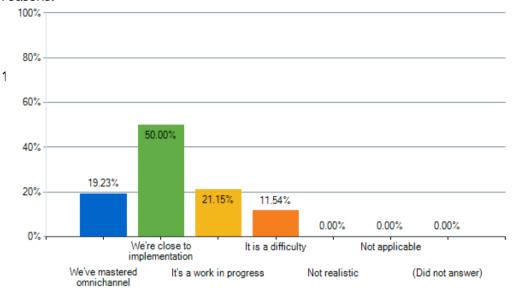


Figure 3: Which of the following best describe how your company views omnichannel?

Source: research developed by author

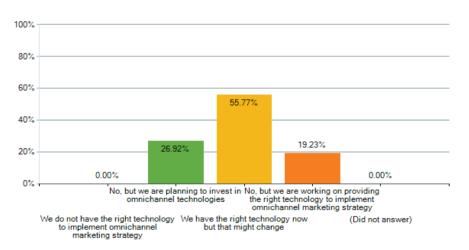


Figure 4: If your company has not implemented omnichannel marketing strategy yet, do you consider that is because of technology reasons?

Source: research developed by author

In Figure 5, omnichannel as a marketing strategy is being voted as an important tool, with 59.62%. 30.77% consider it as a very important, critical tool while a small percent of 9.62% state it is somewhat important.

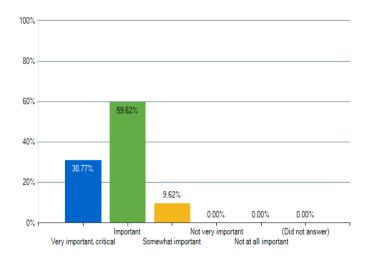


Figure 5: How important is having an omnichannel strategy to your company? Source: research developed by author

While asking to rank the retail initiatives in order of most effective in driving business growth, with 1 representing the most effective and 5 the least, number one as most effective is voted to be Competitive differentiation, followed with Omnichannel retail strategy as second-ranked and New sales channels and markets on the third place. Supply change management and New product lines and development are the fourth and fifth place.

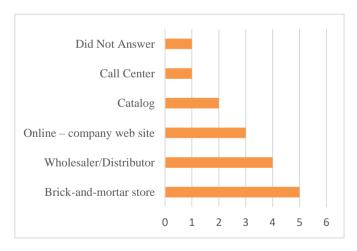


Figure 6: Please rank the following retail initiatives in order of most effective in driving business growth, with 1 representing the most effective and 5 the least.

Source: research developed by author

On the question in Figure 7, "Which channels do you currently conduct business in?" multiple answers per participant were possible. Percentages added may exceed 100 since a participant might have selected more than one answer to this question. All of the responders voted online via the company website with a 100% intake. Followed by a brick and mortar store with 86.54%, the same percentage share is for online social media communications and platforms. 57.69% are conducted by catalogs, while 26.92% on a commercial online site, which leaves 17.31% for mobile apps and 9.62% for mobile web sites.

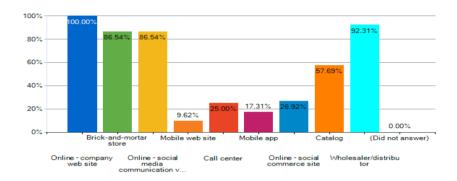


Figure 7: Which channels do you currently conduct business in? (Check all that apply)

Source: research developed by author

On the question in Figure 8, "If you are measuring the profitability of multichannel customers, how much more profiFigure are they vs. single-channel customers?" half of the responders consider it to be more profiFigure between 101% to 200%, a little less 40.38% consider it to be between 51% to 100%, and 9.62% voted for 11% to 50%. Responders were asked to answer out of the suggested tools, to indicate how do they measure the profitability of multi-channel customers as it is shown in Figure 9. Multiple answers per participant were possible. Percentages added may exceed 100 since a participant might have selected more than one answer to this question. 50 responders or 96.15% responded that is with measuring the social media feedback/communications, almost half of them by measuring the frequency of shopping trips and visit their website with 32.69%. Visit the Facebook page were voted by 10 responders with a total 19.23% and 7.69% with mobile app visits or downloads.

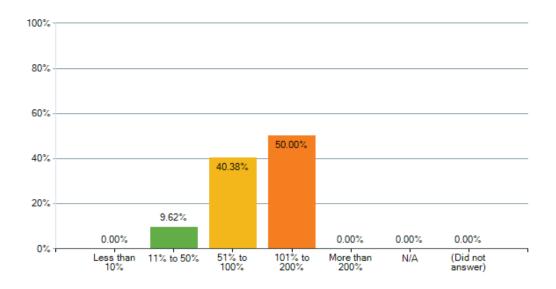


Figure 8: If you are measuring the profitability of multichannel customers, how much more profiFigure are they vs. single-channel customers?

Source: research developed by author

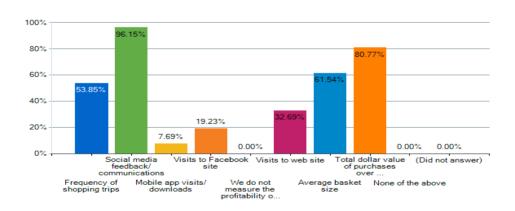


Figure 9: How do you measure the profitability of multi-channel customers?

Source: research developed by author

Regarding the ranking of the channels in Figure 10, in order of importance for the annual revenue, the responders were asked to rank from 1-5, where 1 is 'not important' and 5 is 'very important'. Number one as most important on the ranking list is the Brick and mortar store, followed with Wholesaler/Distributor on the second place and Online's company web site on the third. The forth placed by importance is the Cathalog and the Call center was stated as least important channel.

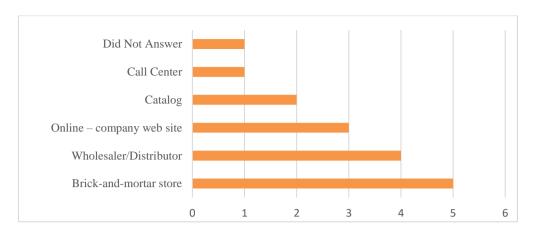


Figure 10: Please rank the following retail initiatives in order of most effective in driving business growth, with 1 representing the most effective and 5 the least.

Source: research developed by author

Figure 11 the responders were asked to mark each promotion that is responds to their line of promoting. Multiple answers per participant were possible. Percentages added may exceed 100 since a participant might had selected more than one answer for this question. Featuring on the company web site is a promotional tool for 52 responders, with 98.08%. Social channels participate with 88.46% while Tv/radio are on the third place with 80.77% Email marketing and printed store advertising share almost the same percentage and less than 10% belongs to sms messaging, in store digital signage.

The most important payoff of a successful omnichannel strategy for 94.23% of the responders is an improved customer retention. Improved marketing effectiveness and customer service have an even result of 86.54%, that is along with improved loyalty and brand interactions with 63.46%. An improved supply chain efficiency is important to 57.69% of the responders, followed with inventory efficiency of 38.46%. The employee satisfaction and retention was voted with 28.85% and only 21.15% belonged to an increasing basket size as seen in Figure 12.

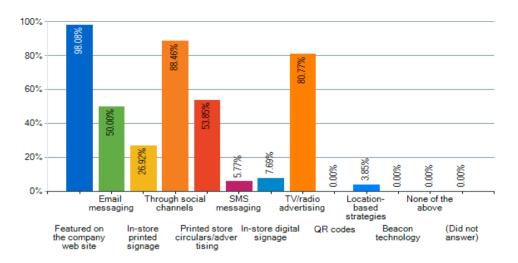


Figure 11: How are you promoting your omnichannel capabilities to consumers?

Source: research developed by author

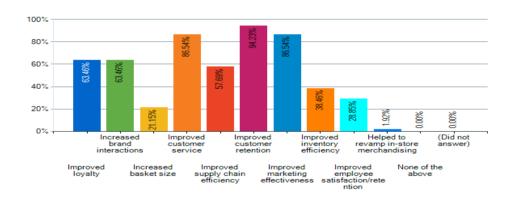


Figure 12: What do you see as the most important payoff of a successful omnichannel strategy?

Source: research developed by author

Sales analytics are dominant as analytics the retails conduct with 98.08%. Marketing analytics follows with 75%. The percentage of 73.08% is shared for Assortment/Inventory analytics and Social media analytics. 30.77% go to Merchandising analytics while customer analytics participate with 25%. The least percentage belongs to conducting Web analytics that is 13.46% in Figure 13.

In Figure 14, 38.46% identify with the statement "we would benefit from additional Omni-tech, etc." when it comes to their company's omnichannel

execution. 19.23% or 10 responders answered that they do agree they have the right technology for execution. 17.31% think they have the right technology now but that might change in the future and only 9.62% completely disagree. Only one responder did not answer this question.

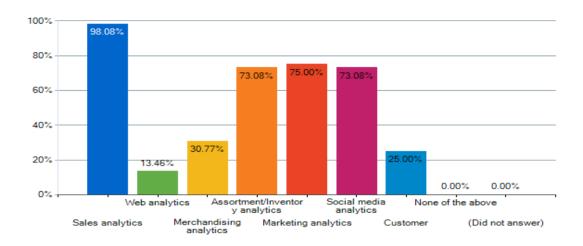


Figure 13: What type of analytics do you currently use? Source: research developed by author

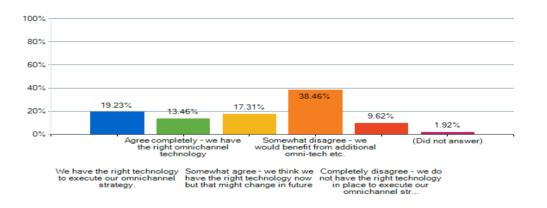


Figure 14: To what extent do you agree with the following statement about your company's omnichannel execution?

Source: research developed by author

In Figure 15 we can see that 80.77% an omnichannel strategy is an aspiration that can add or enhance the ability for two-way communication with customers. For 75% that is an ability to offer a customer loyalty scheme across all channels, 65.38% believe it will improve the ability to analyze and understand customer behavior data, along with 42.31% which think it will have the ability for customers to order online and pick up in-store. The ability to run discounts and promotions across channels (including reporting)

is an aspiration for 38.46% of the responders. 25% believe it will offer customers the ability to view their orders across all your channels in one place, for 13.46% to receive online the products and be able to pay ad to pick up in the store, only for 7.69% that would mean the ability for customers to place orders in-store to be shipped/fulfilled somewhere else.

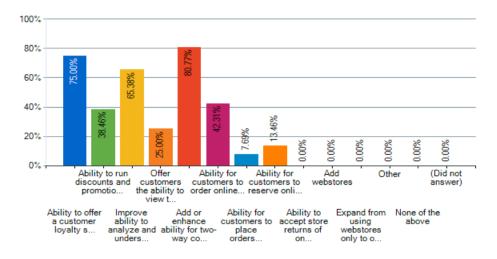


Figure 15: What are your company's aspirations for omnichannel? Source: research developed by author

Regarding demographics, males were presiding with 55.77% and women with 44.23%. Most at the age of 31-44 with 57.69% and 32.69% over 45 years of age. Half of the responders hold Bachelor's Degree, while 46.15% Master's Degree. Ph.D. or higher have only two responders or that is 3.85% Most of the responders were Marketing Managers and Sales Directors.

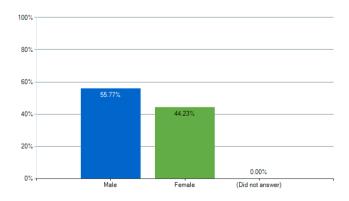


Figure 16: What gender do you identify as? Source: research developed by author

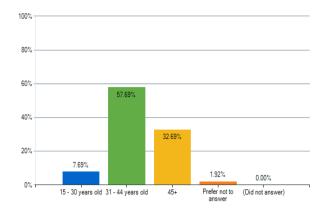


Figure 17: What is your age? Source: research developed by author

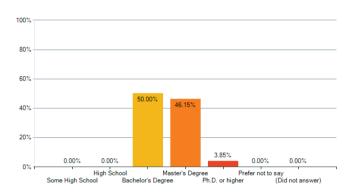


Figure 18: What is the highest degree or level of education you have completed?

Source: research developed by author



Figure 19: What is your position within the company you work? Source: research developed by author

#### 5. Conclusion

From the results, it can be concluded that the retailers in the Republic of North Macedonia do have a knowledge of omnichannel marketing strategy. and the implementation itself it is present at some of them. While some companies have mastered the omnichannel strategy, the rest of the companies has not, either it is in a process or they are very close however they're not quite there yet. Focusing on omnichannel marketing will not only increase profitability as the responders believe but also it will provide customer retention and be able the voice of the customer to be heard, and that is something they also aim at. By exploring the 5 key points as per what are the benefits of omnichannel marketing developed by Wind et al. (2016a). as a model in this paper, we can conclude that regarding the first point, science and technological advances, one of the biggest factors that have influence over that process are the technological changes needed to be covered before execution. The conclusion from the literature review. technology is quite an important asset for the implementation of omnichannel marketing. On the second key point proliferation of media landscapes, the positive side is that they are aware of the importance omnichannel strategy has and its benefits. The omnichannel strategy was ranked second by importance as a retail initiative in order of most effective in driving business growth. However, it seems guite difficult for companies to transition from the traditional form of marketing communication towards a more digital one. That can be concluded to how open are companies to developing mobile apps, driving leads from digital touchpoints and not in most of the cases following the Above the Line approach. The third point, for the third key point, skeptical and empowered consumers as Grewal, et al., (2017) explained, a business should generate differentiating value for customers and build deeper customer engagement. The turbulent and hyperconnected world is the fourth key point, the results illustrated that the digital connection on a higher level than omnichannel marketing is offering can be seen in their aspirations, such as commerce and online store, web rooms, etc. their ultimate goal takes those touchpoints in perspective but noted from the previous answers, the frequency of already operating for e.g. commerce store is quite limited. Regarding the fifth and last key point. disruptive new business and revenue models from the results we can conclude that retailers must adapt to the new digital challenges, sustain the existing tools of communication and marketing strategy if they are sustainable but at the same time move towards a more open communication that will empower customers and provide them a seamless and consistent customer experience across all sales channels by engaging with each touchpoint. Although the result points out that the retailers especially those that are in the process of implementation, striving, or are at the final stage of implementation in terms of assets available for execution, retailers should find alternative ways of investment in technologies that would provide a seamless customer experience across all possible channels, in a way that the shopping experience would be facilitated and would create a

strong brand relationship by creating value. By integrating technology they will improve their internal efficiency and use the maximum of their present available resources. With the implementation of omnichannel marketing, retailers would open themself toward new possibilities of connecting both the physical and virtual store/products/services. It is positive to note that retailers despite their limitations are trying to offer omnichannel integration within their possibilities while starting to blur the boundaries between offline and online channels and creating a holistic shopping experience, concluding from the fact that customers engage with the brand and not the channels themself, which provides encouraging results shown from their statement in terms of the effect on profitability. The challenge remains to be the advanced level of the interactions with customers and developing personified shopping experience through all customer touchpoints via all available marketing formats, channels, and technologies.

#### 6. Limitations and Further Research

Due to data limitations, we were not able to study the impact on sales that customer engagement has, but this is a fruitful area for future research. This is an important next development in retailing and will affect how retailers operate. Further limitation stems from the fact that the information is limited to the Republic of North Macedonia only, which places constraints on any generalization within the industry, geographically.

The findings reported here point to some interesting opportunities for future research, such as extending the study to other industries, increasing the number of responders, in-depth study and cross research within the customer engagement and the profitability of the retails as well as replicating the research in another country in order to gather more data.

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## PREFERENCE OF INTERNET SPEED FOR "INTERNET AND TV GENERATION"

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#### **Abstract**

The behavior of people of different ages is also strongly reflected in the use of modern media. The study examined the differences between three generation cohorts: Baby Boomers, Generation X, and Generation Y in the effects of personality traits on on-demand radio use identified two generations that respond differently to media and termed the "television" and "Internet" generations [1]. An analysis of five different age groups was used in the present paper. With an online survey, they were asked to select and label the most important and least important for them from the listed properties. In our study, we used claims related to TV programs and very fast internet. We found that there are differences between the importance individual communication services. but statistically significant differences stood out only in the importance of high-speed Internet between the last age groups 55 to 65 years and over 65 years. The results of the research also showed that other characteristics, such as the number of programs, more film and sports programs were less important for the respondents.

#### **Kev Words**

TV, Internet, age groups, communication services

#### INTRODUCTION

The world almost stopped since March 2020. If being out, socializing, spending time in nature etc., were values especially active and health-conscious people shared, things changed immediately. Social distancing and

spending time at home - behind different monitors - became a "new" way of life.

Hence, watching TV (shows) became more important again, the usage of the internet - applications on mobile and other devices - has grown to unimaginable heights.

There were two objectives of this paper: to define and categorize the most important decision factors in the process of choosing the right telco package and to compare the most decisive factors for different age groups of potential users.

#### LITERATURE REVIEW AND HYPOTHESIS

The curve of the television life cycle, which began to rise sharply in 1928 thanks to the General Electric Company (GE) [2], has reached its peak today after almost a hundred years. After World War II, it experienced a developmental leap from black and white to color. In addition, many technological advances have become easier and thinner. As we can see in the life cycle graph of modern products and services, the Internet is only at the beginning of a steep ascent curve.

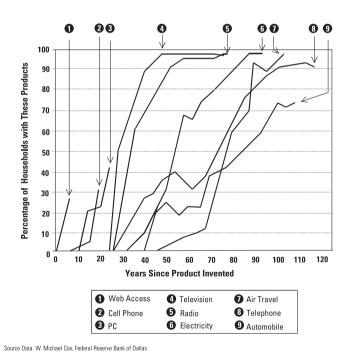


Figure 1. The shortening of product life cycles [3]

The beginnings of the Internet can be traced back to the early 1980s. Due to its flexibility, interactivity, and personalization, it develops and complements quickly. Internet useful tool for communication, education,

entertainment, and shopping [4] [5]. The Internet has transformed the way we do business, as it now allows retailers to offer consumers from all over the world an unlimited range of products and services at any time [6]. The Internet is changing the way we live, and especially during the Covid 19 pandemic, it has dramatically increased online shopping. It is undoubtedly the most important channel of direct marketing and is now rapidly evolving into a global phenomenon [7].

This revolutionary impact on everyday communications and transactions, however, varies according to the "Baby Boomers" generation, the "X" generation, and the "Y" generation. In researching perceptions of online shopping and the challenges they face in online shopping, social factors are significantly related to the behavior of three generations. Most often, for these three generations, the problem is trust in credit card transactions. Online shopping can be defined as a form of electronic preparation for a purchase without any intermediary services [8]. Traditional shopping can be separated from online shopping, with the former being paid to be able to personally evaluate purchases before making a purchase, while with the latter this option is not available. In any case, the finding that the World Wide Web shortens distances, connects the world and provides quick and effective solutions was already perceived by Levitt almost forty years ago [9].

Mary Mekker probably knows best the development and dimensions of the Internet. On the graph we can see the rise of the Internet and the annual growth dynamics until 2018.

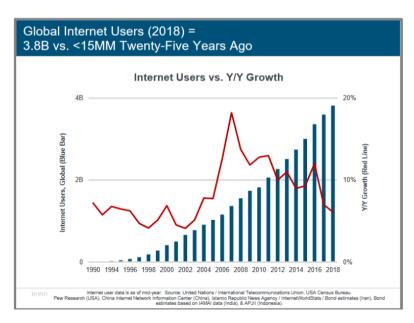


Figure 2. Global internet user [10]

Mary Meeker is an analyst who has been following developments on the World Wide Web since 1985. This year, she published a brief 9-page report

on how coronavirus affects the global economy, consumer behavior and technology [9].

The report states that companies that are doing best in the current crisis are using cloud technologies, selling products that are always needed, and can be easily found online. This dynamic works in the areas of ordering food online, stores, online education, healthcare providers, and all types of software. "Many of these internet-related trends have been around for some time," the report says. "Covid-19 accelerated them." In the world of services, which has generated tens of billions of dollars of capital in recent years, wealth is divided. Uber is struggling with the dive, and Airbnb is worried about the decline in travel. Companies that deliver food to homes or jobs are recording growing demand and are aggressively hiring new workers. Meeker also sees the role of technology in healthcare and medicine, which plays a greater role as the crisis develops. Telehealth allows people to get certain medical services at home.

Connected control devices show that they can help improve results, and we observe the importance of automation and artificial intelligence. "Automation will continue to penetrate healthcare to reduce workload and improve the quality of data capture." It says in the Meeker report. It is widely known that certain activities, such as tourism, hospitality, air transport and cultural activities, such as theaters, exhibitions, and all mass gatherings, have been hit hard by the pandemic. By contrast, all online services have flourished. Distance education, online shopping and social media activities have increased.

If we look only at Zoom, as a meeting and education program, it experienced a remarkable leap when the Corona appeared [9]. A similar thing happened to Microsoft Teams and other comparable applications.

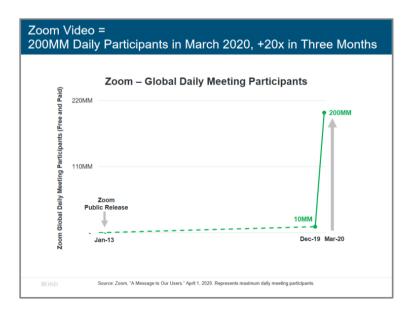


Figure 3. Global daily meeting participants on Zoom [10]

Certainly, new digital media is becoming increasingly important both at home and at work. Individuals engage in daily presentations of personal information online. However, protecting sensitive data from misuse is becoming increasingly important.

Nevertheless, not all Internet users are equally well informed and skilled in the use of digital media. Digital self-determination issues, however, are also highly related to the age group of users, as attitudes regarding this concept differ between so-called digital natives and older individuals. Deutsche Telekom AG surveyed German Internet users aged 15 and over on a representative sample (n = 1,056). Various elements indicating attitudes, risky behavior, and potential problems with digital media have been analyzed [11].

They identified different patterns of use and preferences depending on age. The use of digital devices and applications was much more complicated for the elderly. They often ask for help from younger users or avoid using certain services. Both groups, however, shared similar views on data trust and security.

We proposed the following hypotheses:

**H1**. Internet speed is less important for older age groups.

**H2.** Watching TV channels with a delay - catch  $TV^7$  [12]- is less important for older age groups.

#### **METHODS**

In our survey, Sawthoot Software SSI Web in MaxDiff module was used and item scores for each individual were estimated, using a hierarchical Bayes (HB) methodology.

The MaxDiff method (best - worst scaling) is an approach for obtaining preferential / importance ratings for several subjects. It is most commonly used when we want to measure respondents' preferences for a brand, product characteristics, work-related benefits [13]. Using the MaxDiff method, we show subsets of possible items in the survey and ask them to list the best and worst subjects or the most and least important ones. Respondents typically complete eight to fifteen such MaxDiff questions.

The combinations of items are designed with the goal that each item is shown an equal number of times. Exercises focus on estimating preference or importance scores. The combinations of elements are designed very carefully, with the aim that each element is shown in equal numbers. Each

<sup>&</sup>lt;sup>7</sup> Catch-up TV are the programs that are made available online by TV channels so you can watch them whenever you want. This period can vary from 3 up to 30 days or even more.

respondent sees each item two or more times in MaxDiff combinations. In the questionnaires, respondents focus on assessing preferences for multiple subjects.

Research has shown that the results of the MaxDiff method reveal greater discrimination between subjects and between respondents. The MaxDiff method uses questions that are easy to understand, so respondents from children to adults with different demographic and cultural backgrounds can provide reliable data. MaxDiff assures researchers that with minimal knowledge of statistics, they can easily conduct high-quality research to scale multiple objects. The trade-off techniques used by MaxDiff are robust and easy to use. The results are also easy to interpret, as they are ranked on a total scale from 0 to 100 [13].

#### **RESULTS**

Our survey was conducted in November and December 2020 on 644 respondents - 51.4% women and 48.8% men. All the described features represented about 30 percent of the importance in the whole package of tele-communication services. The other 19 properties, however, accounted for around 70 percent of the importance.

Age groups from 18 to 35 years

#### Rescaled Scores (0 to 100 scaling)

	ltem			95%
Label	Number	Average	95% Lower	Upper
Exceptional internet speed	1	9,48	8,75747	10,20253
(e. g. 500/100 Mbit / s)				
Catch-up TV (up to 7 days)	2	7,47	6,52554	8,40856
More movie TV channels	3	3,47	2,85880	4,08423
Extended programming	4	2,85	2,25758	3,43480
scheme - 230 TV channels				
Standard programming	5	2,74	2,32083	3,16834
scheme - 180 TV channels				
Basic programming scheme	6	2,25	1,87322	2,63265
- 120 TV channels				
More sports TV channels	7	1,03	0,64159	1,42646
		29,30		
The rest		70,70		

Age groups from 36 to 45 years

Rescaled Scores (0 to 100 scaling)

	ltem			95%
Label	Number	Average	95% Lower	Upper
Exceptional internet speed (e. g. 500/100 Mbit /s)	1	9,31	8,62389	10,00184
Catch-up TV (up to 7 days)	2	7,50	6,62592	8,37097
Extended programming scheme - 230 TV channels	3	3,69	2,95827	4,41400
Standard programming scheme - 180 TV channels	4	3,16	2,56634	3,74434
More movie TV channels	5	2,97	2,46646	3,46945
Basic programming scheme - 120 TV channels	6	2,41	1,98437	2,82894
More sports TV channels	7	1,73 30,76	1,15329	2,30770
The rest		69,24		

Age groups from 45 to 55 years

Rescaled Scores (0 to 100 scaling)

	Item			95%
Label	Number	Average	95% Lower	Upper
Exceptional internet speed	1	8,69	7,82687	9,55552
(e. g. 500/100 Mbit /s)				
Catch-up TV (up to 7 days)	2	8,50	7,45605	9,53571
More movie TV channels	3	4,10	3,37597	4,82517
Basic programming scheme	4	3,34	2,70075	3,97053
- 120 TV channels				
Standard programming	5	3,04	2,59478	3,48840
scheme - 180 TV channels				
Extended programming	6	3,02	2,24631	3,78800
scheme - 230 TV channels				
More sports TV channels	7	1,95	1,23893	2,66441
		32,63		
The rest		67,37		

Age groups from 55 to 65 years

Rescaled Scores (0 to 100 scaling)

Research Scores (o to 100 searing)				
	ltem			95%
Label	Number	Average	95% Lower	Upper
Catch-up TV (up to 7 days)	1	8,75	7,95278	9,54860
Exceptional internet speed	2	8,27	7,54148	8,99661
(e. g. 500/100 Mbit /s)				
Standard programming	3	3,90	3,31991	4,48159
scheme - 180 TV channels				

Extended programming scheme - 230 TV channels	4	3,59	2,92824	4,25987
More sports TV channels	5	3,52	2,58408	4,45513
More movie TV channels	6	3,17	2,51858	3,82798
Basic programming scheme - 120 TV channels	7	2,31	1,93312	2,68650
		33,52		
The rest		66,48		

Age groups 65 years and older

Rescaled Scores (0 to 100 scaling)

	Item			95%
Label	Number	Average	95% Lower	Upper
Catch-up TV (up to 7 days)	1	9,52	8,68898	10,35479
Exceptional internet speed	2	6,35	5,58969	7,11778
(e. g. 500/100 Mbit /s)				
Standard programming	3	4,83	4,21974	5,44292
scheme - 180 TV channels				
Basic programming scheme	4	4,78	4,06555	5,49042
- 120 TV channels				
More movie TV channels	5	4,21	3,52229	4,89306
More sports TV channels	6	4,13	3,30955	4,95113
Extended programming	7	3,61	2,96710	4,24696
scheme - 230 TV channels				
		37,43		
The rest		62,57		

Table 1. Rescaled scores for seven items

Results of our survey show that for younger groups, superfast Internet (500/100 Mbit/sec) ranks first with almost 10 percent importance out of all 26 services provided in the survey that make up the bundle of telecommunication services. Speed remains second for viewers above 55 and even for those above 65.

For older age groups, over the age of 55, it is more important to watch TV channels with a delay (8,75 and 9,52% for 65+). However, even for younger groups, this service has a high preferential share, over 7,5%.

It was found that there are differences between the importance of individual communication services, but statistically significant differences stood out only in the importance of high-speed Internet between the last age groups 55 to 65 years and over 65 years. The T-test of these two pairs is statistically significant (P = 0.001).

Thus, hypothesis H1 is confirmed for the group over 65 years of age. Tests of other pairs are not statistically significant.

Also, testing pairs of the importance of watching television backwards is uncharacteristic, so hypothesis H2 is rejected.

All other properties shown, such as the number of TV channels, several movie channels, or several sports channels in individual programming schemes, are much less important properties of the package.

There are a lot of movies that you can watch, part of regular programming at several tv channels and there are several services where you can watch movies (Netflix, Pickbox, etc.), so this is not a big surprise.

On the contrary, low importance of the selection of sports channels was not expected. There are no (legal) alternatives possible, having in mind that Sportklub package is not available from several telecommunication operators since May 2020. If the importance for viewers above 55 is 3,5 - 4,13%, interest in watching the sport for younger audiences is much lower - 1-less than 2%.

#### **CONCLUSION AND LIMITS**

Although the results of the research show certain deviations in the evaluation of communication platforms of the older generation, they follow well. According to the present data, the importance of the Internet has also been well acquired by the elderly. Nevertheless, this research has limitations that present opportunities for future research. First, the data for the study come from a single country; thus, replicating research in other countries will establish further generalizations. Second, another limitation of this study was the choice of certain characteristics of communication services that affect the use and collaboration with technology and also vary slightly across countries. Definitions of communication services, among many possible motives and driving forces, are also influenced by work efficiency or ease of use. behaviors of individuals in technology and other subjective traits.

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# MARKETING STRATEGY: TO INCREASE THE NUMBER OF IN-FORCE POLICIES IN PT SLI

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#### **Abstract**

SLI is one of the fastest-growing life insurance companies on the market, shown by its growth rate that has always outperformed the market for the last five years. While the new business is growing, the number of in-force policyholders is declining, especially in the Agency channel. In order to formulate the Marketing Strategy: To Increase the Number of In-Force Policies in PT SLI, a series of analysis has been conducted on both external and internal factors of the company. Several tools that are used in the external environment analysis are the PESTEL Framework, Porter's Five Forces Model, Customer Analysis, and Competitor Analysis. Meanwhile, from the internal environment analysis, the tools being used are Segmentation, Targeting, and Positioning Model Analysis and the 7Ps Marketing Mix.

#### **Key Words**

marketing strategy, life insurance, agency channel, in-force policies, segmentation, targeting, and positioning

#### INTRODUCTION

Indonesia is one of the most populous countries in the world with a population of 268 million as of 2019 which makes Indonesia an attractive insurance market. Following Insurance Law No. 40 of 2014, insurance can be classified into two; general insurance and life insurance.

Revenue of life insurance companies can be split into two, which are New Business (NB) Premium and Renewal Premium, and the sum of these two is called Gross Written Premium (GWP). According to the Indonesian Life

Insurance Association (Asosiasi Asuransi Jiwa Indonesia, AAJI), the GWP of the Indonesian market has continuously grown in the last 10 years at 12.3%. However, compared to Indonesia's Gross Domestic Product (GDP), life insurance penetration, which is measured by GWP/GDP, is relatively stagnant at 1.1% to 1.4%.

PT SLI (SLI) is a joint venture company backed up by a strong, well-capitalized global parent company. SLI has been operated in Indonesia since 1995 and focused the sales on unit-linked insurance products, marketed to individual policyholders, through Agency, Bancassurance, and also Telemarketing distribution channels. SLI is one of the fastest-growing life insurance companies on the market, shown by its growth rate that has always outperformed the market for the last five years; Compounded Annual Growth Rate (CAGR) of SLI's Individual NB in 2015 - 2019 is 19.4%, while the overall Indonesia Market CAGR in 2015 - 2019 is just 7.3%. As of 2019, SLI was rank 6 among other foreign JV companies in terms of Individual NB.

As a fast-growing company, SLI focuses its operations on the acquisition of as many clients as it can. However, SLI is also facing a serious problem at the same time. While the new business is growing, the number of in-force policyholders is declining, especially in the Agency channel.

Based on the business issue faced by SLI, the objectives of this research are as follows:

- 1. To understand the internal and external factors influencing SLI's policyholder to stop paying renewal premium.
- 2. To develop a marketing strategy to increase the number of in-force policies in SLI's Agency UL in the future.

#### b) LITERATURE REVIEW

This research uses both primary and secondary data. Primary data are data generated by a researcher for the sole purpose of resolving the issue at hand. They are individually tailored for the decision-makers of organizations that pay for well-focused and exclusive support. (Malhotra, N. K., Nunan, D., Birks, D. 2017). Primary data for this final project was gathered through an interview with the internal SLI stakeholders and also gathered through an in-depth interview with clients and agents that is assisted by an external consultant.

Secondary data are data that have already been obtained for reasons other than the issue at hand. At face value, this definition appears to be straightforward, particularly in contrast to the definition of primary data. (Malhotra, N. K., Nunan, D., Birks, D. 2017). In this research, secondary data is obtained from SLI's core life policy administration system, SLI website, books, government data publications, online articles, and relevant websites.

### a. External analysis

What impact do forces in the external environment have on the firm's potential to gain and sustain a competitive advantage? How is the firm supposed to deal? (Rothaermel, F. 2017).

PESTEL is a framework that classifies and analyses an important group of external factors that could affect a firm. These factors can create both opportunities and threats for the firm. This framework groups the factors in the firm's general environment into six segments which are Political, Economic, Sociocultural, Technological, Ecological, and Legal (Rothaermel, F. 2017).

An industry is a group of incumbent companies facing more or less the same collection of suppliers and customers. To fulfill unique consumer demands, firms operating in the same market tend to offer similar products or services. While the PESTEL framework enables us to scan, monitor, and evaluate the external environment to identify opportunities and threats, industry analysis offers a more comprehensive basis not only to identify the profit potential of an industry—the level of profitability that can be expected for the average firm— but also to draw implications for the strategic position of one company within an industry. (Rothaermel, F. 2017).

Porter derived two key insights that form the basis of his seminal five forces model by integrating the theory from industrial organization economics with hundreds of comprehensive case studies, (Rothaermel, F. 2017):

- Rather than describing competition narrowly as the firm's closest competitors to describe and forecast a firm's performance, the competition must be interpreted more broadly, to also include the other forces in an industry: buyers, suppliers, the potential new entry of other firms, and the threat of substitutes.
- An industry's profit potential is neither random nor entirely determined by industry-specific factors. Instead, it is a result of the five forces that form the competition: the threat of entry, power of suppliers, power of buyers, the threat of substitutes, and rivalry among existing firms.

#### b. Internal analysis

The internal analysis would address the following questions; What effects do internal resources, capabilities, and core competencies have on the firm's potential to gain and sustain a competitive advantage? How should the company exploit them for competitive advantage? (Rothaermel, F. 2017).

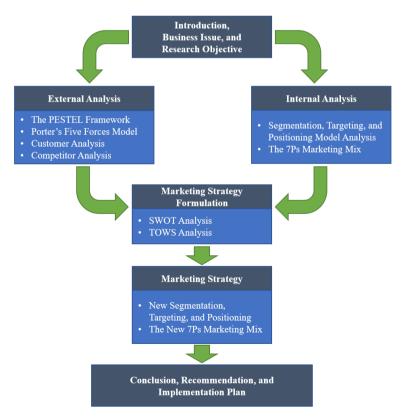
The company chooses the customers it will serve. Market segmentation involves splitting a market into distinct groups of buyers who have different needs, characteristics, or behaviors and who might require separate marketing strategies or mixes. The company defines various ways to segment the market and establishes profiles of the resulting market segments. Market

targeting (or targeting) consists of determining the attractiveness of each market segment and choosing one or more market segments to enter. (Kotler, P., Armstrong, G., & Opresnik, M. O. 2018).

Marketers typically consider four basic strategic elements when designing strategies for the market of manufactured goods: product, price, place (or distribution), and promotion (or communication). As a group, they are generally referred to as the "4 Ps" of the marketing mix. However, the nature of services poses distinct marketing challenges. We, therefore need to extend the marketing mix by adding three Ps relevant to service delivery, which are process, physical environment, and people. Collectively, these seven elements are referred to as the "7 Ps" of services marketing. These elements are the seven strategic levers of services marketing (Lovelock, C. H., & Wirtz, J. 2016).

#### c) METHODS

The conceptual framework that is being used for this research can be depicted in the following diagram



The introduction of the life insurance business, also the background of SLI, and its business issues were explained in the Introduction. The next step is to explore the business issue by conducting a thorough analysis of both internal and external factors then formulating it into a marketing strategy

and finally developing an implementation plan. The tools to be used in this final project to conduct the external analysis are The PESTEL Framework, Porter's Five Forces Model, Customer Analysis, and Competitor Analysis. While the tools that will be used in conducting internal analysis are Segmentation, Targeting, and Positioning Model Analysis, the 7Ps Marketing Mix which is gathered from internal interviews.

### d) RESULTS

# a. External analysis: The PESTEL Framework

The political situation in Indonesia may have an indirect impact on the financial situation of the life insurance industry in Indonesia. In a discussion with SLI's Head of Investment, it was mentioned that one of the main political events that may impact the sales is the presidential election. During that time, prospect clients tend to hold their big spending on Unit Linked (UL) insurance products due to the volatility of investment instruments, especially in the stock market. He foresees that the market will be conducive for the life insurance industry until 2023, where Indonesia will have another presidential election in 2024. From another angle, he added that the Jiwasraya saga may lower the market's confidence to buy a life insurance product.

From the Economy perspective, the life insurance industry in Indonesia is facing a challenging situation as can be seen in the next table.

Factors	Impact on Indonesia Life Insurance Industry
Growth rates	Indonesia has fallen into its first recession in 22 years. COVID-19 pandemic also caused an increase in unemployment due to massive layoffs and the sharp rise in
Levels of employment	poverty rates in 2020. The outlook for economic growth and employment levels remain unclear at the moment, the key is how successful Indonesia's and the global COVID-19 containment efforts are, so that people become confident, improve their spending and create new jobs.
Interest rates	The current BI's 7DRRR is the lowest since a few years ago which will encourage people to take loans and invest or spend. Normally, the purchase of Unit-Linked (UL) products will increase during this period because UL products can give a better investment return than a bank's time deposit
Price stability (inflation and deflation).	Low inflation rate predicted by Bank Indonesia indicating the economic slowdown/recession, where the public purchasing power is decreasing. Society will keep the cash and tend to prioritize spending their money on basic necessities.

	The weakening of the Rupiah against the US Dollar is
Currency	forecasted to be continued. Unlike other industries that
exchange	use imported raw materials, the operational cost of the
rates	life insurance industry will have a minimum impact on this
	situation.

Several demographic experts say that Indonesia has been entering a phase that is called a demographic bonus. This situation provides favorable effects because the young generation will become an engine to stimulate economic growth. (Ariteja, S. 2017). According to the World Bank's latest country classifications, Indonesia is now officially an upper-middle-income country, an upgrade from its previous status as lower-middle-income,

Technology has been adopted massively by the life insurance industry in Indonesia, major companies have started to implement digital transformation in their daily operations, starting from the non-face-to-face sales process, issuing the policy contract in form of e-policy, until processing and paying the insurance claim through e-channel. These technological innovations drive higher productivity and better cost efficiency to the overall industry landscape.

In the life insurance industry, ecology is not a major factor. However, by executing the digital transformation as described before, life insurance companies are taking an active role in protecting the environment from the excessive usage of papers which causes deforestation and, in the end, contributing to global warming.

In Indonesia, the life insurance industry is supervised by the Financial Services Authority (Otoritas Jasa Keuangan, OJK) and regulated by the Insurance Law No.40 of 2014. In doing the supervision role, OJK issued various regulations / POJK (Peraturan OJK) and circular letters / SEOJK (Surat Edaran OJK) which all life insurance companies in Indonesia must comply with. All of these make the life insurance industry one of the most heavily regulated industries in Indonesia.

# b. External analysis: Porter's Five Forces Model

Porter's Five Forces Model of the life insurance industry in Indonesia can be found below

Key Competitive Forces	Level	Comments	
The Threat of Entry	Low	<ul> <li>A larger company would enjoy economies of scale</li> <li>High capital requirement</li> <li>Restrictive government policies are in place</li> </ul>	
The Power of Suppliers	High	Both agents and banks may increase the cost of production by demanding higher	

Key Competitive Forces	Level	Comments	
		agent's incentives or bank's referral fees for the number of client leads, or by reducing the quality of the client leads.	
The Power of Buyers	High	Buyers have the option to buy similar products with insignificant differentiation offered by many companies.	
The Threat of Substitutes	Low	Protection as the main feature of insurance cannot be substituted by other products.	
Rivalry Among Existing Competitors	High	<ul> <li>Big companies: oligopoly</li> <li>Smaller companies: monopolistic.</li> <li>Gross Written Premium has been steadily growing at 12.3% (CAGR 2009-2019).</li> <li>Strong barriers to exit</li> </ul>	

# c. External analysis: Customer Analysis

Due to privacy regulation in SLI, the author cannot perform an interview with the SLI ex-client. However, a qualitative interview has been carried out earlier to analyze the behavior when one buying a new product from SLI. This interview was assisted by external consultants, involving the author of this research, using the following methodology and target respondents.

	Client and Agent Interview
	One on one in-depth interviews
Methodology	• Number of SLI clients = 14 (100-120 minutes)
	<ul> <li>Number of SLI agents = 10 (90 minutes</li> </ul>
	CLIENTS
	Male / Female, who bought policy within the past
	6 months.
Target	A mix of married and single
Respondents	First time and repeaters buyers of SLI
	<u>AGENTS</u>
	A mix of agents who always with SLI and who have
	come from competitors
Location	Major cities with a significant number of SLI clients:
Location	Jakarta, Denpasar

For certain life insurance companies who adopt a tied-agency model, agents are considered to be their internal factor because they regularly paid agent's salaries. Whereas in SLI which adopting a general-agency model, agents can be considered an external factor because agents are rewarded only by commission linked to their sales and recruitment activities. Agents should comply with certain contract maintenance requirements that will be

regularly reviewed and will be demoted or fired if they fail to meet these standards.

In qualitative interviews, the researcher conducts face-to-face interviews with participants, telephone interviews, or engages in focus group interviews with six to eight interviewees in each group (Creswell, J. W., & Creswell, J. D. 2018). Based on this theory, the minimum number of interviewees is eight, but to have more fruitful insights, SLI has decided to extend it further by inviting dozens of clients and agents and held the interview in two cities. However, not all invitees were able to take part in the interview session so that the total number of people interviewed was only 24, consisting of 14 SLI clients and 10 SLI agents.

- General Question: What is insurance to the clients?
- Insurance is protection, the most fundamental association with insurance is to tide over the crisis, especially dealing with health and accidents
- Insurance is meeting life goals, particularly with Investment-linked plans that help money grow; marriages, children's education, business expansion, etc.
- Insurance helps maintain traditions, such as preparing for children's medical expenses, for one's funeral ceremonies (esp. in Bali), and taking parents to Haj.
- Insurance is support. Agent's friends/relatives are showing their support by taking a policy from him/her.
- > 7P Product Question: How good is the SLI product for the clients and agents?
- Clients do not want 'products' to be sold, they need something relevant to what they need in their life cycle stage.
- Some agents feel they should be more involved in the process of developing new products because they feel that they know the client's needs the best.
- ➤ 7P Price Question: How competitive is the SLI product price? Some agents said that the SLI health insurance product is not attractive enough, with the same payment as one of the competitors but having fewer benefits. Some agents feel they should be more involved in the process of developing new products.
- > 7P Place Question: Which one is better between paper-based vs digital sales process?

Technology ought to facilitate and simplify the entire application process. However, while the eSPAJ (electronic Surat Pengajuan Asuransi Jiwa) on the iPad looks smart, it may be easier to use paper SPAJ. The electronic system needs to gear up and expedite the application process.

> 7P - Promotion Question: How good is SLI brand awareness in society?

SLI brand awareness is low among clients before they start getting in touch with the agents. Though clients look to a trusted relationship with the agents and thus brand awareness does not impact their decision on choosing SLI.

> 7P - Process Question: How good is the new business process in SLI?

Overall new business process in SLI is at par with the 'best case scenario' from other competitors. However, some internal process improvements can be made to make clients feel a flawless onboarding experience.

> 7P - Physical Environment Question: How representative is the SLI Office?

SLI is not well-known among clients. It is then up to the Agents to educate Clients about SLI presence in Indonesia, its Canadian roots, its products, its location/building in the cities.

- > 7P People Question: How is the client's relationship with the agent?
- Agents are still the most important factor for clients, as they see agents as their bridge to SLI.
- The trust built between agents and clients is the key. They do not pay attention to details of the product nor compare it with the market as they trust their agents.

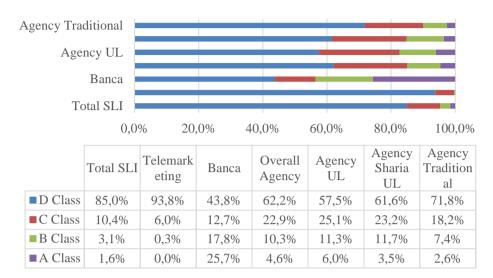
To support customer analysis, secondary data from the SLI core life policy administration system was gathered. In collaboration with Head of IT Application and Head of Data Analytics, the policy lapsed data of Agency Unit Linked (UL), Agency Sharia UL, and Agency Traditional extracted from SLI core life policy administration system then analyzed as follows:

- More than 80% of the lapsed policies in Agency UL and Agency Sharia UL were categorized as small case size, while more than 70% of the lapsed in Agency Traditional were categorized as micro case size. More than 50% of the lapsed policies in these three products were generated by a new agent.
- The first year lapsed in Agency Sharia UL and Agency Traditional were ranged from 73% 84%, while the Agency UL at 42%. Also, 22% of the lapsed in Agency UL was because the policyholders only paid the first premium, while in Agency Sharia UL it is 43%, and in Agency Traditional even higher at 74%.

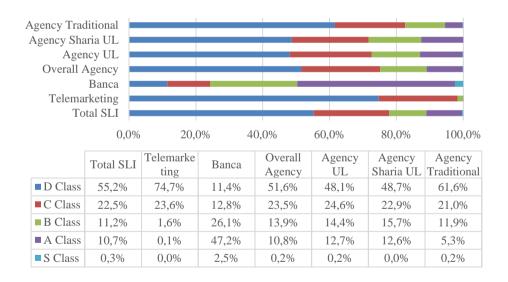
From an interview with Head of Strategy, Planning, and Performance and Chief Marketing Officer, SLI's client can be categorized into several classes based on their income as follows:

- S Class: > 5 billion rupiahs per year
- A Class: 700 million rupiahs per year ≤ x < 5 billion rupiahs per year</li>
- B Class: 400 million rupiahs per year  $\leq x < 700$  million rupiahs per year
- C Class: 200 million rupiahs per year ≤ x < 400 million rupiahs per year
- D Class: < 200 million rupiahs per year</li>

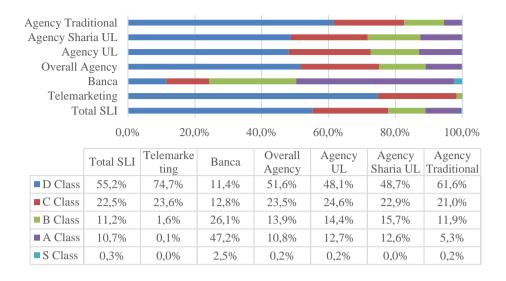
From an interview with the Head of Data Analytics, the profile of lapsed policies in SLI is dominated by D Class clients as shown below.



The profile of in-force policies per distribution channels has a similar pattern with lapsed policies where the Class D Client are dominant, especially in both Telemarketing and Agency channels



Below is a graph showing the lapse ratio of each distribution channel and the client's income class. It indicates that the lapse ratio in the C & D Class is relatively higher than in the A & B Class, whereas the S Class has a lapse ratio of 0%.



# d. External Analysis: Competitor Analysis

	Manulife Indonesia	FWD Life	
Product	Individual and Group business; Tradit	ional, Unit Linked	
Price	No standard pricing for an insurance product, a product		
	price for one person to another migh		
	to their risk profile. Some of Manuli		
	products are having the most compet		
Place	Sales delivered in both brick-and-	FWD is one of the	
	mortar and digital ways	pioneers in	
		digital insurance	
Promotion	Marketing activities through a	Focused on	
	regular TV program, billboards,	marketing in	
	magazines, newspapers, and social	social media	
	media such as Facebook, Twitter,	using their	
	Youtube, and Instagram.	Facebook,	
		Twitter, and	
		Instagram	
		accounts, as well	
		as their Youtube	
		channel.	
Process	Several digital apps to simplify the	sales and policy	
Dhariant	administration process are in place	Hand Office in	
Physical	Head Office is located in Sampoerna	Head Office is	
Environment	Strategic Square, a Grade A building located in the Sudirman area.	located in FWD	
	tocated in the Sudirman area.	Tower, a	
		skyscraper in Sudirman	
		Central Business	
		District.	
		טואנו וכנ.	

	Manulife Indonesia	FWD Life
People	Manulife Indonesia  Manulife serves more than 1.2 million policyholders supported by more than 1,200 employees, 7,400 agents, 450 Banca insurance advisors, and 150 telemarketers. Manulife is introducing the Kaizen program to make employees more productive, effective, and efficient	FWD serves around 600
		to consumers.

# e. Internal Analysis: Segmentation, Targeting, and Positioning Model Analysis

From the interview with Head of Strategy, Planning, and Performance and Chief Marketing Officer, it was revealed that SLI targeting clients of big islands in Indonesia, such as Java, Lesser Sunda, Sumatera, Sulawesi, and Kalimantan

Based on the demographic, SLI is targeting both male and female, with age around 22 to 64 years old, from any ethnicity and religion, with a minimum income of two hundred million rupiahs per annum that can be coming from professionals or business owners and aware of health and life protection as well as investment.

	Detailed Variable	Targeted Criteria
Geographic	Island	Java, Lesser Sunda, Sumatera,
Geographic	istanu	Sulawesi, and Kalimantan
	Age	22 - 64 years old
	Gender	Male and Female
	ic Income	< IDR 200 mio p.a for
Demographic		Telemarketing
Demographic		> IDR 200 mio p.a for Sharia
		> IDR 400 mio p.a for
		Conventional
	Occupation	Any occupation

	Education	Any education
	Poligion	Islam for Sharia
	Religion	Any religion for Conventional
	Ethnicity	Melayu for Sharia
	Lumercy	Chinese for Conventional
	Socioeconomic status	Aware of health and life
		protection also investment
		Low for Telemarketing
Psychographic		Middle-low to High Net Worth
		for Sharia
		Middle-up to HNW for
		Conventional
Behavioral	Popofite sought	Health and life protection, also
Deliavioi al	Benefits sought	investment

### f. Internal Analysis: The 7Ps Marketing Mix

Product. During the interview with Head of Product Marketing and Head of Product Partnership, it was disclosed that SLI is currently selling 39 products which consist of 13 traditional products and 26 unit-linked products. Of these products, 17 are sold through the Agency channel, while the remaining 22 products were sold via Bancassurance and Telemarketing channels. SLI also sells 18 Sharia-compliant products that are being sold both through Agency and Bancassurance channels. The product proposition itself varies such as regular and micro protection for health and life products, a combination of protection and investment products, and also a combination of protection and offshore fund investment.

Price. Both Head of Product Marketing and Head of Product Partnership said that SLI pricing for some key products is competitive in the market. However, due to its smaller company size compared to the market leaders, some other product prices are less competitive. To attract more buyers, a temporary marketing campaign is carried such as giving a discount or more commission to the insurance advisors.

Place. Summarized from the interview with Head of Digital Strategy and Head of Distribution Strategic Initiative, the sales process in SLI is combined between paper-based and digital which is supported by more than 170 marketing offices throughout Indonesia. However, digital adoption is still relatively low due to some reasons such as many of the insurance advisors are coming from older generations which is a typical late majority rather than early adopters.

Promotion. From the interview with the Head of Branding and Communications, it was disclosed that SLI marketing activities are rarely above the line. There are some activities in radio, magazines, and billboard placement but the majority of the marketing activities are through the line

by creating content in social media such as SLI website, SLI Facebook page, SLI Instagram page, and SLI YouTube channel.

Process. Just like the digital sales process, SLI also introduced digitalization in the back-office to streamline the process, increasing the productivity of its employees, and giving a better experience to its clients. In the interview with the Head of Policy and Premium Services, some innovative processes that have already been implemented are revealed such as automation on repetitive operational processes, digital client service, interactive chat through WhatsApp, etc. This process improvement resulted in a shorter process time and higher client satisfaction. To foster continuous process improvement, SLI runs an innovation competition which triggers the staff to always think of a better way to do something in their working area.

Physical Environment. SLI Head Office is located in Jakarta Business District which is also surrounded by many Embassies. From the interview with the Head of Facility Management, SLI is entitled to the naming rights of the building, hence named the building as SLI Tower because it is considered as the major tenant in that skyscraper. He also mentioned that regarding the establishment of SLI client service centers, recruitment and development centers, and general agency offices across Indonesia, there are several criteria related to the reputational risk that need to be fulfilled before an office can be established in one location.

People. During the interview, the Head of Staffing said that people are the most important assets in SLI. Knowing that limited quality people are available in the life insurance industry in Indonesia, SLI always tries to recruit the best possible candidate for one position by offering a competitive remuneration package. Once the people are on board, many learning options can be taken to upgrade their skills from attending classroom activities to self-learning via the digital learning platform. SLI has won several HR awards that recognize its success in doing innovation, creating leaders, and becoming the employer of the year.

## e) DISCUSSION

#### a. SWOT Analysis

Concerning SLI situation, the following is the SWOT Analysis conducted in the company:

#### Strengths

- SLI is a Joint Venture company backed up by a strong, well-capitalized parent company with extensive footprints across the globe and also a solid financial rating,
- SLI continues to enlarge its market share and rank, from 1.9% and rank 10 in 2015 to 2.9% and rank 6 by 2019. Compounded Annual Growth Rate

- (CAGR) of SLI's Individual New Business in 2015 2019 are 19.4%, while the Indonesia Market CAGR is only 7.3%,
- SLI offers a wide range of life insurance products; Conventional, Sharia, Traditional, and Unit Linked (UL) to the individual market only, which is aligned with the industry profile.

#### Weaknesses

- SLI rarely executing marketing activities resulted in low brand equity in society. With high brand awareness, it will be easier to gain initial trust from the clients,
- During the sales process, Clients were sold with small case size products offered by the agents (driven by sales commission) rather than their needs.
- More than 70% of the lapsed policies in the Agency channel are coming from C and D Class clients, which are annual income of fewer than 400 million rupiahs per year,

## Opportunities

- Indonesia is one of the most populous countries in the world with a 268 million population and low insurance penetration at around 1.1% to 1.4% of the GDP
- Gross Written Premium of the Indonesian life insurance industry has continuously grown at 12.3% per year since 2009,
- According to the World Bank, Indonesia is now officially an upper-middleincome country, an upgrade from its previous status as lower-middleincome

#### **Threats**

- The power of suppliers is high because agents can raise the cost of production by demanding a higher agent's bonus for a number of client's leads, or by reducing the quality of client leads. Recently, many successful agents were being recruited with big compensation.
- The products from one company to another are also relatively the same.
   Buyers will have options to buy similar products with insignificant differentiation from other companies
- The life insurance industry in the future is quite challenging. Not only because of high rivalry among existing competitors but also because Indonesia has fallen into recession due to the COVID-19 pandemic and worsened by the Jiwasraya saga that may lower the market's confidence to buy a life insurance product.

## b. TOWS Analysis

Formulated from SLI's SWOT Analysis, the TOWS Matrix is then identified to determine the root cause of declining in-force policies in SLI. The summary is as follows:

- SLI brand equity is considerably low, clients buying decisions are based on their relationship with agents, not SLI brand. Clients were sold with products offered by the agents, rather than their needs. Clients are buying small case size life insurance products just to show support to agents who are their relatives.
- Clients from the lower socioeconomic class are having a higher lapse ratio and the majority of SLI in-force policies portfolio are coming from C & D Class clients, which have an annual income of fewer than 400 million rupiahs per year.
- Agent's movement from one company to another is increasing, and when they move to another company, their existing clients will follow. The clients are willing to do so because the product features of one company to another are similar.

The detailed SLI's TOWS Matrix can be found in below table

		INTE	RNAL	
		<u>Strengths</u>	<u>Weaknesses</u>	
TOWS Matrix		<ol> <li>JV company backed up by a strong global parent company</li> <li>Fast-growing company excel the market growth rate</li> <li>Various products line-up with competitive pricing on its key products</li> </ol>	<ol> <li>SL brand equity is considerably low</li> <li>Clients were sold with products offered by the agents rather than their needs</li> <li>The majority of inforce policies are C &amp; D Class clients, that having a high lapse ratio</li> </ol>	
	<u>Opportunities</u>	SO Strategies (maxi-	WO Strategies (mini-	
	1. Low life insurance	maxi)	maxi)	
	penetration in one of the most populous country	(S1, S2, S3, O1, O2, O3)	1. (W1, W2, W3, O1, O2, O3)	
	2. The life insurance	Massive recruitment of	Run a regular financial	
	industry	higher caliber agents to	literacy program to	
A N	continuously growing in the last	bring in more upper- middle client's segment	upper-middle client's segment and above to	
EXTERNAL	10 years	and above	increase awareness on	
E.	3. Indonesia new		SLI brand and life	
	status as an upper- middle income		insurance products.	
	country		2. (W3, T3)	
	,		Redefine the SLI	
			Agency target market	
			to focus on S, A, and B Class clients	

<u>Threats</u>	ST Strategies (maxi-	WT Strategies (mini-
1. The increasing	mini)	mini)
trends of agents poaching by competitors  2. Competitors are selling products with similar features  3. High rivalry among existing competitors, combined with challenging life insurance industry situation due to COVID-19 pandemic, and Jiwasraya saga	1. (S1, S2, S3, T1) Strengthen the agent retention program to ensure the availability of high-quality agents Revamp the existing Agency compensation to make it competitive with competitors' package  2. (S1, S2, S3, T2, T3) Redefine the SLI positioning by providing beyond expectation service to the clients as a	1. (W1, T1, T2, T3) Run a continuous marketing program
	differentiator from other competitors.	

# c. New Segmentation, Targeting, and Positioning

Based on the research findings, many of the lapsed policies are coming from lower-income segment clients. Many of the clients only pay the first premium when they buy the policy, but fail to pay the renewal premium because they only bought it to show their support to agents and cannot afford to pay the renewal premium regularly.

In the existing condition, SLI is segmenting its market only by islands, which is not effective because not every city on those islands is at the same wealth level. In the new segmentation, SLI should give more focus on major big cities in those islands. By doing so, SLI can focus their limited resources to tap on major potential cities where the overall socioeconomic status of the population is higher than the smaller cities.

Segmentation Variable	Existing Segmentation	New Segmentation
Geographic	Big Islands in Indonesia	Major big cities in Indonesia
Demographic	Age, gender, income, occupation, education, religion, ethnicity	Age, gender, income, occupation, education, religion, ethnicity

Psychographic	Lifestyle, socioeconomic status	Lifestyle, socioeconomic status
Behavioral	Benefits sought	Benefits sought

After segmenting the market, the next step is to evaluate and select the most attractive segments from a list of customers or segment groups identified earlier. Based on the analysis from the previous chapter, some targeted criteria need to be revised aligning with the new strategies produced using the TOWS Matrix, such as:

- Targeting capital cities such as Jakarta, Medan, Bali, Makassar, Balikpapan,
- Targeting the productive age of professional office workers and business owners,
- Targeting the higher-income segment both for Conventional and Sharia Agency.

	Detailed Variable	Targeted Criteria
Geographic	Cities	Capital cities on Java, Lesser Sunda, Sumatera, Sulawesi, and Kalimantan
Demographic	Age	22 - 55 years old
	Gender	Male and Female
	Income	> IDR 400 million per annum for
		Sharia
		> IDR 700 million per annum for
		Conventional
	Occupation	White collars, business owners
	Education	Any education
	Religion	Islam for Sharia
		Any religion for Conventional
	Ethnicity	Melayu for Sharia
		Chinese for Conventional
Psychographic	Lifestyle	Aware of health and life protection
		also investment
	Socioeconomic status	Middle-up to High Net Worth for
		Sharia
		Affluent to HNW for Conventional
Behavioral	Ronofits sought	Health and life protection, also
	Benefits sought	investment

Targeting a higher segment of clients will be meaningless if SLI cannot adapt to their needs as this segment is more demanding. Naturally, these clients want to have a greater policy benefit and are willing to pay a bigger premium, while at the same time expecting a better client service. Redefining the client services will match the expectations of the new target client segment as well as become the differentiator of SLI positioning in the industry. SLI should reposition positions itself as a foreign JV company

backed by a reputable and sound parent company that can serve the clients beyond their expectations by providing precise, timely, and solutionoriented services, with compassion supported by technology and data analytics.

#### d. New Marketing Mix

Based on the new Segmentation, Targeting, and Positioning and the strategies generated from TOWS Analysis, SLI needs to implement a new marketing mix to deliver its objectives. The proposed 7Ps Marketing Mix is as follows:

Product. SLI should develop new products that suit the need of higher client segments. When this segment thinks about insurance, they think far beyond the life coverage it provides. The upper segment sees insurance as an asset that provides wealth protection, enables succession, and enhances healthcare options.

Price. Higher market segments may value quality over price, making them less susceptible to price sensitivity. However, to remain attractive SLI needs to maintain its price competitiveness. Finding the pricing sweet spot is not easy, but it is one of the major factors to win the market.

Place. Regarding the sales channels, SLI should maximize both physical and electronic channels. New technologies such as mobile applications, artificial intelligence, robotic process automation, and gamification are inevitable. However, the role of agents is predicted to be still important for the next few years because human touch cannot be easily replaced by electronic channels, especially in the higher market segment which requires more intense service.

Promotion. SLI brand equity and life insurance penetration in Indonesia is considerably low. To tackle this issue, SLI needs to run a continuous marketing program on a large scale and regularly held a financial literacy program to the upper-middle client's segment and above.

Process. Some improvement needs to be carried out by SLI such as develop a new digital sales platform by providing (i) holistic goal financial planning, enabling agents to help clients make and track short/long term financial goals, (ii) product visualization/explanation tools to make the complex simple and (iii) sales solution that provides the best experience.

Physical Environment. SLI Tower is located in a prime location in Jakarta Business District, which is matched with the new SLI image of a bona fide life insurance company targeting a higher client segment. However, some upgrades might be needed to rejuvenate the physical appearance of SLI client service centers, and general agency offices across Indonesia.

People. To attract a large number of higher client segments, SLI needs to recruit a higher agent segment massively and strengthen the agent retention program to prevent the movement of high-quality agents from SLI to other companies. To smoothen the recruitment and retention process, Agency compensation should be revamped to make it competitive with competitors' remuneration packages. The Agency training curriculum also needs to be enhanced to ensure that every agent is capable of dealing with a higher client segment while at the same time selling life insurance products based on the client's financial needs analysis.

### f) CONCLUSION

SLI is a fast-growing joint venture company that excels in the industry growth rate that is backed up by a strong, well-capitalized parent company and offers a wide range of life insurance products. Even though the number of new businesses is growing, SLI has experienced a decline in the number of Agency in-force policies. Accordingly, an analysis of the external and internal environment of the company has been conducted to find the solution for this issue.

From the external environment, the agent's movement from one company to another is increasing, and when they move to another company, their existing clients will follow. The clients are willing to do so because the product features of one company to another are similar.

Meanwhile, the internal factors which contribute to the declining number of in-force policies in the Agency are (i) SLI brand equity is considerably low, clients buying decisions are based on their relationship with agents, not SLI brand. Clients were sold with products offered by the agents, rather than their needs. Clients are buying the small case-size product just to show support to agents which are their relatives, and (ii) Clients from the lower socioeconomic class are having a higher lapse ratio and the majority of SLI in-force policies portfolio are coming from that segment.

To overcome the issue, SLI can implement several strategies as formulated from the TOWS Matrix:

- Redefine the SLI Agency target market to focus on S, A, and B Class clients,
- Redefine the SLI positioning by providing beyond expectation service to the clients as a differentiator from other competitors,
- Run a continuous marketing program with a focus to increase SLI brand equity,
- Run a regular financial literacy program to upper-middle client's segment and above to increase awareness on SLI brand and life insurance products,
- Massive recruitment of higher caliber agents to bring in higher client's segment,

- Revamp the existing Agency compensation to make it stay competitive,
- Strengthen the Agency retention program to ensure the availability of high-quality agents
- Strengthen the Agency training program and implement a sales policy of selling products based on the client's financial needs analysis

## g) LIMITATION

Even though SLI markets their products through Agency, Bancassurance, and Telemarketing channels, this research only concentrate on Agency products due to the following conditions:

- 1. Bancassurance products are showing a positive trend. However, due to the different nature of the business, success stories from Bancassurance cannot easily be copied to the Agency channel.
- 2. SLI no longer pursues the Telemarketing business because of profitability issues of such products. It is also aligned with the situation of the Indonesian life insurance industry.

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# SHIFT FROM ENVIRONMENTAL TO ECONOMIC DIMENSION OF SUSTAINABILITY IN TIME OF COVID-19 PANDEMIC

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#### **Abstract**

Marking World Planet Day in April, reminded on sustainable development of our society. The existing studies on sustainability show that the environmental dimension has been so far the most emphasized one. The purpose of the paper is to emphasize that a 'new reality' triggered by Corona-19 pandemic in some sectors diverted attention from environmental issues to the basic question of businesses: how to survive - to economic dimension. The findings suggest that offset from environmental sustainability dimension should only be temporary. Being back to 'normal' should significantly reduce the amount of packaging used for 'to go-away food' and for on-line ordered items, while hygiene measures that are not very eco-friendly (disinfection, face-masks, items to be used only ones, etc.) will probably stay with us for a while. Individual examples of good practices indicate some progress toward sustainability; however, the reality suggests that the pandemic time was not used enough for thorough rethinking about our future sustainable development.

# **Key Words**

sustainability, environmental dimension, economic dimension