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Editor Speech of IC - BTI

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Congratulation!

Edmond

Hajrizi, Rector of UBT and Chair of IC - BTI

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Unemployment Problems In Times Of Crises

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Abstract

The occurring global crises of different nature have a significant impact on the growing unemployment in all economic sectors in Bulgaria. The labour market is severely affected by the emerging crises and is forced to adapt enterprises to the situations occurring or to close their doors permanently or for indefinite periods of time. In this context, the report clarifies some problems

and risk factors of unemployment under the conditions of current recessions. The lack of adequate policies to tackle the underlying problems of unemployment pose huge barriers and obstacles for businesses in all economic sectors to reduce and tackle job losses. The associated difficulties are associated with serious and severe problems, significantly affecting incomes, living standards and normal existence of human factor. The aim is to create and preserve sustainable jobs, acquire new skills and qualify the already employed resource. The main objective is to increase the participation of young people in public life and support their active citizen participation. On the basis of analyses, the main problems are highlighted and recommendations are made to curb and overcome the increase in unemployment in the country. Based on the methods of comparative and statistical data analysis, the main problems are identified and recommendations are made to limit and overcome the increase in unemployment in Bulgaria for the period 2017-2021.

Keywords: Unemployment, Crises, Problems, Bulgaria.

1 INTRODUCTION

Over the last few years, the labour market in Bulgaria has undergone decisive and unacceptable changes, linked to the rapid rise in unemployment at the beginning of the Covid-19 crisis and the associated restriction measures, to the opening of many new jobs and the replacement to labour shortages again a few months later. The labour market in Bulgaria has been severely affected by the crises that have emerged in recent years, and companies have been forced to adapt to the situations or close their doors permanently or for indefinite periods of time. Many employers implemented different work practices, while many of them failed to cope with the occurring recessions in enterprises. The economic consequences in all sectors of the country are different depending on a series and variety of factors. Unemployment remains an important problem during crises in Bulgaria and is of paramount importance for the country's economy. The causes mainly relate to the loss of income and living standards of the active population.

The main objective of this report is to analyse the problems of unemployment, its characteristics and its impact on the active persons in the labour market based on the methods of comparative analysis and statistical data analysis. Many enterprises in the country are constantly pressed to search for possible solutions in order to develop and retain their workforce to achieve stability and prosperity. The studies in details the factors influencing the drop in employment, the actions undertaken by the state and employers to handle the problem.

2 ANALYSIS AND DISCUSSION

In recent years, businesses across the country have been forced to operate in crisis conditions, having a highly negative effect on their operations. Unemployment represents a deviation

of the market economy of a social and economic nature. All this is accompanied by many and severe problems involving income, living standards and employment rates. An analysis of the literature reveals that there are different views on unemployment. For example, from the point of view of increasing unemployment, clarifying its essence, specifying the structure and the various processes taking place in it, it is based on the opinions of many researchers. Ivanov, 2020 research changes in the labour market in the context of a pandemic crisis and their impact on the health care system in Bulgaria. Terziev, 2014 focused to transformations of the Bulgarian labour market in the transition years.

The reasons for the existence of a severe shortage of personnel in Bulgaria go back more than a decade. According to most employers, "laziness and incompetence" of Bulgarian citizens and the country's declining population are the main arguments for this [5]. Also a significant problem is the declining share of industry in the gross domestic product and aggregate employment, which is a consistent process and marks the transition from an industrial to an information society. This fundamental change in the structure of the national economy is often accompanied by a profound change in the professional development of employees, an increase in unemployment and poverty, and an exacerbation of social conflicts [7].

The crises have significantly changed the country's labour market and led to a huge rise in unemployment. This is mainly due to the restrictive measures imposed, which have led to job losses and the closure of many businesses. At the same time, the crises have intensified long-awaited changes. Many firms have implemented optimising flexible forms of work, and some have relied on investment in human resources to emerge from the crisis stronger.

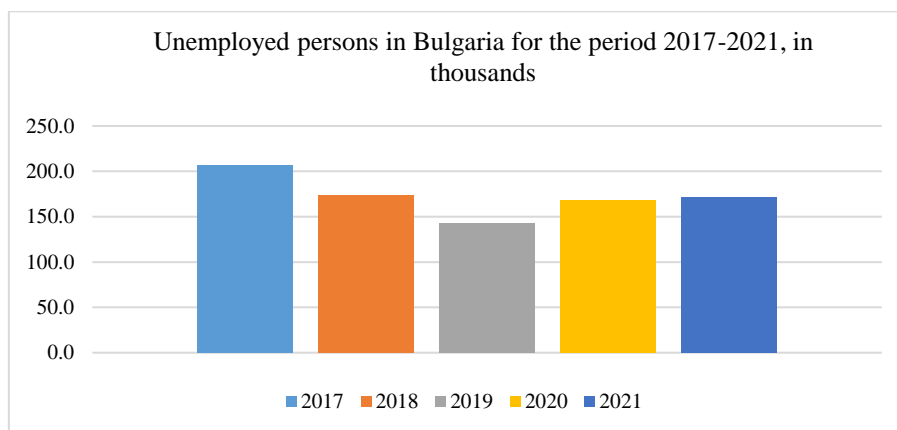


Fig. 1. Unemployed persons in Bulgaria for the period 2017-2021. Source: Unemployed persons, NSI, 2022

The data presented in Fig. 1 reveal that while 206.9 thousand unemployed persons were registered in 2017, the number has decreased to 142.8 thousand in 2019. However, in 2020 (168.6 thousand) and 2021 (171.1 thousand) there is an increase in registered unemployed persons compared to 2019. The main reason for the increase in the number of unemployed persons is related to the forced unpaid leave imposed by the suspension of a number of economic activities in order to cope with the crises related to the pandemic and the resulting economic consequences of the war in Ukraine.

The dynamics and structure of unemployment can clearly be demonstrated by the number of registered unemployed persons in the Labour Offices. This means that part of the unemployed are mainly graduates. The basic nature can also be determined by the closure of many industries and the resulting redundancies. The process of restructuring production has caused labour market pressures, which are associated with the release of the workforce [2].

Most of the layoffs are the result of workers leaving their jobs in enterprises, where it takes time to fill vacancies and replenish the workforce, as well as mass layoffs from enterprises, mainly due to restructuring, enterprise closures, implementation of effective bankruptcy law [6].

The most influencing factor on the specificity of the unemployment rate is the high relative share of the hidden economy in Bulgaria, which has two dimensions - non-reporting by enterprises of the full volume of output produced, or underestimation of the magnitude of the output actually created by the deals made [16].

The crises increased unemployment across the country, with the unemployment rate rising from 5.1% in 2020 to 5.3% in 2021, up from 4.2% in 2019 (see Fig. 2). The large effect occurred in 2020 during the state of emergency period, when thousands of jobs were lost for several months. While some recovery followed, the impact of the crises should not be underestimated.

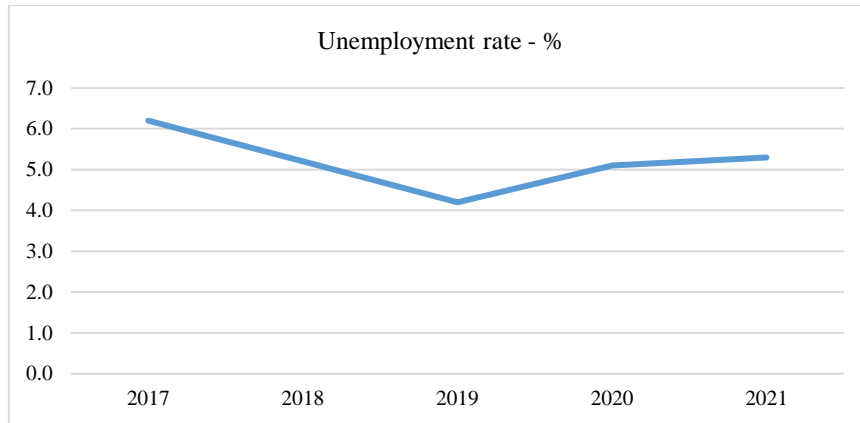


Fig. 2. Unemployment rate in Bulgaria for the period 2017-2021. Source: Unemployed persons, NSI, 2022

Unemployment as a socio-economic phenomenon is characteristic of any market economy. In order to adapt to the labour market in a period of transition, the following are needed: knowledge of the characteristics and functioning mechanisms of the labour market, information on the state of the labour market, knowledge and information on the labour market institutions that mediate, connect job seekers and job providers, awareness of the labour legal aspects regarding the dismissal and employment of workers, awareness of the policies in favour of employment, knowledge and availability of information on the possibility of starting a job, job search skills, talking skills at job interviews, job search behaviour [17].

The main opportunities for this will contribute to easier job finding for active job seekers, greater competitiveness on the labour market and last but not least greater flexibility and resilience of the unemployed.

Unemployment remains a dominant employment policy issue. Those workers who lack the necessary qualifications are much less likely to find a job than those with higher qualifications or university degrees [3]. Systemic unemployment is caused by the continuous and prolonged economic recession, the unstable disparities in the economy, the lack of a noticeable effect to compensate for the loss of jobs in sectors with shrinking production, the differences between industries, regions, sectors of the economy. Without the accumulation of positive macroeconomic dynamics it is not possible to solve the problems of unemployment [13]. Additional causes of unemployment are mainly related to the characteristics and timeliness of the occupation, the replacement of older workers by younger but better-trained professionals for new branches of industry, finding satisfying work, whereby workers often move from one job to another, alternating

between a state of employment and unemployment [10]. Most existing jobs are for skilled workers, while jobseekers are either young people without the necessary education and work experience or adults made redundant from low-skilled jobs [15].

The main priority in the structure of unemployment in Bulgaria is the so-called cyclical or Keynesian unemployment. The manifestations of cyclical unemployment occur in economic downturns, when wages and labour demand start to decline simultaneously. The main cause of cyclical unemployment is triggered by the precautionary shrinkage of aggregate demand in commodity markets and the subsequent decline in output and employment [1]. And the main measures to reduce cyclical unemployment are related to maintaining high GDP growth rates and limiting labour fluctuations [16]. The definition of cyclical unemployment is that it is caused by insufficient aggregate demand in an economy that is unable to generate enough jobs. It is linked to the movement of the economy, in periods of economic boom and recession [15].

Particular attention is paid to researching and analysing the situation of unemployed persons from risk groups, caused mainly by reasons of socio-economic and demographic nature, who are often disabled persons, disadvantaged persons, young disqualified persons, areas where mainly Turkish and Roma population lives, unemployed and single mothers with children up to 3 years of age. In this regard, it is necessary to take measures for vocational guidance, vocational training and job placement of these unemployed groups through socio-economic integration [11]. It is necessary to stress that such has not yet been fully implemented.

It is important under the current conditions to give Bulgaria the opportunity to focus its efforts on the issue of labour efficiency, on the behaviour of the participants in the labour process, on the attitude towards labour. There are significant changes in economic and social life and this in turn has implications for 'labour-related relations' and employment relations. The mismatch between labour supply and demand brings forth the concept of a labour market, which is the relationship between employers and workers, and in relation to this the symptoms of the so-called 'black economy' and 'black labour market' emerge [14].

The lack of state assistance in achieving employment stems from the recognition of work as a basic human right, the lack of the need for a stable economic interest, state assistance in achieving freely chosen employment that stems from the free and voluntary nature of modern work [12], which in turn further leads to increased demand for work and unemployment.

Everyone needs a job to earn a living. Unemployment prevents a person from gaining independence and self-esteem and hinders people's integration into society [4]. Bulgaria proved to be very unprepared to meet the challenges of the market economy. In connection with the inefficient use of the already employed labour force, the so-called "hidden unemployment", related to the loss of working time, is developing [14].

One of the biggest problems in Bulgaria is related to youth unemployment. It is a source of insecurity, poverty and also a large emigration in recent years, which changes their demographic behaviour, the very attitude to professional career [18]. Seeking jobs in unattractive fields or in jobs that do not match the education of young people leads to their alienation, disrespect and resentment of the system, encapsulating young people in an imaginary, unreal world. In this case, young people lose the skills they have acquired during their studies, and along with this, many of them lose their desire and habits to work [8]. In this sense, intergenerational solidarity is linked to efforts and policies to overcome the young-older opposition in the labour market with new knowledge and skills, adaptation to change. In this case, insufficient economic dynamics and the related competition and conjuncture in the labour market distort social solidarity and harmony between generations, introducing competition and opposition between young-old in the field of employment [18]. Lack of employment among young people can have major adverse personal and societal consequences and lead to lifelong social exclusion [9]. Some of the main reasons for the difficulty in finding a job among young people are related to early school leaving and the lack of a specialty due to low education, mismatch of completed education with the qualifications sought by employers, lack of acquired professional experience, low qualifications, inconsistent job search activity, gaps in the expectations of young people and employers, lack of connection between education and the labour market, lack of motivation in young people, lack of practical skills and work habits, tendency to emigrate abroad [8].

3 CONCLUSION

The economic situation in Bulgaria in this difficult period has significant consequences and negative impact for all enterprises, for which it is necessary to search and implement adequate social policies. The aim is to create and preserve sustainable jobs, acquire new skills and qualify the already employed resource.

Government policy should address the overcoming of mismatch between the level of education and vocational training, insufficient initiative and active behaviour in the labour market, insufficient awareness, insufficient measures related to the labour market policy (vocational training, apprenticeships, internships, apprenticeships), incentives for employment and entrepreneurship, etc. Acquiring new skills and informing jobseekers what is needed for a position are important prerequisites for finding a good job. The main objective is to increase the participation of young people in public life and support their active citizen participation.

Key measures to combat unemployment in the aftermath of the crises should focus on equipping the unemployed with new skills and qualifications relevant to today's labour market - technology literacy, soft skills, and modern production techniques.

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Digital Transformation in small and medium-sized enterprises in a time of a crisis

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Abstract. The Covid-19 pandemic presents small and medium-sized enterprises with serious challenges. It leads small and medium-sized enterprises to search for new solutions for survival and development. Digital transformation plays a crucial role in overcoming the crisis and restoring business processes. Digital transformation enables small and medium-sized enterprises to carry out their activities in a new way. In addition, it contributes to the sustainable competitive advantage and economic growth of businesses. In this context, the purpose of the report is to analyze the process of digital transformation in small and medium-sized enterprises in Bulgaria; it aims to highlight the major problems businesses face with the implementation of digital technology as well as make recommendations as to how they can overcome them. Statistical methods were used to analyze the state of digitalisation of small and medium-sized businesses and to give an evaluation of the results obtained in the study. The analysis of digital transformation in small and medium-sized enterprises is based on statistical data from the National Statistical Institute. Overall, the paper looks at the main theoretical aspects of digital transformation and its impact on businesses in a time of a crisis. Based on the analysis and evaluation given of the results, summarized conclusions are made and recommendations for successful implementation of digital transformation are provided.

Keywords: Digital Transformation, SMEs, covid-19 crisis.

4 Introduction

The last few years have witnessed phenomenal environmental and technological changes, which have impacted not only the economy, but also businesses and individuals [20]. At the same time, the COVID-19 pandemic was an unexpected event that has led to major instabilities in the world's economy and changes in the market dynamics [14]. It presented small and medium-sized enterprises with serious challenges. Moreover, the biggest challenge for SMEs is to understand how to effectively reduce their vulnerability and respond adequately to externally triggered crises [8, 16]. The crisis forced small and medium-sized enterprises not only to quickly adapt to these changes, but also to look for new solutions for survival and development. In this regard, digital technology are crucial in the processes for enabling businesses to overcome crisis [13,16, 19]. Undoubtedly, they play a crucial role in restoring business processes.

Digital transformation is what enables small and medium-sized enterprises to do their business in a new way. In addition, it contributes to achieving a sustainable competitive advantage. The adoption and implementation of the digital transformation approach in small and medium-sized enterprises is also a prerequisite for the economic growth of businesses. In this context, the purpose of the report is to analyze the process of digital transformation in small and medium-sized

enterprises in Bulgaria, to outline the main problems they face in the implementation of digital technologies and to give recommendations for overcoming them. To realize the set goal, qualitative and quantitative approaches have been applied. The application of content analysis in the course of the study provides an opportunity to clarify the theoretical aspects of the issue of digital transformation. The methods of analysis, synthesis and comparison were used in order to analyse and evaluate the process of digital transformation in small and medium-sized enterprises in Bulgaria. The study is based on statistics on small and medium-sized enterprises from the National Statistical Institute (NSI) of the Republic of Bulgaria for the period of 2020 and 2021. The quantitative method is applied to discuss the results, allowing statistical data to be analyzed and evaluated using a tabular presentation approach. A statistical characteristic as absolute growth was also calculated for the needs of the research and analysis.

5 Problem Definition

The issue of digital transformation has been discussed in scientific literature by a number of authors. They tackle the topic of digital transformation from various perspectives.

Digital transformation is rapidly affecting every sector and the wide society by offering scale and speed for organizations to transform [12]. According to Bughin, Deakin and O’Beirne [3], digital transformation is the process of reorganization of technology, business models and processes in order to create new values for customers and employees. More specific is Vial’s [22] view of the essence of digital transformation. He treats digital transformation first and foremost as ‘a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies’ [22, p. 118]. At the same time, an important emphasis placed by the author is the enterprise that is considered regardless of its category (size). In addition, it is necessary to consider that enterprises are open to the opportunities presented by the digitalisation [9]. This definition was used in this paper as it encompasses businesses of any size and it is open to the opportunities presented by the digitalisation [9].

It is also important to examine the nature of digital technologies from the perspective of its influencing factors. In this regards, the scientific literature indicates that among the driving factors accelerating the digital transformation are factors, such as the advancement in technology, changes of businesses practices with the implementation of e-commerce, internet economy and social media, Industry 4.0., artificial intelligence, cloud computing, big data, increase used of smartphones and computers, etc. [21]. In fact, digital technologies – social, mobile, big data, cloud, are having a direct impact on businesses and the human life.

The analysis of the literary sources reveals that digital transformation is considered as a processes that involves changes in business processes and capabilities [23], concurring new markets [5] and changing business practices [4]. As such, the implementation of digital technology cannot be done in isolation, organizations need to understand the benefits of digitalisation and employ a digital mindset, train their employees and change their businesses models in order to successfully employ digital transformation and be successful in the digital world [17].

The successful digital transformation is linked with the optimization and redesign of current business processes. It is important for businesses to achieve a symbiosis between the imple-

mented change, the new technology and the data integration, for the digital processes to be accepted and successful [17]. All levels in the businesses must accept the change and be involved in the process.

Thus, authors have paid major attention as to how business entrepreneurs have responded to these changes with the help of innovation and technology [11, 15]. The benefits of it – automation and optimization of business processes, improved business productivity, speedy production, reduced errors and more, showcase the immense potential of digital transformation for SMEs [6, 7, 18]. Businesses that act and adopt digital technology have the potential to outperform their competitors and increase their revenue in an efficient manner [10].

6 Results and Discussion

The number of enterprises who have implemented digital technologies evidences the impact of digitalisation on the Bulgarian enterprises, which acts as a remedy for the challenges imposed by the COVID-19 crisis.

The digital transformation of Bulgarian enterprises is linked to the development of the digital economy, which stimulates businesses to implement digital technologies [1]. Ahmedova [1] also states that Bulgaria performs well and is a little bit below the EU average for the implementation of digital technology. The National Statistical Institute supports the above and illustrates the continuous trend in the utilization of digital technology of SMEs during the COVID-19 crisis.

One of the biggest trends for SMEs after the COVID-19 crisis is the availability and access to the internet. In this regard, the data obtained from the NSI of Bulgaria shows a very slow increase in the number of small and medium-sized enterprises that use the Internet. Regardless, the data in table. 1 shows that faster growth is found in small enterprises (with 10 to 49 employees) that use the Internet.

Table 1. Enterprises by category using the internet in percentage

Enterprises by size	2020	2021	Variation
10-49 employees	94.8	95.4	+0.6
50-249 employees	99.0	99.3	+0.3

Source: Business Statistics, R&D, Innovation and Information Society, NSI, 2021, <https://nsi.bg>

Regarding the enterprises that have a website, the data from table. 2 reveals that in a time of a crisis, medium-sized enterprises (with 50 to 249 employees) significantly outperform small enterprises. At the same time, it is striking that the number of small businesses with a website is decreasing in 2021 compared to 2020.

Table 2. Enterprises by category using with a website in percentage

Enterprises by size	2020	2021	Variation
10-49 employees	47.6	47.0	-0.6
50-249 employees	70.6	73.0	+2.4

Source: Business Statistics, R&D, Innovation and Information Society, NSI, 2021,

<https://nsi.bg>

Bulgarian small and medium-sized enterprises encounter significant difficulties in realizing the potential of e-commerce. This is supported by the data presented in table 3, from which it is clear that the share of small and medium-sized enterprises carrying out online trade is very small. In addition, small businesses have made more progress with online sales, unlike medium-sized businesses, which even registered a decrease in 2021 compared to 2020.

Table 3. Enterprises by category selling products / services online

Enterprises by size	2020	2021	Variation
10-49 employees	9.6	10.7	+1.1
50-249 employees	16.2	15.8	-0.4

Source: Business Statistics, R&D, Innovation and Information Society, NSI, 2021, <https://nsi.bg>

The degree of digitization of small and medium-sized enterprises in Bulgaria during the crisis can be judged by the use of cloud technologies and social media. With regards to the use of cloud services, a more significant increase in their use was found among medium-sized enterprises by 2.6% (from 20.0% to 22.6%) compared to small enterprises, where an increase of only 1.6% was registered (from 8.4% to 10.0 %) in 2020 compared to 2021 (NSI, 2021). As for the use of social media for the same period, a more significant increase in the share of small and medium-sized enterprises compared to those using cloud services was found. According to NSI data, the share of small enterprises increased by 4.5% (from 31.8% to 36.3%), and the share of medium enterprises increased by 7.2% (from 41.8% to 49.0%) in 2019 compared to 2021.

The analysis of big data, the use of electronic invoices, customer information management software (CRM) and resource management software (ERP) are also important for evaluating the digital transformation of small and medium-sized enterprises in Bulgaria. In this regard, it should be noted that due to the availability of data from NSI only for 2020, it can be concluded that in crisis conditions the share of both small enterprises (5.0%) and medium-sized enterprises (10.7%) performing big data analysis is relatively small. It is noteworthy that in 2020 the share of small (8.9%) and medium-sized enterprises (13.8%) working with electronic invoices is also low.

In terms of the introduced digital technologies in small and medium-sized enterprises in crisis conditions, the comparative analysis shows that the share of medium-sized enterprises that use these technologies is significantly higher. The NSI data reveals that while 27.9% of medium-sized businesses use customer information management software, roughly half as many small businesses (14.3%) plan to use it in 2021. A similar trend is also observed regarding the use of resource management software. It is noteworthy that a significant part of medium-sized enterprises (40.1%), in contrast to small enterprises (17.1%), are betting on the use of software for resource management in 2021.

As can be seen from the analysis of the survey results, the number of small and medium-sized enterprises using the Internet is growing relatively slow. At the same time, it is observed that in the conditions of the crisis, the share of Bulgarian enterprises that own a website, rely on online trade, benefit from the advantages of using digital technologies, cloud technologies, social media and management software for human resources is still small. Moreover, the results of the analysis reveal that the main problems faced by the representatives of small and medium-sized enterprises

in the crisis are mainly reduced to: serious difficulties in realizing online trade, insufficient degree of use of the potential of social media for advertising and communications, insufficient level of digital maturity.

It is obvious that the representatives of small and medium-sized enterprises, who are the backbone of the Bulgarian economy [2], still do not realize the important role of digital transformation as an opportunity for survival and achieving long-term sustainability, especially in the conditions of the COVID-19 pandemic, which has brought additional uncertainty as to how to ensure business continuity and economic growth [24]. Moreover, the application of digitization in small and medium-sized enterprises contributes to the achievement of significant positive changes, primarily related to increasing the opportunities for their innovative development in a world of fierce competition and in crisis conditions. The benefits of its introduction are mainly related to the creation of new business models, new ways of doing business and more efficient organization and management of business processes. It is obvious that it is imperative to accelerate the digitization process in small and medium-sized enterprises in Bulgaria as a prerequisite for ensuring their sustainability, increasing their development potential and increasing competitiveness.

7 Conclusion

The pandemic is a crisis affecting every aspect of life and the small and medium-sized enterprises in every industry. Digital transformation in turn offers an opportunity for businesses to redesign their business processes by the introduction of digital technology and a digital mindset. Digitalisation offers an opportunity for businesses to tackle the challenges the COVID-19 crisis. In this paper, the digitalisation of SMEs was explored as a way to overcome the COVID-19 crisis challenges and achieve competitive advantage and sustainable growth. The results from the analysis supports this view, illustrating the steady increase and adoption of digital technology in the small and medium-sized businesses.

8 References

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The Effect of Stress on Organizational Commitment, Job Performance, and Audit Quality of Auditors in Brunei

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Abstract. The fundamental purpose of this paper is to discover how stress influences the organizational commitments, job performance, and audit quality of the auditors. This paper distributed self-administered surveys and further employed univariate and multivariate analysis to examine the feedback. This research referred to stress as time pressure, work overload, role stress, social influence pressure, and work-family conflict. The findings concluded that role stress and social influence pressure significantly and negatively influenced affective commitment, while work-family conflict delivered a substantial direct relationship with affective commitment. Besides, work overload and time pressure have no notable association with affective commitment. All work stress factors have no significant association with continuance and normative commitments. Additionally, only role stress could substantially reduce the job performance of auditors, whereas the other work stress has no significant association with the job performance of auditors. Moreover, only role stress and social influence pressure could substantially diminish the audit quality, and work overload, time pressure, and work-family conflict have no significant relation to audit quality.

Keywords. *Stress; Organizational Commitments; Job Performance; Audit Quality; SPSS Software*

INTRODUCTION

Cicei (2012) referred to stress as detrimental physical and intellectual reactions of individuals that emerge when existing job provisions do not complement their qualifications, benefits, and needs. Masihabadi, Rajaei, Koloukhi, and Parsian (2015) further explained that job stress and occupational health developed into subjects of significant interest throughout the prior decade, both globally and nationwide.

Cicei (2012) stated that job stress is deeply associated with critical organizational consequences, for instance, high turnover rates and declined job contentment and organizational

commitment. Johari, Ridzoan, and Zarefar (2019) justified that audit is a stressful occupation because this profession concedes hefty workloads, multiple deadlines, social influence pressure, time pressure, and organizational commitment.

Dharma and Supartha (2019) highlighted that the stress level experienced by the employees requires monitoring to evaluate its influence on the profoundness of commitment since job stress negatively affects organizational commitment. Consequently, work stress could impact the employee judgment against the correspondence between the goals and the significance of the individuals with the company (Dharma & Supartha, 2019).

Johari et al. (2019) further explained that stress could induce physical and emotional suffering that may lower the job performance of individuals. Besides, job performance is closely associated with audit quality, suggesting that underperforming auditors will deliver poor audit quality reports that may result in substandard auditing (Johari et al., 2019).

Problem Statement

The line of work of the audit profession is exposed to a challenging environment (Mohd Nor, 2011). Lemmon (2019) further added that the extensive stress and pressures encountered by the auditors created the accountancy industry subjected to mental health concerns.

Amir (2019) stated that auditing is intertwined with behavioral problems. For instance, work stress could influence organizational commitment, job performance, productivity, and potential audit risks such as reduced audit quality that could harm the public confidence in auditors and their careers (Wai et al., 2013). Wai et al. (2013) asserted that the overall accounting profession undeniably realized as a pressured environment. However, CareersinAudit (2017) proclaimed that numerous auditors endure in silence and refuse to voice out due to worrying that it could severely restrict their potential career advancement.

No further investigations studied the possible outcome of pressure from the job stress theoretical stance (Wai et al., 2013), especially towards organizational commitment, job performance, and audit quality in the Brunei context. Mohd Nor (2011) also emphasized that since audit report quality relied upon the review and judgment of auditors, the presence of the adverse influence of work stress within audit professions demanded further investigations. Besides, work stress continuously emerges in the daily undertakings of audit engagements; hence, it is fundamental to gather an insight into the association between occupational stress, organizational commitment, job performance, and audit quality to assure no deterioration of audit report quality transpires (Mohd Nor, 2011).

Research Objective

This paper proposes the stated research objectives: i) To check whether stress could affect the organizational commitment of auditors, ii) To assess whether stress influences the job performance of auditors and iii) To evaluate whether stress affects the audit report quality.

LITERATURE REVIEW

Organizational Commitments

Rageb, Abd-El-Salam, El-Samadicy, and Farid (2013) defined organizational commitment as a psychological condition that contemplates a strong sense of attachment, affirmation, individuality, devotion, support, affection, and contentment towards organizations. Prolonged job stress could diminish the organizational commitment of individuals (Karacsony, 2019), thereby threatening the quality, originality, enthusiasm, and efficiency of individuals (Zhuwao, Setati, Rachidi, & Ukpere, 2015).

The previous literature review demonstrated an inverse correlation between role stress and affective commitment, indicating that stress, such as role conflicts, substantially impacts affective commitment (Malik et al., 2010; Osama & Umemezia, 2018; Washburn et al., 2021). Moreover, according to Cicei (2012) and Ekmekci et al. (2021), work overload has significantly and negatively influenced affective commitment. The research study by Yadav et al. (2019) and Deepak (2020) alleged that quantitative demand such as time pressure exhibited a substantial positive correlation between time pressure and affective commitment. Besides, prior research indicated that work-family conflict delivered a significant direct correlation with affective commitment (Sheaffer, 2015; Akhtar & Malik, 2016; Ekmekci et al., 2021). Additionally, the research by Rupert et al. (2009) and Shafer and Wang (2010) alleged that obedience pressure negatively and substantially influences affective commitment, implying that social influence pressure produced a notable negative association with affective commitment.

Several papers declared that stress such as role conflicts and role ambiguity does not influence continuance commitment as their positive correlation was not significant to impact continuance commitment (Botha, 2007; Addae et al., 2008; Daud et al., 2015). Meanwhile, Pillay et al. (2014) and Zhuwao and Setati (2015) expressed that work overload demonstrated no notable positive association with continuance commitment. The research study by Mosadeghrad et al. (2011) and Mosadeghrad (2013) alleged that time pressure increases turnover intentions and eventually reduces continuance commitment. Moreover, Botha (2007) and Li et al. (2013) confirmed that work-family conflict produced a positive but not significant association with continuance commitment. Besides, Fischer and Mansell (2009) and Hao (2018) further affirmed that social influence pressure and continuance commitment are positively and not substantially related.

Prior research proclaimed no notable negative association between role stress and normative commitment (Yousef, 2002; Zhang et al., 2018; Atif et al., 2020). Moreover, according to Cicei (2012) and Yetgin and Benligiray (2019), work overload negatively and significantly influences normative commitment. The research study of Daud et al. (2015) and Girak (2016) alleged that time pressure and continuance commitment produced no substantial negative relationship. Besides, prior research indicated that work-family conflict has a notable negative association with normative commitment (Namasivayam & Mount, 2004; Malik & Awan, 2015). Additionally, the research by Hao (2018) and Hao et al. (2019) affirmed that social influence pressure substantially impacts normative commitment, suggesting a positive correlation between social influence pressure and normative commitment.

Job Performance

Yustina and Valerina (2018) noted that job performance specifies how well employees execute their job responsibilities. In the case of auditors, job performance is the strength and competence of auditors in performing audit functions and audit judgment arrangements (Mohd Nor, 2011). Johari et al. (2019) further explained that stress could induce physical and emotional suffering that may lower the job performance of individuals. Besides, job performance is closely associated with audit quality, suggesting that underperforming auditors will deliver poor audit quality reports that may result in substandard auditing (Johari et al., 2019). Accordingly, this counterproductive practice would jeopardize the audit organizations to any possible legal obligations, client turnover, and reputational damage (Wai et al., 2013). Besides, stress cannot be stopped or regulated in a functional setting, particularly in the audit field, which renders a vital concern significantly when this industry is under severe close examination (Wai et al., 2013).

Several papers demonstrated an inverse correlation between role conflict and job performance, indicating that stress, such as role conflicts, substantially impacts audit performance (Wai et al., 2013; Afifah et al., 2015; Tungga et al., 2020). Meanwhile, Khan (2015),

Johari et al. (2019), and Tjahjadi and Cahyadi (2020) asserted that work overload does not significantly impact job performance. The research study by Johari et al. (2019) and Zainuddin et al. (2021) recognized a substantial positive correlation between time pressure and job performance. Moreover, Wai et al. (2013) and Warokka and Febrilia (2015) confirmed that work-family conflict produced a negative but not substantial correlation with job performance. Besides, Wai et al. (2013), Cahyaningrum and Utami (2015), and Johari et al. (2019) further affirmed that auditors under no social influence pressure made more precise audit judgments, implying that social influence pressure produced a significant inverse association with job performance.

Audit Quality

Amir (2019) asserted that audit quality is an assurance; in which individuals would utilize the performed work to analyze the actual and anticipated events. The detrimental outcome of job stress on the job performance of auditors was the poor audit report quality because it was profoundly susceptible to the appraisal and resilience of the auditors (Talebkhah, 2020). Moreover, reduced audit quality could harm the public confidence in auditors and their careers (Wai et al., 2013). Amir (2019) noted that to ensure a premium audit report quality, auditors should execute their assignments effectively and independently, adhere to the audit standards, secure qualified and acceptable evidence, and conduct all audit process steps to construct more reliable information.

Previous literature reviews declared a notable negative association between role stress and audit quality (Mohd Nor, 2011; Amir, 2019). Moreover, according to Mohd Nor (2011) and Ishak (2018), work overload positively but not significantly influences audit quality. The research study of Mohd Nor (2011) and Calocha and Herwiyanti (2020) alleged that time pressure exhibited no notable positive association with audit quality since the positive association between variables is not significant enough to influence the audit quality. Besides, prior research indicated that work-family conflict produced a negative and significant correlation with audit quality (Khavis and Krishnan, 2020; Ypma, 2021). Additionally, the research by Lord and DeZoor (2001) and Nasution and Ostermark (2012) affirmed that auditors under obedience pressure tend to substantially sign off materially misstated statements, implying auditors under social influence pressure would significantly and negatively influence audit quality.

HYPOTHESIS DEVELOPMENT

H1a: Role stress has a significant negative relationship with affective commitment.

H1b: Work overload has a significant negative relationship with affective commitment.

H1c: Time pressure has a significant positive relationship with affective commitment.

H1d: Work-family conflict has a significant positive relationship with affective commitment.

H1e: Social influence pressure has a negative relationship with affective commitment.

H2a: Role stress has no significant relationship with continuance commitment.

H2b: Work overload has no significant relationship with continuance commitment.

H2c: Time pressure has a significant negative relationship with continuance commitment.

H2d: Work-family conflict has no significant relationship with continuance commitment.

H2e: Social influence pressure has no significant relationship with continuance commitment.

H3a: Role stress has no significant relationship with normative commitment.

H3b: Work overload has a significant negative relationship with normative commitment.

H3c: Time pressure has no significant relationship with normative commitment.

H3d: Work-family conflict has a significant positive relationship with normative commitment.

H3e: Social influence pressure has a positive relationship with normative commitment.

H4a: Role stress has a significant negative relationship with job performance
 H4b: Work overload has no significant relationship with job performance.
 H4c: Time pressure has a significant positive relationship with job performance.
 H4d: Work-family conflict has no significant relationship with job performance.
 H4e: Social influence pressure has a significant negative relationship with job performance.

H5a: Role stress has a significant negative relationship with audit quality.
 H5b: Work overload has no significant relationship with audit quality.
 H5c: Time pressure has no significant relationship with audit quality.
 H5d: Work-family conflict has a significant negative relationship with audit quality.
 H5e: Social influence pressure has a significant negative relationship with audit quality.

METHODOLOGY

This paper gathered the appropriate data by distributing a self-administered survey generated in both Malay and English languages. This study exercised convenience sampling by proposing those connected with the researcher and further asking the respondents to disseminate the survey to their associations. It also reached out to audit companies listed in Brunei by personally contacting the firms and requesting approval to conduct the research survey. This paper addresses the research objectives by employing SPSS software and performing univariate and multivariate analyses to examine the relationship between variables.

RESULTS

This paper initially disseminated the questionnaires to eleven various audit firms. Unfortunately, most audit firms in Brunei could not participate in this survey due to the company policies and are presently in the midst of audit peak seasons. Hence, this paper could only gather 36 responses totaling 90% of the anticipated target respondents.

Most respondents for this study are 83.3% female, while males 16.7% out of the 36 participants. Besides, 83.3% of the participants fall under the age range of 21 to 30 years old. As for the experience levels, those with less than one year of experience dominated the survey with 63.9%. Moreover, out of the entire respondents, audit juniors with 36.1% represented the majority of respondents, and 55.6% of the participants serve the non-big four corporations. Therefore, indicating that auditors with experience of less than a year are more likely to suffer from stress than auditors with higher working experience.

Most participants disagree and are neutral when answering the statements for all the independent variables except for work overload. The answers for work overload are mainly agreed and neutral, which is similar to the responses for the assertion of job performance. As for the feedback for the statements of affective commitment, continuance commitment, and normative commitment, respondents are more likely to incline towards neutral and disagree. Meanwhile, the responses for audit quality are primarily towards rarely and sometimes.

All variables have satisfied the premise of the normality test and further concluded as data within normal distributions. Besides, the values of correlation coefficients of all independent variables are below 0.80. It indicates that all variables are not highly correlated, and there is no event of multicollinearity issues in this model.

The regression equation for affective commitment has demonstrated that for every rise in role stress, work overload, time pressure, and social influence pressure, affective commitment will decrease by 0.396, 0.039, 0.298, and 0.409, respectively, assuming other variables stay consistent. Meanwhile, an increase in work-family conflict will improve the affective commitment by 0.436. As for the significance of the relationship between variables, only role

stress, work-family conflict, and social influence pressure have a significant relationship with affective commitment, whereas the others do not.

Besides, the regression equation for continuance commitment has shown that for every growth in role stress, work overload, work-family conflict, and social influence, continuance commitment will grow by 0.148, 0.017, 0.151, and 0.142, respectively, considering other variables remain stable. Meanwhile, an increase in time pressure will lessen the continuance commitment by 0.048. As for the significance of the relationship among the variables, none of the independent variables have a significant relationship with continuance commitment.

Moreover, the regression equation for normative commitment has revealed that for any gain in role stress, work overload, and social influence, normative commitment will lessen by 0.321, 0.010, and 0.099, respectively, provided other variables stay the same. Meanwhile, an upsurge in time pressure and work-family conflict will boost the normative commitment by 0.104 and 0.308, respectively. As for the significance of the relationship between variables, none of the independent variables have a significant relationship with normative commitment.

Additionally, the regression equation for job performance has suggested that for every growth in role stress, work-family conflict, and social influence pressure, job performance will drop by 0.387, 0.250, and 0.161, respectively, considering other variables remain constant. Meanwhile, an upsurge in work overload and time pressure will increase job performance by 0.073 and 0.188, respectively. As for the significance of the relationship among the variables, only role stress has a significant association with job performance, while the others do not.

Furthermore, the regression equation for audit quality has implied that for every addition in role stress, work-family conflict, and social influence, audit quality will diminish by 0.513, 0.020, and 0.365, respectively, assuming other variables stay unaffected. Meanwhile, an upsurge in work overload and time pressure will improve audit quality by 0.389 and 0.118, respectively. As for the significance of the relationship between variables, only role stress and social influence pressure have a significant relationship with audit quality.

DISCUSSIONS

Based on the regression analysis, role stress and social influence pressure negatively influenced affective commitment. Meanwhile, work-family conflict positively impacts affective commitment, and work overload and time pressure have no notable impacts on affective commitment. Therefore, H1a, H1d, and H1e are accepted, whereas H1b and H1c are rejected. The results implied that auditors who encountered role conflict maintain lower affective commitment. Meanwhile, the social influence pressure amongst auditors may contradict the independence concept of accounting bodies, thus augmenting the conflict level and further reducing the affective commitment. Besides, the auditors might have established coping mechanisms, permitting them to divide work and life responsibilities and would not interfere with the affective commitment. They might also perceive work overload as an inherent characteristic of audit professions. The results further suggested that auditors in Brunei overcome their time pressure by effectively and efficiently completing their audit assignments and procuring adequate time management. Thus, not influencing their sense of belonging to their respective organizations.

Moreover, the regression results also demonstrated that role stress, work overload, time pressure, work-family conflict, and social influence pressure have no significant relationship with continuance commitment, implying that none of the independent variables could influence the continuance commitment. Therefore, H2a, H2b, H2d, and H2e are accepted, whereas H2c is rejected. The results implied that auditors under role stress valued their secure employment, and role stress would not influence their need to remain in the company. It may also suggest that

auditors suffering from work overload still managed to perform their duty within the time allotment and only remained with the company due to the incentive offered or reputation within the company. Besides, this result suggests auditors under time pressure only remained with their companies since currently they have no other job alternatives, and the benefits offered by their organizations are worthwhile despite the excessive time pressure. Moreover, the auditors might reprimand the nature of the work rather than the company itself and only endured their job out of necessity and not desires. Meanwhile, the social influence pressure of auditors would not deliver financial gains for them in any circumstances.

The regression results also exhibited that all work stress involving role stress, work overload, time pressure, work-family conflict, and social influence pressure has no significant relationship with normative commitment. It suggests that none of the work stress could influence the normative commitment of auditors in Brunei. Therefore, H3a and H3c are accepted, whereas H3b, H3d, and H3e are rejected. The results implied that although role stress tarnishes the overall performance, in this case, the auditors might experience less role stress and even if it happened, it is not a hindrance, thus would not reduce the sense of obligation towards the companies. It may also suggest auditors find the work overload manageable and within their capabilities and therefore feel responsible for the assigned work. Likewise, time pressure adjusted the prime priorities of auditors, but it does not influence their determination to stay obligated to their companies. Besides, work-family conflict among auditors does not transpire, or although it exists, it does not deem a burden. The result further implied that social influence pressure does not exploit the perseverance of employees to express a particular responsibility towards the organization; the potential rationale is that the normative commitment is within their self-motivations and might not be directly associated with the organization.

The results further revealed that only role stress could substantially reduce the job performance of auditors. Meanwhile, the other types of work stress, such as work overload, time pressure, work-family conflict, and social influence pressure, produced no notable association with the job performance of auditors. Therefore, H4a, H4b, and H4d are accepted, whereas H4c and H4e are rejected. The results implied that auditors who suffer from role stress have difficulty apprehending their responsibilities and perceive their roles as unbearable and burdensome. It also suggested that auditors could deem work overload as a challenge instead of intimidation; therefore, work overload serves as a motivation factor and thus produce positive influences on job performance. Besides, auditors under time pressure could enhance their audit judgments since time pressure stimulates auditors to concentrate more on relevant details and prevent irrelevant information from affecting their better judgment. Meanwhile, work-family conflict is considerably related to life satisfaction rather than the job performance of auditors. Moreover, auditors who suffer from social influence pressure would not overlook unreliable financial information and thus would not jeopardize their overall job performance.

The regression analysis also showed that only role stress and social influence pressure could substantially diminish the audit report quality; meanwhile, work overload, time pressure, and work-family conflict have no substantial relation to audit quality. Therefore, H5a, H5b, H5c, and H5e are accepted, whereas H5d is rejected. The results implied that when auditors suffer from role stress, they become counterproductive and neglect their responsibilities, which involve performing actions that could impair the audit report quality. It further suggested that social influence pressure influences the determinations of auditors, implying that auditors who confront inappropriate social influence pressures produce judgments that disregard their professionalism and integrity, which then lowers the audit report quality. Regardless, auditors might perceive work overload as a sense of fulfillment, which results in motivating visions that further improve job performance. The results also suggested that time pressure is an intrinsic aspect of the audit fieldwork. Hence, auditors viewed the attainment of time allocation as a crucial benchmark of performance evaluation for their career progression; thus, they would not engage in reduced audit

quality. Moreover, auditors could separate and conduct both job roles and family responsibilities equally, allowing them to balance their career and personal lives.

CONCLUSION

The findings from this study produced several conclusions on the influence of stress on organizational commitment, job performance, and audit quality of auditors in Brunei. Based on the regression analysis, role stress and social influence pressure have significantly and negatively influenced affective commitment. Meanwhile, work-family conflict produced a significant positive association with affective commitment, whereas work overload and time pressure have no significant associations with affective commitment. The findings also concluded that all stress elements such as work overload, role stress, work-family conflict, time pressure, and social influence pressure have no significant relationship with the continuance and normative commitments. In the presumption of the job performance of auditors, only role stress could substantially reduce the job performance of auditors. However, the other types of work stress, such as time pressure, work overload, work-family conflict, and social influence pressure, have no notable association with the job performance of auditors. By referring to the regression results, only role stress and social influence pressure could substantially diminish the audit report quality, and work overload, time pressure, and work-family conflict have no significant relation to audit quality. Therefore, not all independent variables could significantly influence the dependent variables. This study has discovered that role stress substantially affects all the dependents variables, including organizational commitment, job performance, and audit quality of auditors. Therefore, in emphasizing this, it would be beneficial for audit organizations and government officials in Brunei to comprehend the influence of role stress on the viewpoints of auditors to devise effective stress management control for the stress levels suffered by the auditors.

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The impact of the business environment barriers on SMEs growth: the case of Kosovo

Abstract

This research investigates the impact of the business environment barriers on SMEs' employment growth. The SMEs in Kosovo face many barriers to achieve growth, including of internal and external business environment. The literature regarding the effects of the business environment on the growth of SMEs has been reviewed, followed by the empirical analysis and interpretation of the results from the SME survey. In this context, we use the survey sample of the Riinvest Institute, which consists of SMEs in Kosovo. The linear regression models in statistical software SPSS were employed to check the statistical significance of the business environment barriers to SMEs growth. The research finds that the business environment exercise significant effects on SMEs' growth. Thus, according to analysis, some institutional obstacles such as limited access to finance, and corruption exercise a significant negative impact on SMEs' growth. Whilst, at the firm level, the number of employees and sales volume exerts a significant positive impact on the firms' growth.

Keywords: SMEs, business environment, employment, growth

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1. Introduction

Small and medium-sized enterprises (SMEs) play a substantial role for innovation, competitiveness, and job creation (Storey, 1994; Watson, 2006), as they have a potential to grow, implement new technologies and adapt to frequent changes of the business environment (Berry et al., 2001; Almeida, 2007; Banham, 2010). The role of SMEs on job creation and reduction of poverty is recognized worldwide (Muller, et.al, 2014), this role is particularly curtailed in developing economies (Narteh, 2013). The business environment constraints are the main SMEs' growth bottlenecks, especially in the context of transitional economies (Coleman, 2000; Beck et al., 2008). According to Brown et al. (2011), SMEs in countries with the weak rule of law use bank and lease financing far fewer than the capital of informal sources such as friends and family or money lenders. In this context, Beck (2007) argues that small firms seem to finance a larger part of the investment with internal finance and informal sources of finance.

At the European Union (EU), SMEs represent the largest creator of jobs, thereby increasing employment of active labour. SMEs in 2016 accounted for 99.8 % of all enterprises of the non-financial business sector in the EU. Hence, about 23.8 million SMEs were active across the EU and employed about 93 million people that represent 66.6 % of total employment (EC, 2017). In Kosovo, SMEs represent 99.9% of the total number of enterprises and they employ 80.7 % of total employment in the private sector in Kosovo (ECIKS, 2014). The micro and small enterprises have steadily increased in number, due in part to the ongoing formalization of unregistered enterprises (EIB, 2016).

The high unemployment rate in Kosovo has been driven by the poor quality education system coupled with generally few quality employment opportunities, where many of the young workers unable to find employment end up working in low-skilled, low productivity positions, often in the informal sector (EIB, 2016). Several surveys over the past few years suggest that the main obstacles to the growth of Kosovan SMEs relate to financial shortcomings (limited access

to finance, high-interest rates) and institutions (regulations, bureaucracy, and corruption), (EBRD, 2013; Riinvest Institute, 2014, World Bank, 2020, Zylfijaj et al., 2020). The unreliable business environment in Kosovo has led to an unproductive SME sector, incapable to fulfill its role for employment, productivity, and value-added.

This research, from an enterprise perspective, seeks to examine the impact of the business environment on the employment growth of SMEs in Kosovo. In sum, the main objective is to address the research question: what is the impact of the business environment on SMEs growth. The rest of the paper is structure as follows: the literature review in section 2. The data and sampling described in section 3. In section 4, empirical analysis, and finally in section 5, conclusions.

2. Literature review

2.1 SMEs Definition

In the literature, small business is defined differently among authors mainly because of the disagreement on the criteria they used. Small business is defined differently across the industries in regards to sales, employment, and market share. According to Peterson et al. (1986), small business was defined initially by Small Business Administration (SBA) in the US by an Act in 1953 as “A small business concern shall be deemed to be one which is independently owned and operated and which is not dominant in its field of operation”. Only, later on, was added to this definition the criteria of the number of employees (Peterson et al., 1986). Small business is defined today by SBA as an enterprise with no more than 500 employees. On the other hand, in Europe, an SME is considered the one with fewer than 250 employees and an annual turnover of 50 million EUR (European Union, 2015). Table 1 shows the EU definition of SMEs, which determines the criteria for defining enterprises by the European Union: number of employees, annual turnover, and annual balance sheet (European Union, 2015).

Table 1 EU definition of SMEs

Enterprise category	Headcount Annual Work Unit (AWU)	Annual Turnover	Annual Balance Sheet
Medium-sized	<250	≤ € 50 million	≤ € 43 million
Small	<50	≤ € 10 million	≤ € 10 million
Micro	<10	≤ € 2 million	≤ € 2 million

Source: European Union, 2015

2.2 SMEs Growth

In the 1930s was introduced the firm growth, which is also known as the Law of Proportionate Effect. It is also called Gibrat's rule of proportionate growth, which is used to determine firm growth, independent of the firm size (Rosli & Sidek, 2013). Gibrat's law is the most elaborated framework for policymakers on the determinants of firm growth, predicting that firm growth as purely random effect and independent of firm size (Gibrat 1931). Gibrat's law is a proposition of the firm growth process, which indicates the probability of a given proportionate change in size during a specific period is the same for all firms, no matter their size at the beginning of the period (Mansfield, 1962). Earlier studies tend to confirm this law, while most

of the recent research rejects it. More specifically, from the early sixties, many authors have conducted empirical studies to examine the validity of this law. In most studies, Gibrat's law is rejected for small firms (Almus & Nerlinger, 2000; Calvo, 2006; Parker et al., 2010). Rejecting Gibrat's law means that firms that grow at a faster or slower rate, in one time period will grow faster or slower at another time period (Parker et al., 2010).

The term growth is about the firm survival and achievement of the objectives of firms. It is measured in terms of employment, revenue, market share and product development (Pasanen, 2007). Due to the high contribution to the economy through the creation of new jobs, firm growth has gained high interest among different academics. The high growth firms are associated with entrepreneurial orientation, which includes dimensions of innovative, proactive, and risk-taking behavior. Growth is considered an indicator of firm performance and it is associated with the achievement of financial goals. It should be emphasized that firms that achieve high growth may experience a reduction of profitability only in the short run. Firm turnover is the most frequent growth measure which is related to taxation, while the number of employees is another growth measure which has to do with job concerns and its working capacity. SMEs use mostly these growth indicators because of their simplicity and visibility to get from firms (Storey, 1994).

The Institutional Theory

Institutional theories play an important role in organizations, which arise either from external sources, such as state or from the organization itself. Institutionalized rules are classifications, which are built within society and they are taken for granted or are supported by public opinion or laws (Meyer & Rowan, 1977), setting the boundary of behaviour for individuals and organisations (North, 1990). According to Scott and Meyer (1983), institutional environments are characterized by an elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy. This theory emphasizes that one of the primary goals of an organization is having legitimacy. Institutionalized organizations attempt to integrate their structural arrangements with the frameworks of larger firms to have support and legitimacy (Bolon, 1998). Institutional theory is criticized as institutions change over time, which have effects that are specific. Thus, institutions not only serve to drive change and shape the nature of change, but also they change themselves over a period of time (Dacin et al., 2002).

According to Aidis (2005), institutional theory has been used to explain poor economic growth in transition countries. Based on their model, formal and informal rules are related to the role of the state, where formal ones include tax policies and business legislation, while informal rules consist of different practices, such as unofficial acceptable government culture, including various forms of corruption and failure of formal rule development. More specifically, forms of corruption include implementing business regulations and tax inspections that represent obtaining bribes, whereas the failure of formal rule development comprises of late payments by clients, as well as mafia and racketeering activities

Human Capital

The human capital is considered a fundamental element for the company's success because of employees' qualifications and their loyalty to the firm. When measuring the contribution of labor to output, it can be concluded that there is a greater productive capacity of employees compared to other forms of wealth taken together. According to Schultz's (1961) view, laborers are capitalists because the acquisition of "knowledge and skill are in great part the product of investment and, combined with other human investment, predominantly account for the productive superiority of technically advanced countries". Fundamentally, "human capital is a concept based on the belief that the role of workers in production is similar to the role of

machinery and other forces of production” (Johnson, 1995). Human capital is the knowledge retained throughout life, which is applicable in the production of goods, services, and ideas. Put in a more positive light, Schultz argues the importance of investing in people in order to enhance their welfare (Oliver, 2004).

It should be emphasized that the human capital theory has been reviewed from 1776 until 1960, when different authors have established theoretical and empirical foundations. Investing in people is crucial as economic benefits are obtained from them. There are different types of human capital investment, such as health and nutrition, but lately, empirical analysis shows the importance of education as a key human capital investment (Widarni and Bawono, 2021).

2.3 Business environment barriers

The business environment constraints such as high-interest rates, high tax, and import duties are among the most significant factors that increase the cost of doing business in developing countries (Erastrus et al. 2014). Estrin et al. (2013) argue that the relation between growth aspiring enterprises and institutions is complex: they benefit simultaneously from the adequate government in the sense of regulation, but are constrained by corruption, therefore, SMEs would have a tough period when they face unfavorable tax system, discriminatory regulations and complicated laws (Zhou and de Wit, 2009, Mallett et al. 2019). The institutional features including legal structure, less regulation of credit, labour, and business encourage firms (Bartlet and Bukvic, 2001; Nyström, 2008; Hartog et al., 2010). Also, the quality of institutions exercises a substantial influence on firms’ growth (Autio and Fu, 2014, Chang, 2022). Although SMEs play a vital role in transition economies, they are frequently, obstructed and challenged by legal, regulatory, and policy constraints (Djankov et al., 2008; Levine, 2008; Smallbone and Welter, 2009, Nikoloski, 2017).

Finance is the most important resource for the growth of the firm. In the theory of capital structure, external finance consists of funds that firms obtain from outside of the firm. It is contrasted to internal financing which consists mainly of profits retained by the firm for investment (Modigliani and Miller, 1958). Myers and Majluf (1984) elaborated firms financing needs in a linear order; including that firms at first within their limited capacity prefer to use internal funds, followed by short and long external debt from various financial sources, and finally external equity. The pecking order theory suggests that in business environments with asymmetric information or weak credit system firms prefer to use more internal funds. Firms operating in a competitive and developed business environment tend to use more external finance to achieve growth.

Some of the barriers encountered by SMEs to access finance are the following: perceived high risks by commercial banks’ lending to small firms, lack of collateral, reputational effects, and the existence of information asymmetries between finance providers and borrowers (Quaye et al, 2014). Insufficient availability of external finance can restrict the firm’s growth opportunities (Hyz, 2011, Bui et al. 2021). The stability and development of the financial sector support firms to allocate resources better and consequently, grow faster (Claessens and Laeven, 2003; Rajan and Zingales, 2003, Butler and Cornaggia, 2009). The competitive business environment, of which access to finance is an important component facilitates the growth of firms which is essential for the development process (Ayagari et al., 2007; De la Torre et al., 2008; Barth et al., 2011). Therefore, access to finance affects the implementation of growth opportunities (Fadahunsi, 2012).

Depending on the context of financial development, firms use different sources of internal and external finance to achieve growth. In this context, according to the World Bank

(2013), firms in Kosovo use various sources of finance, however, the most important source for investment is an internal source of financing. Hence, firms use up to 70% of internal sources for investment, then the most widely used of external sources of financing is bank financing 20%, followed by equity or sale of stock for investment (8%), and other sources of financing (2%), (IFC, 2013). To get a more complete picture of the SME finance landscape, systematic efforts needed to estimate the number of SMEs in the informal sector as well as to examine their access to financial services (IFC, 2013). In the case of Kosovo, all banks complained about poor and inaccurate financial record-keeping by SMEs, reporting that many businesses keep separate sets of books for bank and tax purposes, do not adhere to business plans, and misappropriate funds (EIB, 2016).

The high tax rates are inappropriate for the reasons that reduce the investment capacity of businesses and potentially employment, as businesses are investors better than the government. Due to the indications that small businesses are more constrained than large ones in terms of access to finance, some countries support small businesses with favorable tax rates to reduce their losses caused by the challenges to access finance. For example, for decades, Canada has provided a special tax regime for small businesses, however, this has not justified economic effects since by this exemption the government has discouraged businesses to grow aiming to reduce tax obligations. Besides that, this has influenced the low level of participation of Canadian businesses in international markets (Chen et al., 2002).

According to Atawodi and Ojeka (2012), the high tax rates and the complex filing of procedures are the most crucial factors causing non-compliance with SMEs. Moreover, high tax rates reduce firms' internal sources of finance, this, in turn, encourages firms to avoid taxes and conduct their business in the informal economy (Ishengoma and Kappel, 2008). The tax administration must provide an appropriate tax policy by ensuring that all taxpayers meet their tax filing and paying requirements, and must balance its educational and assistance role with its enforcement role (Baurer, 2005).

The process of economic transitions entailed a massive reallocation of resources across sectors of the economy, leading to a dramatic increase in labour market risk for workers; to ameliorate the effects of such increased risk, policymakers faced the challenge of designing new labour market institutions (Boeri et al. 2008, Marelli & Signorelli, 2015). The ideologies of employees of the state-owned firms have been replaced by those of owners, employers, entrepreneurs, wage earners of private firms, or the self-employed. The previous universal and mandatory system of job security and employment stability has been replaced by a more liberal institutional framework for firings and hiring, and more flexible labour relations overall (Kuddo, 2009).

The SMEs often face shortcomings in providing minimum wages, social protection, and job security. Formal work contracts are less common than in enterprises of larger size and infringements of labor law and basic occupational safety and health regulations are frequent (ILO, 2006). Atkinson et al. (2014) found that enterprises operating in developed institutional contexts apply formal and informal forms of employment, though in any case minimum labor regulation is practiced. However, the context of developed economies is often radically different from that of developing economies, which are often characterized by weak law enforcement, a large informal sector, and informal credit and insurance networks (Boeri et al., 2008).

Corruption among others contributes to the low level of productivity, high rate of criminality, informal economy, and unemployment. Kanu (2015) argues that corruption is negatively associated with growth, productivity, and employment. In a corrupted institutional environment businessman want to compensate for the money paid out as bribery, productivity is lowered, prices become high, customer loyalty and demand falls and then as a result growth of firms is affected negatively (Nkonoki, 2010). The corruption dimension of institutional quality

is likely to have a significant impact on entrepreneurship (McMillan and Woodruff, 2002). Furthermore, corruption is a reflection of all institutional weaknesses in the economy, as it results from weak property rights, arbitrariness in state administration, weak judicial system, excessive and nontransparent regulatory frameworks (Treisman, 2007; Estrin, 2010, Fisman et al. 2021). Therefore, corruption has been a big obstacle to business expansion in transition economies (McMillan and Woodruff, 2002; Aidis and Mickiewicz, 2006; Aidt, 2009, Nam et al. 2020). According to Fisman and Svensson (2007) bribery negatively correlates with firm growth, more specifically; a one-percentage point increase in the bribery rate is associated with the reduction in firm growth of three percentage points. The European Commission (2015) highlights the problem of corruption in privatization, customs, tax administration, health services, and the education sector in Kosovo.

The reforms of the legal framework cannot serve its purpose if it does not pay adequate attention to the issues of enforcement, compliance, and effectiveness (Shihata, 1996). Many countries in Eastern Europe are plagued by obstacles, such as judicial corruption, the abusive use of procedural mechanisms to delay the process, the lack of access to information, and unreliable information systems (Elena et al., 2004). Law enforcement is not well functioning in many developing countries, where courts in charge characterize by limited expertise and long delays (Djankov et al., 2008). The lack of court efficiency hinders the business environment; therefore, SMEs rarely use contracts of business deals with counterpart partners. Consequently, the lack of willingness to use contracts hinders the growth of SMEs, while increasing the informal economy. An SME friendly legal, regulatory, and administrative environment means that contracts are easily enforced (OECD, 2004), which is important in facilitating firm growth (Nyarku and Oduro, 2017).

While SMEs create many jobs, they also close many jobs due to their failure: this process known as Creative Destruction is the essential fact about capitalism which as an evolutionary process led by firms 'competitiveness incessantly destroy old one and create a new one (Schumpeter, 1942). Besides the creation of an appropriate business environment, which supports new firm entries and growth, it is also important to have in place appropriate bankruptcy procedures. Lim and Hahn (2003) argue that appropriate bankruptcy proceedings contribute to productivity growth by allowing inefficient firms to exit, encouraging new entries, and stimulating surviving firms to become more efficient. Business entry and exit are natural processes that are inherent to European economies; actually, 50% of enterprises do not survive the first five years of their life (European Commission, 2017). According to Halliday and Carruthers (2007), countries seeking to encourage employment may achieve this by adjusting bankruptcy laws to reduce barriers and costs associated with bankruptcy.

3. Sampling and data

To examine the impact of the business environment in SMEs' employment, the assessment was undertaken by surveying the firms in Kosovo. The survey was carried out by the Riinvest Institute using a sample of 1,000 SMEs in different sectors. The summary descriptive statistics concerning the size of the firms shown in Table 2.

Table 2 Size categories in the sample of SMEs

Size categories	SMEs	
	Number of businesses	Share
1 - 9 persons employed	856	85.60%

10 - 49 persons employed	123	12.30%
50 - 249 persons employed	21	2.10%
Total	1,000	100%

From Table 2 can be noticed that the majority of businesses (85.6%) in the sample represent micro sized enterprises, small sized enterprises represented with 12.3%, while the rest of the sample consists of medium sized enterprises 2.1%.

The average number of employees in the sample is shown in Table 3. In addition, the table presents the analysis in the growth of businesses by the number of employees during the last four years as well as a forecast of employment growth four years in the future.

Table 3 average number of employees and the growth of businesses by the number of employees

Sector	4 years ago	Now		4 years from now (forecast)	
	Av. Number	Number	Yearly increase	Av. Number	Increase/decrease
SME	5.81	6.77	3.9%	8.23	5.0%

Table 3 presents the average number of employees in the sample which is 6.77. The sector had an average growth in the period of four years by 3.9% yearly. Whilst, the employment for four years in the future is expected to increase by 5.0% yearly.

4. Empirical analysis

In this empirical analysis, we expect firms' employment growth if the business environment barriers are scale down and vice versa. The effect of the business environment barriers on the firms' employment growth will be estimated by using econometric modeling, such as linear regression model, which predict the future values of the dependent variable Y, based on known or expected future values of the explanatory variables X (Gujarati, 2004).

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots + \beta_k X_k + u$$

The employment growth of firms represent dependent variable. Independent variables of the business environment barriers are measure according to perceptions of business' owners/managers as a barrier for doing business. In this context, the Likert scale was employed where respondents value the institutional barriers from 1 meaning that a given variable is not perceived as an obstacle, to 5 meaning that variable is perceived as a major obstacle for doing business. In addition, common control variables related to the firms' characteristics have been introduced in the model. Therefore, we control for gender of the owner (male = 1, and female = 0) and age of the firm's owner. The total sales are introduce as ordinal in seven categories that present firms' sales per year, ranging from: 1) €0 - €10,000; 2) €10,000 - €50,000; 3) €50,000 - €100,000; 4) €100,000 - €200,000; 5) €200,000 - €500,000; 6) €500,000 - €1,000,000; 7) €1,000,000 and more. The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables (Table 4).

Table 4 OLS-linear regression for the employment of the firms and business environment obstacles

Dependent variable: employment	B	S.E.	Beta	t	Sig.
Limited access to finance	-.032	.016	-.076	-1.989	.047**
High cost of finance	.004	.024	.007	.197	.840
Unavailability of subsidies	.020	.021	.036	.945	.345
Taxation	-.003	.017	-.006	-.159	.873
High custom tariffs	.002	.017	.005	.122	.903
Labor and other business regulation	-.015	.022	-.108	-.789	.430
Dysfunctional Judiciary System	.028	.021	.058	1.342	.180
Corruption	-.054	.085	3.960	2.507	.012**
Contract violations	.008	.016	.017	.482	.630
Gender	-.092	.081	-.039	-1.139	.255
Age	-.008	.002	-.119	-3.512	.000***
Number of employees	.015	.002	.249	6.320	.000***
Total sales	.048	.019	.102	2.567	.010**
Observations					812
Correctly classified					0.75
R ²					0.15

Note: Standard errors and p-values for coefficients respectively marginal effects are in parenthesis. ***Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

As noted in Table 4, the limited access to finance is a significant predictor ($p=.047$), the predicted value indicates that when perception on limited access to finance increase by one unit the forecasted employment in the firms is likely to decrease by 3.2 %, whereas the odds ratio predict: $\exp(-.032)-1=3.1\%$. Corruption was a significant predictor in the model ($p=.047$), indicating that when the perception of businesses on corruption increase by one unit, the employees of the firms are likely to decline by 5.4 %. The odds ratio: $\exp(-0.054)-1=-5.2\%$.

As regard to the firms' characteristics, the age of the owner of the firm is a significant variable. When the owner of the firm gets one year older the employment is likely to decrease by 0.8%, the odds ratio $\exp(-.008)-1=0.8\%$. The number of employees in the firm is a significant predictor when the number of employees in the firm is increased by one, predicts that employment will further increase by 1.5%, the odds ratio: $\exp(0.015)-1=1.5\%$. Total sales were a significant predictor in the model ($p=.000$). The predicted value indicates that when total sales increase by one above mentioned category, the employees of the firms are likely to grow by 4.8 %. The odd ratio $(0.452)-1=4.9\%$.

R-squared is a statistical measure that indicates the explanatory power of the independent variables in a regression model. The explanatory power of the variables analyzed, as indicated by R-squared determine 15 % of variation in the dependent variable.

5. Conclusions

From the theoretical baseline, a number of barriers of the business environment affect SMEs' growth. The effects of the business environment constraints on the firms' employment growth were estimated by using econometric modeling with multiple linear regressions. The results indicate that limited access to finance exercise significant negative impact in the growth of SMEs. In terms of institutional barriers, corruption significant negative impact on the growth of SMEs. On the other hand, as regard to firm characteristics the number of employees and the amount of sales exert significant positive impact to the firms' growth.

The consistency of institutions in fighting corruption would make a more reliable business environment, and supportive for SMEs. To encourage the growth of SMEs, institutions should develop the financial sector. In this context, the guarantee credit schemes shall be supported, as such schemes facilitate SMEs access to finance. Special attention shall be given to increase youth in the business. Hence, grants and soft loans shall offer to this category of entrepreneurs, who represent the great potential for job creation and value added. Further, specific policies related to taxes, grants, and coaching shall be implemented to boost SMEs growth.

The results of the research given here open up avenues for further research. Although we included many independent variables in the model, other components of the business environment should be included in future studies. With regard to the reliability of data and the accuracy of research outcomes, future research may use mixed methods in its research approach. The combination of quantitative and qualitative research approaches may be appropriate to gain in-depth information on how respondents perceive business-environment obstacles.

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The role of technology during the pandemic – (case study workers of the health and education sector in Kosovo)

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Abstract

Purpose: The importance of technology in our lives is becoming greater every day, thus turning into something necessary for normal functioning in every activity. The pandemic and social distancing have affected all spheres of society, especially education and health. When everything stopped working properly, the entire burden fell on learning development and medical check-ups. The purpose of this work is to analyze how much information systems have been used by these two sectors, how much they think it has been effective and whether age has influenced the access of these used systems as a limitation.

Design/methodology/approach: This paper uses data extracted from a questionnaire which was addressed to 30 respondents from the health and education sector. The extracted data was analyzed through the software application for statistical analysis SPSS (IBM Analytics) doing so comparisons between sectors and highlighting the role of technology during the pandemic in the aforementioned sectors..

Findings: From the research, we have seen that the use of information systems during the pandemic has been very effective, making many activities easier to carry out, especially in the education and health sectors. We have also seen that older employees have had hardly use technology as a tool to perform their tasks.

Limitations/Implications of the research: The limitation of this paper is related to the fact that the questionnaire was distributed during the pandemic and that most of the older staff were not present in the workplace. I consider that after the end of the pandemic and the total return to normality, the importance and role of information systems will be seen even better.

Originality/Value: This study will be of practical importance to see how challenges are overcome through technology, when everything else is limited and beyond human control.

Keywords: Information systems, Health, Education

Paper Type- Research Paper

Introduction

An information system is an integrated set of components for collecting, storing and processing data and for providing information, knowledge and digital products. Business firms and other organizations rely on information systems to conduct and manage their operations, interact with their customers and suppliers, and compete in the marketplace. Information systems are used to manage inter-organizational supply chains and electronic markets. For example, corporations use information systems to process financial accounts, manage their human resources, and reach their potential customers with online promotions. Many large companies are built entirely around information systems such as eBay, Amazon, etc.

Recently, the information system plays a key role in the normal functioning of the life of companies and individuals in general. All companies in the public sector as well as in the private sector attach great importance to technology.

The Covid-19 pandemic has changed our world forever. Many people are dying and many businesses are barely surviving. This is a time when all different researchers from different fields are struggling to make long-term solutions. There is also great hope for researchers of information systems, to contribute to something that can serve us in the future crises that we may have. In the most critical days for businesses, schools, the banking and health sectors, thanks to information systems, a lot of work has been carried out, thus facilitating communication with students, suppliers, customers and patients. Work in the digital information infrastructure would also be welcome for crisis management and information modeling approaches to help resolve or mitigate pandemics, such as COVID-19. The pandemic has generated a rapid demand for efforts to use innovative technologies to cope with the damage caused by COVID-19 in our lives (O'Leary, 2020). Innovation and technology together constitute a factor that contributes to the development and ability to cope with many problems that come unexpectedly, such as the Covid-19 pandemic. Throughout this time, we have also seen the importance of the computer system and information processing, where we can say that the importance of the information system in our lives has often been neglected. While everything was closed and most businesses worked with minimal staff or were closed altogether, through information systems and various applications work from home, learning from home has been made possible as a key issue for almost normal operation. The pandemic has implications for the design, development and use of information systems and technologies (Sein, 2020).

Literature review

The literature that will be cited below will clearly express the role of the information system in general with special emphasis in the time of the Covid-19 pandemic as well as the use of information systems in the health and education sector.

According to Sein, (2020) The pandemic has not only raised opportunities to advance technology-based solutions, but also provided a rare opportunity to study technology research and practice, including information management, work practices and modeling in the use of technologies. The rapid shift to telehealth, telework and online education in response to the threat of the coronavirus is a reminder that digital technology brings

many benefits and can play an essential role in managing and reducing the risks posed by lockdown during the pandemic and even after the pandemic (Richter, 2020).

Based on Mingis(2020) many IT professionals are working in different ways to help fight the pandemic, including developing products to fight the virus, tracking and predicting its spread,

and protecting hospitals from cyber attacks. Information systems and technology researchers must contribute to this global effort to combat COVID-19 and future pandemics (Ågerfalk, Conboy, & Myers, 2020) by leveraging their prior experience and knowledge in responding to crises, decision-making, remote work, virtual team management, analyzing large data sets, etc. Right now there is a dearth of research contributions in the fields of information systems to help fight COVID-19.

Rai (2020) also identified several opportunities for information systems research to contribute to building resilience to pandemics and extreme events including (i) redesigning the public health system from reactive to proactive through the use of real-time surveillance systems and contact tracing tools to stop transmission,

(ii) transforming organizations through increasing crisis-driven resilience and reducing crisis-revealed vulnerability, and (iii) empowering individuals and communities through adapting to, coping with, and addressing the infodemic.

Dwivedi et al. (2020) presents an assessment of the critical challenges of COVID-19 through an information systems and technology perspective and provides insights for research and recommendations that study the impact of COVID-19 on information management research and practice in transforming education, work and life.

Public health systems have embraced health informatics and information technology as a potentially transformative tool to improve real-time surveillance systems, communication and information sharing between different agencies. However, there is a need for more robust technology to improve adequate epidemic forecasting, data sharing and effective communication. The purpose of this review was to examine the use of IT tools and information technology and its impact on public health delivery. (Williams, Oke, Zachary, 2019)

IT will have an influential role in the recovery phase of COVID-19. Provision of IT infrastructure and financial support by governments should be considered more in facilitating IT capabilities. Based on the findings for this area there has been no effort on the pre-crisis phases of emergency management, including mitigation/prevention and preparedness. In contrast, many advantages of IT were studied and reported in the response phase. However, after the outbreak of COVID-19, studies on the recovery phase must be completed. According to Asadzadeh, et al (2020) There are several information technology approaches that have been used to respond to the management of Covid-19. Those approaches include Bioinformatics systems that help in drug discovery with different methods, Artificial intelligence that helps to improve the speed of CT diagnosis for each case, To protect employees and provide safety to the patient, Telemedicine that includes telecommunications and online education, as well as many other approaches such as the decision support system, the hospital infection control system, which play key roles in normal functioning, especially during the pandemic.

As in the health sector, IT systems have also helped the field of education during the pandemic. The Covid-19 pandemic raging across the globe has caused large-scale institutional and behavioral 'shock effects' in various areas of human activity, including education. The impact on students is unprecedented: as of April 9, 2020, there are over 1,500,000,000 students worldwide from primary to high school who cannot attend school (UNESCO 2020). First of all, after we encountered the pandemic, the push towards online learning has been inevitable, thus making information systems play an essential role in the entire journey of students towards achieving the common goal. During the Covid-19 pandemic, educational institutions have been trying to find ways to ensure that students can continue their studies despite the crisis and social distancing. This has created an unprecedented push for online learning.

The engagement of teachers and students in the development, implementation, and use of education technology can influence how successfully technology can support meaningful teaching and learning (Bates and Sangrà 2011; Howland et al. 2018).

Not everyone has believed in the functioning of education in the context of a pandemic, but over time it has been seen that the goal has been achieved to some extent.

According to (Birch, Chiappetta & Artyushina, 2020) In the Covid-19 pandemic, the 'broken education' hypothesis provides an opportunity for high-tech businesses to sell unproven solutions, which sometimes have nothing to do with the right philosophies of teaching and learning. Some education technology companies now generously offer their services and products for free in the prospect of further sales. As these tools become ingrained in teaching practice, it becomes difficult to turn back. Additionally, and more worryingly, some of these tools use login requests and tracking cookies to capture and collect data that can be monetized in the future. This is a growing business model in techno-scientific capitalism, where the development of useful technological products and services is less important.

Methodology

The paper was prepared by analyzing the data collected through the questionnaire instrument which contains 20 questions. While the research was done during the Covid-19 pandemic, at a time when not everything worked normally, including the distribution of the questionnaire and reaching the right people has been difficult. Since the main focus has been to look at the role of the information system in the time of the pandemic, with special emphasis on the health and education sectors, in these two sectors, in this situation, work has been done with minimal staff, with shortened hours, which have made work difficult. . After the challenges encountered along the way, 30 respondents answered the questionnaire, 18 from the education sector and 12 from the health sector of different ages and genders. The questionnaire is formulated in such a way as to initially classify the employees of the health and education sectors.

The results of the questionnaire were analyzed in order to confirm or reject the hypotheses raised in this research. Two hypotheses have been raised, which after data analysis will be confirmed or rejected:

H1: Online services affect the success of the process

H2: Age has an impact on access to information systems

Results

H1: Online services affect the success of the process

In order to prove or reject the hypothesis: "H1: Online services affect the success of the process" the Crosstabs option in SPSS is used, analyzing the variables: Success of the process and the question: "Have you used the information systems?"

Table 1: Cross-tabulation between the success of the process and the use of information systems

Case Processing Summary

	Cases					
	Valid		Missing		Total	
Success of the process and the use of information systems	30%	100%	0%	0%	30%	100.0%

The use of information systems		Success of the process		Total
The use of information systems	Yes	15	7	22
	No	0	8	8
Total		15	15	30

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.909	1	.001		
Continuity Correction ^b	8.352	1	.004		
Likelihood Ratio	14.067	1	.000		
Fisher's Exact Test				.002	.001
Linear-by-Linear Association	10.545	1	.001		
N of Valid Cases	30				

To evaluate the dependence/independence between the variable Success of the process and the use of information systems, the Pearson Chi-Square statistical test was used, where the P value determines whether the null hypothesis will be accepted or rejected, therefore if $P < 0.05$ the null hypothesis is rejected and the alternative hypothesis is accepted in this case H1. In the present case, $P=0.001$ which is less than 0.05, therefore it follows that the null hypothesis that asserts that the two variables are independent of each other is rejected and the alternative hypothesis is accepted. In other words, there is a significant statistical relationship between the level of success of the process and the use of IT systems.

H2: Age has an impact on access to information systems

Case Processing Summary			
	Cases		
	Valid	Missing	Total

	N	Percent	N	Percent	N	Percent
Age * Access problem	30	96.8%	1	3.2%	31	100.0%

In order to prove or reject the hypothesis: H2: Age has an impact on access to information systems, the Crosstabs option in SPSS was also used, analyzing and interrelating the variables: Age of respondents and the question: "Have you encountered problems in using information systems?"

Table 2: Cross-tabulation of the importance of employee training

Crosstabulation				
Count				
		Access problem		Total
		Po	Jo	
Age	18-25	0	6	6
	26-50	3	9	12
	50-65	10	2	12
Total		13	17	30

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.050	2	.001
Likelihood Ratio	16.744	2	.000
Linear-by-Linear Association	12.832	1	.000
N of Valid Cases	30		

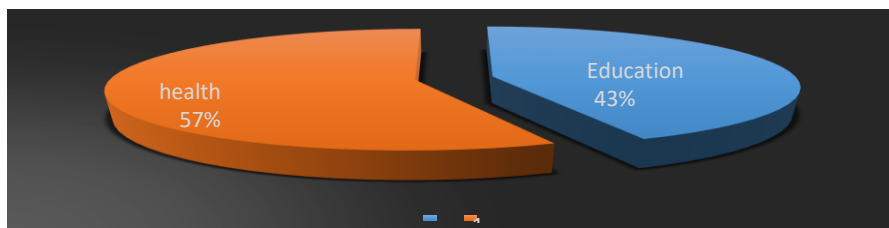
In the present case, $P=0.001$ which is less than 0.05, therefore it follows that the null hypothesis that asserts that the two variables are independent of each other is rejected and the alternative hypothesis is accepted. So there is a significant statistical relationship between the age of the respondents and the problems they encountered in accessing the information systems.

Comparison of results between the health sector and the education sector

Seeing that our focus is on the health and education sectors, based on the responses of the respondents, we can also make some comparisons between these sectors.

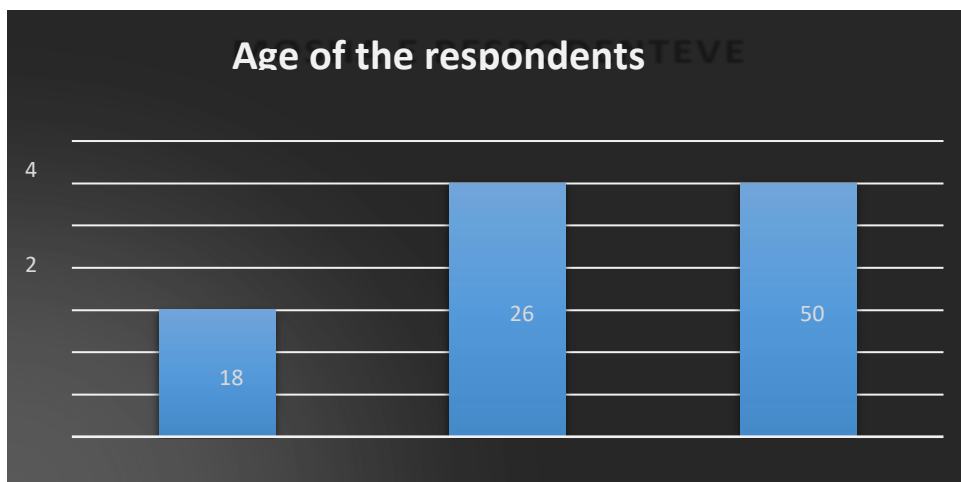
The issues for which the comparisons were made have to do with what sector they work in, how old they are, do they use IT systems.

Diagram 1: Graphic representation of the division of sectors



From the diagram above, we see that of the 30 respondents who answered the questionnaire, 57% of them belong to the health sector and 43% belong to the education sector.

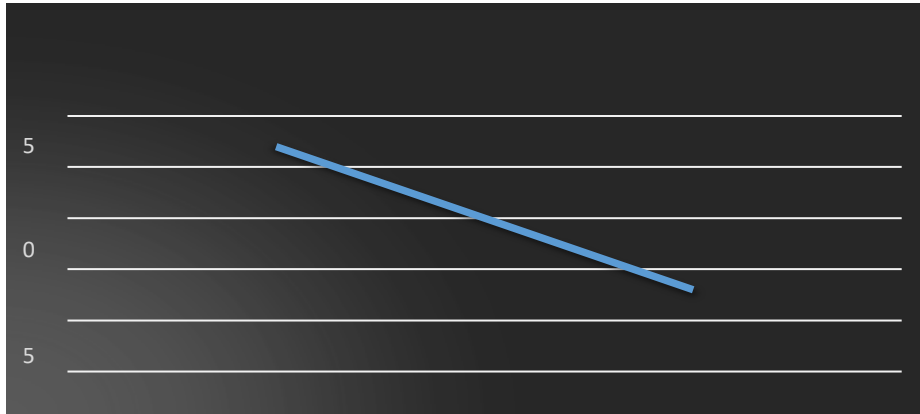
Diagram 2: Graphic representation of the age of the respondents



The age of the respondents plays an important role in our research, as it directly affects the individual ability to access IT systems. And here we see that 40% of the respondents are between the

ages of 26-50 and also another 40% between the ages of 50-65. , leaving a small percentage of 20% for employees aged 18-25.

Diagram 3: How much these sectors use IT systems



Out of 30 respondents, 22 of them or 73% stated that they use IT systems, while 8 or 27% indicated that they do not use IT systems.

Conclusions and recommendations

Through this paper, where the main goal was to see how much information systems have been used by the education and health sector, how much they think it has been effective and whether age has influenced the access of these used systems, we reach some conclusions which are powered by further data analysis.

Based on the results of the work, it appears that the role of information systems has had a vital role during the pandemic and has been effective in achieving the goals of users, clearly showing that both sectors have used it and worked through the systems to reach fulfilling and fulfilling their goals. Another indicator, but no less important in this regard, was the age of the respondents, which is closely related to the access to information systems, and which has shown a great limiting connection to the use of information systems

From the above conclusions also come the recommendations to: value more the use of information systems and the role they have in every field, not only during the pandemic but always, because information systems help us on a daily basis in every type of activity. Also since we are living in a modern time, in a time of technology, training or enabling older people to use technology leaves a lot to be desired, because it is a vast oasis of information that you need at any age.

The limitation of this paper is related to the fact that the questionnaire was distributed during the pandemic and that most of the older staff were not present at the workplace. I consider that after the end of the pandemic and the total return to normality, the importance and role of the infor-

mation system will be seen even better. Technology is the future, the use of technology and management with it leads to the collection of as much information as possible, which affects the success of the individual in particular and the company as a whole.

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INDIVIDUAL BEHAVIOUR AND TEAM MANAGEMENT

Case: Commercial Bank in Kosovo

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Abstract. The purpose of this paperwork is to analyse Individual and Team Behaviour within the various environment and particularly effect within organisation respectfully at the Commercial Bank in Kosovo. This paperwork will present generally analysis of Individual and Team Behaviour and the effect towards firm strategy.

This paperwork is compiled based on research and credibility of material, which has been approached in different kinds of sources: primary, secondary and tertiary. Therefore, in addition to wide information/sources needed, also there has been interviews and discussion with Commercial Bank officers in Kosovo, Central Bank of Kosovo and Kosovo Chamber of Commerce.

By the end of this paperwork, the reader will be able to Understand Individual Behaviour and the concept of teamwork and team management its impact in any organisation and especially at Commercial Bank in Kosovo.

Keywords: Individual Behaviour, Team Behaviour & Management.

JEL classification codes: C91, C92, M12.

Paper type: Research article

9 Introduction

Commercial Bank in Kosovo (hereinafter CBK) are licensed from Central Bank of Kosovo. CBK made well business however, for past two decades are in growth and is known as the stable CBK within the Kosova Market. In the year 2005 CBK staff was well prepared, and made profit and increased its deposits with the high intensity, and CBK achieved the growth of deposits while the rest of the neighbouring countries commercial banks were declining. Today are ten commercial banks that operating in Kosova.

This paperwork consists of two parts: The first part present Individual Behaviour on the academically manner when one attempts on any organisational environment and in CBK too. The second part deals with theoretical team management and CBK team and its effect in the firm. These two parts are main strength of CBK that drives business into successes and to become in the nearest future the leading bank compare to other commercial banks. Banking sector is in need for strong staff personality and great team behaviour, in order to achieve bank successes within a competitive market that it exists now in Kosova.

Author (2006) states: "By our self we are all individuals and our behaviour is based upon our interest/needs. However in team we are again individuals but influenced by others individuals, therefore in team we behave accordingly to the team interest/needs too - whereas no one can say that there is a right or wrong".

10 Objectives of this Paper Work

10.1 The Research Question

Our banking sector is facing the lack of bank officers, one can rise questions on why this happening is and what about the impact of the individual behaviour and team management, how individual with different background can influence the team performance? This paperwork will try to answer these questions and furthermore will bring in surface the must-do point to overcome this situation.

11 Methodology

This paperwork focuses on elaborating how Commercial bank in Kosovo that select individuals based on their background in order to build a great team. The analysis used data to testify the research question. The independent variable of this paper is the individual behaviour impact on the main dependable variable team, team management. In order to achieve the full clarification,

this paper work focuses on primary, secondary and tertiary research that mainly involves individual behaviour at the banking sector team. The paper work intentionally brings to the surface the importance on the individual behaviour towards the team results. The main data gathered through the internet and UBT college library accordingly with the research objectives/question. During the interviews and discussion in summer 2022 with Commercial Bank Officers in Kosovo, to evaluate the background and demographic data of individual with focus at their result achieved as a team.

12 The Art of Literature

12.1 Individual Behaviour

In order to understand clearly the individual behaviour, one should know the elaboration made by Moorhead and Griffin (2004), pointed out: "Think about human behaviour as a jigsaw puzzle. Puzzles consist of various pieces that fit together in a precise ways. And, of course, no two puzzles are exactly alike. They have a different numbers of pieces, the pieces are of different sizes and shapes, and they fit together in different ways. The same can be said of human behaviour and its determinants" (p.85). In order to know more about individual behaviour one should be able to understand individual differences and individual process of perception.

12.2 Individual Differences

Understanding individual differences one should simply know; how different is YOU (reader) from the rest of others (individuals), this also tell us that comparison/matching is all what we do when we define the differences.

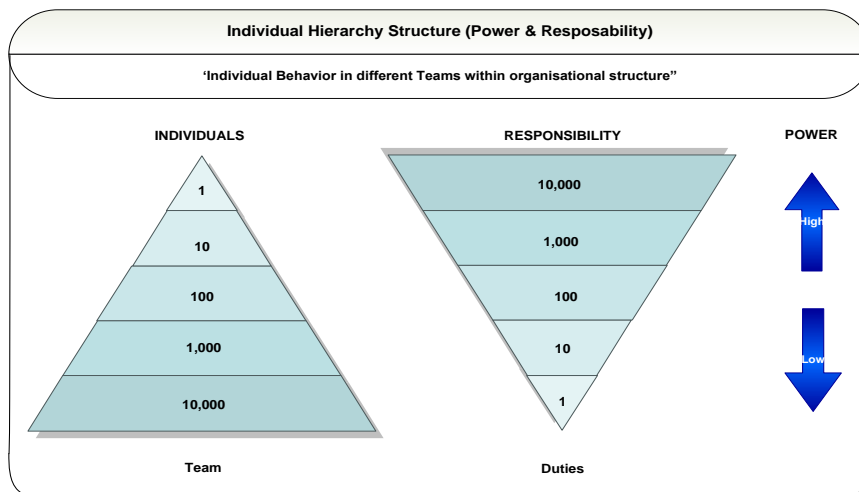
There are different criteria, which differentiate between individuals such us: types/traits of any individual, then two genders, also ability which various between all individuals that may have capacity to perform the various tasks in a job (even though they may be similar one-to-another there is always a difference). Physique power, which is necessary in some professions even in CBK (example: security and cash in transit officer should be well fit), development aspects is a necessary to every individual. Motivation issue which is a key issue to rich the targets that involve individuals and team, attitudes which are very reflected to the background of the root family and the place that the individual growth up. Perception is the part where we cannot ignore were whether we like it or not since we are unique; clearly one cane state there is only one Ibrahim Rugova and one Tony Blair, however there may be other holding same name and surname but they are different individuals since every individual is unique. Social and cultural aspects are the main issue to the extend since effects the main individual behaviour and make the judgment based on his/her knowledge although changing the culture of organisation which effect directly to individuals it's not 'impossible mission' but one has to be aware that this will take a long time.

Everyone has a range of comfort within their life, which they can feel steady and safe. Nevertheless, the stress is an issue were in some cases may activate individuals/people whereas for others may have an immobilising action. Although stressing individuals to achieve the target dose

not present great management, the targets may achieved in that matter but is not showing a long life to any organisation with this individuals and management that are within organisation. Since, one knows that working on the stress the individuals will not last long (or let make the question – How long can an individual work under the stress?- to whom no one has a correct answer). Individual stress is the very nature of human stress is complex and socially and culturally bound it is interesting to reflect on its developments.

In order to gain a clear picture Griffin and Moorhead (2004) stated that: “The personality is relatively stable set of psychological attributes that distinguish one person from another” (p.91) which defines the differences among the individuals. However, individual behaviour is always depended on which level of hierarchy, it’s position within the organisation that he/she is working.

Charts 1 Individual Hierarchy Structure



Source: Author (2006)

If we see a Chart 1) above one can see that if individual belong to the bottom hierarchy, its responsible is low and its duty is low too or to specific. However its power is low in the decision making of the company targets, he/she takes the order or the direction from the above management or a team leader and is responsible to finish the duty by itself.

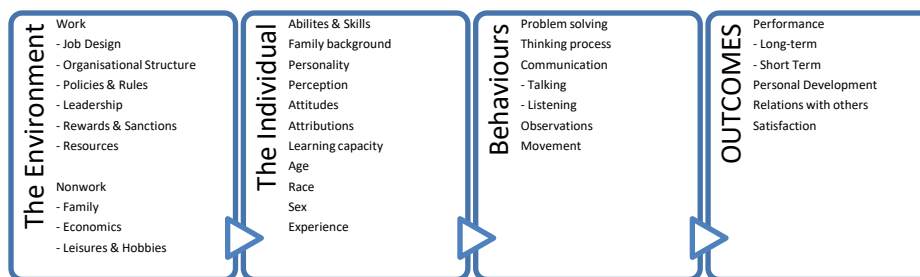
Then the middle management presented on the Chart 1) is the one who its reasonability are much higher than the lower team, however he/she is taking orders from senior management and delivering the orders to the below team. Hence, he/she is sending to the senior management the feedback of the job satisfaction/dissatisfaction from the lower teams. The top of the pyramid present executive of the company. Moreover, by itself, he/she is an individual, which has the team of senior management, but he/she has high responsibility and its power is at the highest level within the organisation. Therefore, one can clearly point out that with a great power comes a great responsibility and duty.

12.3 The Process of Perception

In order to understand the process of perception, one must be aware of the approach pointed made by Mullins, L. J. (1996) stated that: “Managers require an understanding of perception in order to help judge the behaviour and intentions of other people. It is not unreasonable to argue that there is no such thing as reality – only the individual’s perception or interpretation of reality. How, then, can managers avoid organisational problems which result from perceptual difference?” (p.138).

Understanding individual behaviour and how they may behave within organisation the management should use their judgment and should take to the consideration to know his/her way of learning therefore, it is necessary to have the knowledge and skills picture of any individuals that we may talk about, in today business world is called CV (Curriculum Vitae).

Charts 2 Individual Behaviour Framework

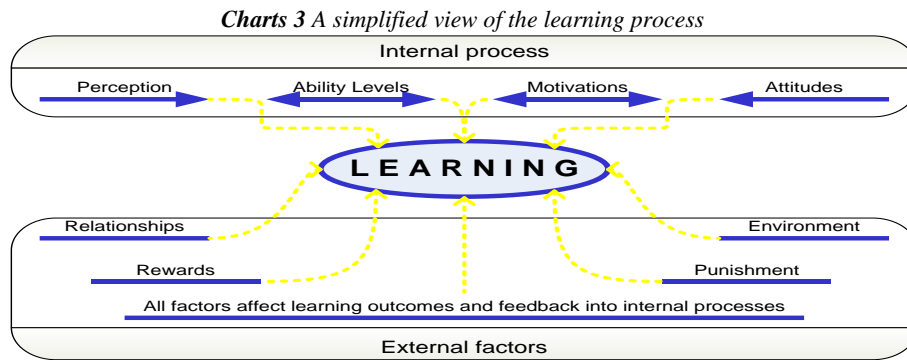


Source: UBT College (Uka handouts) (2022)

Therefore, if we look at the chart 2 we can see what the main issues individuals’ background which gives a great picture of what and how the individuals learn and then we can assume the way he may behave within the organisational structure. One knows that attitudes are learned throughout the life and are embodied within socialisation process. Within organisation ability refers to an individual’s capacity to perform the various tasks in the job.

A psychological contract is a person’s set of expectations regarding what he/she will contribute to the organization taking to the consideration its effort, ability loyalty, skills, time and competency, then what the organization in return will provide to the individual benefit such as; salaries and other benefits. Therefore, the inducements from the organisation are and should be covering to the best interest of the individual need in order to meet and get its full contribution at work; nevertheless we should know that the main two parts are that organisation is ‘buying - individuals’ and individual is ‘selling’ himself to the organisation. Moreover, “when or if” the negotiation take part between organisation and individual in recruiting process is presented the performance pay (if the performance can be measured) seem to be in the best benefits of both the organisation and individuals in order to achieve its targets.

The need of the individuals will affect their perception, the processing of the action individual may use his/hers previous experiences to make the last and not least judgment before the action. According to the individual learning or background he/she makes its process of perception nevertheless the chart 3 present the influences that effect individual behaviour such as; the environment, the individual itself, its behaviour and the outcome of the decision he/she may make.



Source: Mullins, L.J., (1996)

Perceptual distortion can create particular difficulties and rise to perceptual problems, in dealing with other individuals such as; the stereotyping which simplifying the process of perception and making a judgment of other people, instead of dealing with the issue that is facing at the moment, the halo effect is the first part/stage were the interesting then the judgment follows based on the first judgment made, perceptual defence is used in tendency to avoid certain stimuli that are perceptually disturbing or threatening and projection is the part were individual unconscious transfer its own impressions or feelings to other people/individuals.

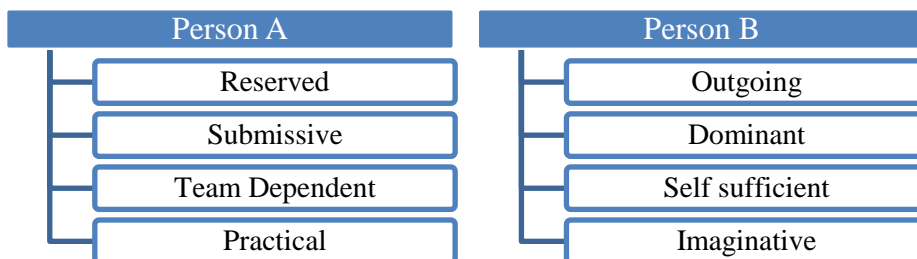
Management and organisation must be able to understanding the process of perception and the importance of it towards the organisational goals.

12.4 Case study

In the research is taking to considering two individuals within the CBK who are both Loan Administrator and have the following similar characteristics such as: they are both 29 years old, same gender, life, study and work in same area/field. Even though there is no difference on their background, their attitude and performance is too different within CBK.

If we look at chart 4) there are differences that are presented within these two individuals/employees that are working at the present at CBK.

Charts 4 Two Employees of the CBK



Source: CBK (2022)

On one hand we see that the person A is reserved and is submissive works, great with a team and it is practical on the day-to-day performance, nevertheless the CBK recognise such a person as a reliable labour source within the banking sector. On the other hand, we face person B who is outgoing, dominant, self-sufficient and imaginative were his performance is higher than person A. However, the CBK sees him as a great individual for the organisation but not reliable in the long term since the energy that has person B is high and in the long term may give him a dissatisfaction on his work and is easy that he/she may leave the organisation. Therefore, the organisation is taking care regarding the security of the bank information as too important to its business were high security can be found in person A rather than person B.

This case presents that in worldwide there are some people that are important to the company but to other companies the same person may be a liability.

13 Managing Teams

Talking about the team one should understand that the main parts are 'INDIVIDUALS' that makes the team and the team is made in order to achieve a specific task. Therefore, managing teams is managing individuals.

One of the major paradoxes of organisational life is the maintenance of individuality and self-responsibility alongside the creation of co-operation and conformity. Balancing individual needs and goals with group co-operation and conformity can be a major cause tension and yet is one of the most important tasks of any management. However, recognition of good performers and performance is an essential part of the process of management. Therefore, managing people in organisations requires not only understanding the employees, but also recognition of the organisational culture whereas some organisations, creativity and individuality may be the last thing they would like to see as an essential (Rustom, 1993).

Working with teams, whether as leader, a single team or manager of several teams is an essential part of a manager's job. Team working is a rapidly becoming the preferred practice in many organisations as traditional corporate hierarchies give way to flat level and multi-skilled working methods. Managing Teams is an indispensable and practical guide to leading teams with expertise, covering subjects such as defining the skills required to complete a project, establishing trust between individuals within a team, and maximizing the performance of that team.

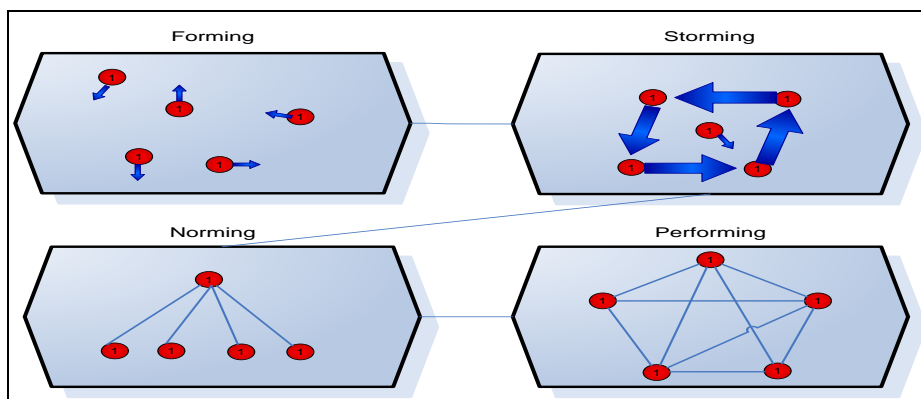
To understand the structure of teamwork one is need to be aware that why and how the team works, the way the team is build, to create team efficiency and to achieve future targets of an organisation. Therefore, a real team is a live when continuously change with organisation environment changes in order to meet its organisation targets and is a dynamic power where a number of individuals are joint to work together (Campbell, Glickman, et al, 1987), •(Robbins, 2003).

13.1 Stages of Team Development

Tuckman, B. W. (1965) proposed that: such perceptions tie in well with the team development model of forming – storming – norming – performing as well as studies of Glickman et al (1987) which demonstrated a progression through teamwork or inter-member co-ordination, before the team tackled task related performance.

A team development has its own stages and is presented on the chart 5) whereas is presented on 4 stages.

Charts 5 Stages of Team Development



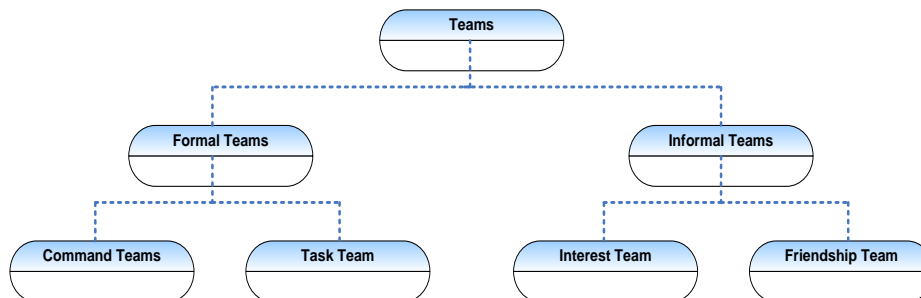
Source: UBT College (handouts) (2022)

Presenting on the chart 5) the first part of the team is forming were this is the part were all individuals on the team are getting to know each other and are inside the barrier to behave in the team manner, then is the following stage known as storming present the team progress by defining the individual role within the team, then the stage three or as called ‘norming’ stage were the team define its leader and to all individual of the team are well know the his/her tasks and the team goals, the stage four is a performing stage were the team performing towards its goal and every team member know almost all jobs and to do in case the team member is missing or can not fulfil its team duty within the team needs, were is some cases its call as a ‘team spirit’ UBT College (handouts) (2022).

13.2 Different teams

There has been stated at University of Sheffield, Understanding Organisational Behaviour handouts, (2020) that: “On one hand formal teams are established to perform organisation work, command teams are specified by the organisation chart and comprise by employees reporting directly to a superior, task team are employees who work together on a particular tasks/project, on other hand informal team is a natural grouping that form to fulfil social needs, interest team are established to meet mutual objective and friendship teams are formed because members have something in common.”

Charts 6 Teams



Source: University of Sheffield (handouts) (2020)

There are different teams such as presented on the above chart (6) nevertheless each of the teams are created in order to achieve specific task. These kinds of teams presented on the chart are present within any organisation and within KBS bank environment. KBS bank managers should be aware of these teams and use these teams accordingly to needs of the various targets on the day-to-day work.

Looking at the chart (6) one can see that various teams have various responsibilities and duties therefore; the team is always created to achieve its objectives and produce specific tasks. The team importance is measured based upon its responsibility and the power to make the decision that would effect the organisation, chart (6) presents the levels of the teams' base on the specific and importance of the task.

13.3 Team Behaviour

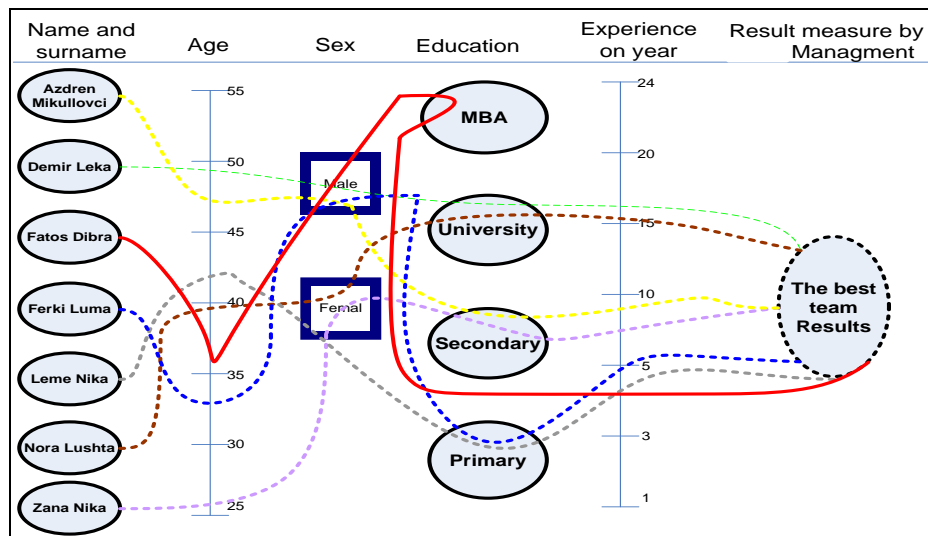
Ramosaj, B. (2005) presented that: "a team of great individuals can be less effective rather than a great team from individuals" (p.15). When the individuals are getting a great feeling about themselves then they present positive fillings on the team and start feeling about team. One can understand from this that the extent to which the team allows the individual to feel comfortable is the extent to which the individual feels good and contribute to the team. Therefore great individual feelings in the team create the most of the team because there is a 'Team Spirit'. Ramosaj, B. (2005) stated that: "maximise team standards by building up an outstanding team, releasing creativity and achieving targets" (p.15).

13.4 Case Study

CBK appear to face a difficulties during their various targets since in the team were appointed only a members with same background and there always a difficulty to understand and agree on the task since their perception and the approving the leader within the team was somewhat impossible. Therefore there was presented a new team to create and the author was taking a part on this survey.

The survey made at CBK presented a team to work by the mixture of individuals: experience, knowledge, sex and age. Since bank is dealing with different kind of customers, the bank team-work can use individual perception to understand better the market needs. The research and development team of the CBK was from several staff on chart 7) were the management believed that they could predict the future needs of the market for the bank products.

Charts 7 Research and Development Team
(The most effective awarded team from CBK)



Source: CBK (Note: not real names are used) (2022)

However if you see chart 7) one can see that within the team there are difference among the individual within the team but their results were awarded since they achieved their targets and they fit between each-other exactly as a 'picture of puzzles'. Moreover the team was working on the 'back-up team-role' which they could almost cover each other in case they may need to subsidies for back-up team member in its role.

14 Conclusions and Recommendations

Understanding individual and team behaviour and the effect towards firm strategy one should take to the consideration the environment and particularly effect within organisation. Therefore, understand individual behaviour and team management within any organisation and CBK we should know that in team we are again individuals but influenced by others individuals, moreover in team we then behave accordingly to the team interest/needs. In accordance to achieve the targets the team should work its plan and work by its plan otherwise if the individual or team fail to plan then simply they plan to fail.

How individual with different background can influence the team performance?

According to the analysis understanding individual behaviour, one should be able to understand individual; differences and process of perception. Individual Differences presents that within organisation, individual ability refers to its capacity to perform the various tasks in the job therefore there is evidence that the team with various individuals background reflects to the best team results. Therefore, one should by understanding individual perception able us to understand our own and other individuals judgements and intentions, even though there are perceptual differences.

A successful team manager has to know and understand that the main issue in the team are individuals, which are gathered to achieve a specific task, therefore managing teams is managing individuals. Moreover, a great managing team should establishing trust between individuals within a team, which would maximize the performance of that team.

Managing team/individuals to achievement its task/objectives/needs in the most comfortable way is to build so-called team spirit. However, different teams are based on the level of the teams needs/tasks, whether the team is formal or informal the tasks/needs are the driven force of the team effort. Therefore, in order for team to achieve the team best results we can clearly recommend that we need to appoint different individuals to achieve the best result.

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THE IMPACT OF THE COVID-19 PANDEMIC ON RETAIL SALES THROUGH ELECTRONIC COMMERCE IN KOSOVO

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ABSTRACT

E-commerce is seen as the next step in doing business, especially for retail. As the name implies, e-commerce is the buying and selling of goods and services, or the transaction of funds or data, through a large electronic network on the Internet.

The year 2020 has faced us with one of the most serious health disasters in the last 100 years of human society. The pandemic situation caused by the COVID-19 virus has disrupted almost all economies of the world, including that of Kosovo. But, e-commerce has experienced tremendous development, beyond any case, throughout the pandemic period. This has also been evidenced in Kosovo starting from many businesses that operate exclusively on online channels such as social media and websites specializing in e-commerce.

But the new and underdeveloped e-commerce infrastructure in Kosovo has encountered some problems, such as poor security of customer data, poor quality of services, backward logistics of shipping, etc. Some of the consequences encountered during the pandemic are the increase in the number of first time buyers, the increase in the volume of purchases as well as a better understanding of e-commerce by consumers. This is essential for e-commerce to develop in the right way and for consumers to be more educated about e-commerce in Kosovo.

Google Forms was used to collect the answers of the respondents, while the SPSS software was used to analyze and present the results.

Keywords: E-commerce, pandemic COVID-19, electronic network.

1. INTRODUCTION

The year 2020 has presented a tremendous challenge to humanity in almost all areas with the spread of the COVID-19 virus pandemic. Its spread has left national economies and businesses counting the costs of the damage as governments struggle with new quarantine

measures to slow the spread of the virus. The FTSE, Dow Jones Industrial Average and Nikkei all experienced big declines as the number of COVID-19 cases rose in the first months of the crisis. Major Asian and US stock markets have recovered following the announcement of the first vaccine in November 2020, but there is still a long way to go before things return to normal. (Read, 2020)

Like the whole world, Kosovo has also been affected by the pandemic and has suffered a lot in the field of health and economy. But one sector of the trade industry, namely electronic trade or as it is known internationally, e-commerce, has flourished in this difficult time. The crisis caused by COVID-19 has accelerated the expansion of e-commerce to new firms, customers and product types.

Throughout the year, many small retail businesses have opened, which in most cases have turned to social media such as Facebook and Instagram to make their sales. At the same time, existing retail businesses have also experienced growth in their online sales. This can be seen as an obstacle to the sales process, but in the Kosovo market, it has been proven that even social media pages do the job quite well.

After studying this topic, which will be done through the questionnaire, I hope that we will better understand the relationship or the effect of the pandemic on the e-commerce industry in Kosovo.

2. LITERATURE REVIEW

2.1. Definition of electronic commerce (e-commerce)

Electronic commerce or as it is known by the term "e-commerce" is the purchase and sale of goods and services, or the transmission of funds or data, through an electronic network, mainly on the Internet.

Contemporary e-commerce can be classified into two categories. The first category is business based on the types of goods sold. The second category is based on the nature of the participant (B2B, B2C, C2B and C2C). (Khurana, 2019) Transactions through e-commerce can be of different types such as business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C) or even consumer-to-business (C2B).

2.2. Different views on e-commerce

A significant number of experts in the field of trade and economics see e-commerce as a step towards the future for the field of trade. Usually, when a technology or trend develops at an accelerated rate, the likelihood of errors, misuses or any negative act increases more and more. For this reason, there are many proponents of the idea that electronic commerce should be much more limited by regulations and laws and applicable only to certain areas of commerce.

There is also the rest of those who see e-commerce as a threat - this includes those businesses that are unable or unable to offer their products or services online/electronically. Also, this form of trade is not suitable for shopping centers.

2.3. E-commerce trends in the region and the world

2.3.1. E-commerce trends before the COVID-19 pandemic (before 2020)

In 2007, e-commerce accounted for 5.1% of total retail sales, while in 2019, e-commerce accounted for 16.0%. China is the world's largest e-commerce market by sales value, with an estimated US\$899 billion in 2016. (Chai, 2020) (Millward, 2014)

In 2012, e-commerce sales topped \$1 trillion for the first time in history. Mobile devices are playing an increasing role in the e-commerce mix, commonly referred to as mobile commerce, or m-commerce. In 2014, a study estimated that purchases made on mobile devices accounted for 25% of the market by 2017. (Eisingerich & Tobias, 2008) (eMarketer, 2013) (Digital Commerce 360, 2013)

2.3.2. E-commerce trends during the COVID-19 pandemic (2020 and beyond)

As measures to prevent the spread of the virus became normal, businesses and consumers increasingly "went digital", securing and buying more goods and services online, increasing the share of e-commerce in global retail trade from 14% in 2019 to around 17% in 2020. (UNCTAD, 2021)

In March 2020, the global traffic of online retail sites reached 14.3 billion visits which means an unprecedented growth of e-commerce during the global lockdown in 2020. In SearchNode's survey, the majority of companies (63%) stated that the year (until October) was successful. And 28% claim their e-commerce business was doing well, while their brick-and-mortar stores were not. While 2% stated the opposite. (Clement, 2021) (Ecommerce News, 2021)

Retail e-commerce sales show that the COVID-19 pandemic has had a significant impact on e-commerce, with sales expected to reach \$6.5 trillion by 2023. (Bhatti, et al., 2020)

2.3.3. Development and trends of e-commerce in the region

Data from the Balkan Business Barometer 2020 published by the Sarajevo-based Regional Cooperation Council show that 83% of the population across the region are internet users. The savviest electronic shoppers, according to the survey, are the Montenegrins, although only 26% of respondents said they shopped online. The lowest level was recorded among Albanian respondents with 15%. Citing data from North Macedonia's statistics office, 40% of individuals with internet access in North Macedonia had made orders and purchases online during the 12 months from mid-2019 to mid-2020. This figure has doubled. from 2017. (Dimitrievska & Nuttall, 2021)

2.3.4. Development, trends and challenges of e-commerce in Kosovo

During 2016, postal deliveries for online purchases, according to Kosovo Post officials, for the first five months have increased by about 35% compared to the same period of 2015. Likewise, the value of deliveries through online purchases has also increased by 20%, or from 120 thousand euros to 150 thousand euros. (Ahmeti, 2016)

A research conducted during 2020 by members of the department of management and informatics from the economic faculty of the University of Pristina about the impact of the COVID-19 pandemic on business enterprises in Kosovo states that 52% of the enterprises surveyed have shifted the way of delivery of goods and their services, while 48% have not considered this.

During 2020, the Statistics Agency of Kosovo has conducted a survey on the use of information and communication technology that has included the entire territory of Kosovo. About the use of e-commerce, 35.4% of respondents claimed to have bought something through e-commerce during the last 3 months, while 10.2% between 3 months and a year ago, 7.9% more than a year ago and 43.1% never.

A serious problem of electronic commerce in Kosovo remains the safety of consumers and the quality of service, which are at a poor level. The sector, experts say, is being held back by the lack of a comprehensive regulatory framework, confusion among consumers about how to shop online, weak courts and misunderstandings about online payments and their security.

Often times, consumers complain that they have been cheated and that there are very few options available to seek compensation.

Electronic commerce in Kosovo is regulated by a law which entered into force in 2012 but cannot be fully implemented due to the lack of additional regulations that regulate how everything should work.

3. PROBLEM STATEMENT

Gjatë hulumtimit, është parë se nuk ka shumë literaturë që kanë fokus kryesor industrinë e tregtisë elektronike, blerjeve online, sigurinë në rrjet si dhe fusha tjera bashkëngjitëse. Aq më pak, hulumtime rreth ndikimit të pandemisë COVID-19 në tregtinë elektronike nuk ekzistojnë fare, vetëm mbi ndikimin e përgjithshëm në ekonominë e vendit. Qëllimi kryesor i punimit është të kuptoj lidhjen direkte të pandemisë COVID-19 me zhvillimin e tregtisë elektronike me pakicë në tregun e Kosovës.

4. METHODOLOGY

Qualitative and quantitative data were used to test the hypotheses regarding the effects of the COVID-19 pandemic on e-commerce in Kosovo. Qualitative research was the main type of research due to the fact that the paper researches the behavior of consumers throughout the pandemic period and in relation to e-commerce. However, the data from the questionnaire has also been researched quantitatively as we have statistical data from the results of the questionnaire.

As for the primary research, a questionnaire was compiled which contained questions related to the topic, namely the hypotheses raised in this paper. The questionnaire is composed of seven questions, where three questions were compiled for the first hypothesis and two questions each for the other two hypotheses. The types of questions that were used are categorical questions, rating scale questions and list questions. The questionnaire collected a total of 56 surveys of different age groups as well as different professional and social environments.

5. PRESENTATION AND ANALYSIS OF THE RESULTS

After collecting all the responses from the respondents, they were processed through the SPSS program to extract the research in a more comprehensible form. The number of respondents and their answers in the questionnaire were taken as data. The variables that were used were the period of the pandemic, the number of online shoppers, the extent of the effect of the pandemic on e-commerce, the volume of online purchases and the reasons that caused the respondents to buy through online channels.

5.1. First hypotheses and results

During the pandemic period, people have purchased more products through online/electronic forms.

Based on the results of the questionnaire, 84% of respondents stated that they made purchases through e-commerce during the pandemic period. When we analyze the volume of products they bought, 15% declared that they bought 0 to 1 product, 40% declared for 2 to 4

products, 23% for 5 to 9 products and 21% declared that they bought 10 and more products through e-commerce during the pandemic period.

As per the Chi-Square Test results, p-value (0.002) was less than the standard alpha value (0.05), so the null hypothesis (H₀) is rejected. The data suggests that the variables Quantity (amount of products purchased) and Time (when they bought more products) are dependent. We understand that the vast majority of respondents have purchased through e-commerce during the pandemic period and most of them have been more active in this respect compared to the year before the pandemic period.

5.2. Second hypotheses and results

During the pandemic period, the number of first-time online shoppers has increased.

83% of respondents declared they first started buying through online channels during the pandemic. Of these initial buyers, 88% of them bought 2 to 4 products during the pandemic period, while 12% bought 10 or more products. From these data we understand that the initial buyers were quite active buyers during this period.

94% of the respondents who bought during the period, have declared that they will continue with this trend even after the end of the pandemic.

55% of respondents answered that they will buy approximately the same amount as during the pandemic, 39% stated that they will buy more and only 7% stated that they will buy less. The latter stated that they bought 5 to 9 and over 10 products during the pandemic. So, those who have bought the most during the pandemic have declared that they will reduce purchases through e-commerce. 53% of those who declared that they will buy more products after the pandemic, declared that they bought 2 to 4 products during the pandemic. The biggest factors that pushed them into online buying was the easier buying process and the quarantine/restrictions due to the pandemic.

After analyzing the obtained results, we can say that the second hypothesis is confirmed since it is evident that there were new or initial buyers during the pandemic period. Also, most of these new buyers have purchased 2 to 4 products and 12% of them have purchased 10 or more products.

5.3. Third hypotheses and results

A significant amount of online shoppers will continue to shop online even after the pandemic.

94% of the respondents who bought during the period, have declared that they will continue with this trend even after the end of the pandemic. 55% of respondents answered that they will buy approximately the same amount as during the pandemic, 39% stated that they will buy more and only 7% stated that they will buy less.

The latter stated that they bought 5 to 9 and over 10 products during the pandemic. So, those who have bought the most during the pandemic have declared that they will reduce purchases through e-commerce. 53% of those who declared that they will buy more products after the pandemic, declared that they bought 2 to 4 products during the pandemic. Also, 75% of initial buyers have stated that they will continue to buy this way.

The question "If so, do you think you will buy more or less?" gives us an insight into how much the pandemic has affected the shopping behaviors through e-commerce among the respondents. If we cross the results of these two questions, the p-value is greater than the standard alpha value, so the null hypothesis (H₀), in this case, is accepted, stating that the two variables

are independent of each other. So there is no dependence between the initial buyers and the frequency of purchases after the pandemic period.

Although these results prove that there is no dependence between first time buyers (during the pandemic) and post pandemic buyers and their purchasing frequency, it cannot be overlooked that still the majority of the respondents who claimed that they bought during the pandemic, also claimed the same for the post-pandemic period. Additionally, 2/3 of respondents who are first-time shoppers during the pandemic have stated that they will continue to shop through e-commerce even after the pandemic.

6. DISCUSSIONS AND CONCLUSIONS

Efekti i pandemisë të shkaktuar nga virusi COVID-19 në ekonominë globale është mese vërtetuar nga plot e përplot hulumtime dhe monitorime të tregut. Nga kjo, ka pësuar edhe ekonomia e Kosovës e cila ka shpëtuar më mirë se sa është pritur, fal remitancave të diasporës që nuk janë ndalur fare. Njëkohësisht, tregtia elektronike ka përjetuar rritjen më të madhe në histori të saj, si në skenën globale ashtu edhe në Kosovë. Fal zhvillimit marramendës të saj, një sektor tjetër ka gëzuar boom në tregun tonë – shërbimet postare të shpejta. Por kjo është një temë tjetër për një punim të ri në të ardhmen.

Hipotezat e ngritura në këtë punim, fillimisht kanë vërtetuar se është rritur numri i blerësve gjatë periudhës së pandemisë, pra ka pasur më shumë blerës fillestar. Për më tepër, krahas kësaj, është rritur edhe vëllimi i blerjeve gjatë periudhës së pandemisë, posaçërisht nga këta blerës fillestar. Normalisht që arsyet kryesore që kanë motivuar këta blerës janë të shkaktuara nga pandemia si “rreziku nga virusi”, “kufizimet e vet-izolimit”, etj. Por, arsyeja që është zgjedhur më së shumti nga të anketuarit, është procesi i lehtë i blerjes krahasuar me blerjen në dyqane fizike. Duhet cekur se kjo është edhe njëra ndër arsyet kryesore për suksesin e përgjithshëm të tregtisë elektronike, siç është përmendur edhe tek rishikimi i literaturës.

Mendoj se punimi ka arritur ti provoj hipotezat në masë të kënaqshme, qoftë në favor apo në disfavor të tyre, përmes hulumtimit të të dhënave të nxjerra nga përgjigjet e pyetësorit. Si përfundim, efekti i pandemisë COVID-19 në tregtinë elektronike me pakicë në Kosovë është vërtetuar sipas të tre hipotezave të ngritura në këtë punim.

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INFLATION AND IMPACT ON THE COST OF LIVING - THE CASE OF KOSOVO

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Abstract

Within the framework of the paper, inflation is treated, including the impact on the consumption of family economies in Kosovo. An important indicator in the economy of a country is inflation. The Covid19 pandemic, among other things, has also affected the economic processes in different countries of the world, as well as having an impact and effects on the economic processes in Kosovo. In addition to inflation or the indicator that measures the cost of living, in this context the consumer price index is used to monitor changes in the cost of living over time. The main goal consists in the analysis of the progress of inflation in Kosovo in recent years. So the purpose of the consumer price index is to measure changes in the cost of living. In the framework of this study, to achieve the objectives, the analysis method, tabular and graphic separately, comparative methods are used, analyzing the dynamics of the issue related to inflation and the impact on the cost of living. Through this study, we consider the results and recommendations given to be taken into consideration by the relevant institutions.

Key words: Inflation, consumer price index, consumption, economic processes.

1. Introduction

Inflation constitutes a macroeconomic disease and is considered a worrying problem for the economy as a whole and for firms and consumers in particular. One of the most well-known indicators and which is followed with interest by all economic entities is inflation. Inflation is a serious problem that negatively affects both the reproduction process and the social stability of the country.

In contemporary economic literature, by inflation we understand the increase in prices or the deflator of the gross domestic product (GDP), or rather the devaluation of the value of local money. Inflation is generally defined as a continuous increase in the average price level of goods and services. Inflation is the increase in the general level of prices. Inflation represents the continuous increase in the general level of prices. Inflation mostly hits the poor and low-income strata of the population. This is because inflation represents a continuous process of increasing prices, namely a permanent decrease in the value of money and the purchasing power of the

population. Another definition says: "Inflation is a permanent increase in the general level of prices and that at the level proportional to the increase in the general level of prices in certain units of time".

2. The methodology used

For the finalization of this paper, the presented material has support including scientific literature, as well as reports and publications from the Central Bank of Kosovo, which deal with issues related to remittances, namely the impact and economic effect of remittances in Kosovo before and during the Covid19 Pandemic. The local statistical source, the method of analysis and synthesis, tabular and graphic separately, comparative method, etc. were also used.

3. Literature review

Consumption is the total amount of expenses made by households and individuals for goods and services of the country. For any country, consumption is the largest component of GDP. Statistics show that poor families spend most of their income on essential goods such as food and shelter. Consumption represents consumer spending on goods and services from which benefits are derived in the current period. Consumption is spending on goods and services by households.

The consumer price index (CPI) is the indicator most widely used to measure inflation. The consumer price index is the most widely known price index. It measures the change over time in the prices of goods and services included in the market basket. The CPI measures the cost of a market basket of goods and services consumed by a typical citizen household over a given period of time. The consumer price index (CPI) is an indicator of the overall cost of goods and services purchased by a typical consumer. The consumer price index (CPI) is an indicator of the overall cost of goods and services purchased by a typical consumer. In the calculation of the CPI, the specific weight of each product or service in the consumer's budget is taken into account. The purpose of the consumer price index is to measure changes in the cost of living. In other words, the consumer price index tries to measure how much income must rise in order to maintain an unchanged standard of living.

4. Results and discussions

Consumer price index in Kosovo

The consumer price index (CPI) is the most well-known price index. It measures the change over time in the prices of goods and services included in the market basket. The purpose of the consumer price index is to measure changes in the cost of living. The consumer price index (CPI) measures the total cost of the market basket. Eurostat has defined the HICP as the European standard for consumer price indices. In Kosovo, the Consumer Price Index (CPI), namely the Harmonized Index of Consumer Prices (CPI) is used as the official measure of inflation. The Consumer Price Index (CPI), namely the Harmonized Index of Consumer Prices (CPI) has been published as an annual average index starting in 2002. The consumer price index and the harmonized consumer price index are calculated on the basis of a COICOP classification structure (Classification of Individual Consumption by Purpose), fully compatible with the expenditure structure used by Eurostat. Based on this classification, expenses are classified into 12 main groups as:

- Food and non-alcoholic beverages;
- Alcoholic drinks and tobacco;
- Clothing and shoes;
- Housing, water, electricity, gas and fuel, others;
- Furnishings, home appliances and home maintenance;

- Health;
- Transportation;
- Communication tools;
- Recreation and culture;
- Education;
- Hotels, cafes and restaurants;
- Various goods and services.

Eurostat has defined the HICP as the European standard for consumer price indices. Data on the prices of the most representative goods and services are collected through the consumer price index questionnaire and the harmonized consumer price index by the staff of the regional offices in the main centers of the country: Gjakovë, Gjilan, Mitrovica, Pejë, Prizren, Pristina and Ferizaj. 415 products over 6800 prices are monitored in supermarkets, service establishments, shops, markets and other retail outlets.

Table 1: Consumer price index in the period 2015-2022

Years	Average annual price index (2015=100)	Annual change in %
2015	100.0	-0.5
2016	100.3	0.3
2017	101.8	1.5
2018	102.8	1.1
2019	105.6	2.7
2020	105.8	0.2
2021	109.3	3.4
Gusht 2022	124.5	13.0

Source: Kosovo Statistics Agency, Harmonized Index of Consumer Prices, Pristina, August, 2022, pp.5-7.

Figure 1: Harmonized annual index of consumer prices according to the years 2015-2022

Figure 2: Average annual inflation rates measured by IHÇK for the period 2015-2022

From the table and graph it can be seen that the average annual rate of inflation during the period 2015-2022 had a trend of growth, only the most pronounced growth trend is observed in 2022. So the inflation rate in 2015 was -0.5% compared to the previous year, while in 2016 the inflation rate was 0.3%, in 2017 it was 1.5%, in 2018 it was 1.1%, in 2019 it was 2.7%, having a downward trend in 2020 at the time of the Covid19 pandemic, where the inflation rate was 0.2%, while having growth progress in 2021 to 3.4%, while in August 2022 the inflation rate reaches 13.0%.

The following table shows monthly and annual price changes for groups and subgroups of consumer goods and services.

Table 2: Weights, IHÇK for the month of August 2022 (2015=100), monthly and annual price changes for groups and subgroups according to COICOP

-in percentage

Group	VIII-2022 2015=100	VIII-2022 VII-2022	VIII-2022 VIII-2021
Total IHÇK	124.5	0.2	13.0
Food and soft drinks	134.5	1.1	19.3
- Food	137.4	1.2	21.0
-Non-alcoholic drinks	120.0	0.6	9.3
Alcoholic beverages and tobacco	128.3	0.0	5.0
Clothing and shoes	102.2	-0.1	0.2
Housing, water, electricity, gas and other fuels	114.1	1.7	12.6
Electricity, gas and other fuels	116.2	2.2	16.7
Furniture, home appliances and home maintenance	112.1	0.8	7.6
Health	112.7	0.5	3.0
Transportation	129.8	-2.6	17.2
Means of communication	115.1	-0.1	0.2
Recreation and culture	104.2	0.1	3.7
Education	102.1	0.0	1.1
Restaurants and hotels	123.8	0.2	13.8
Various goods and services	113.6	0.4	4.8

Source: Kosovo Statistics Agency, Harmonized Index of Consumer Prices, Pristina, August, 2022, pp. 9-10.

Figure 3: Weights, IHÇK for the month of June 2022 (2015=100), monthly and annual price changes for groups and subgroups according to COICOP

From the table and the graph, the progress of the rise in consumer prices can be seen, where it is observed that there is a progress in the rise in consumer prices in 2022 compared to 2021.

Table 3: Average prices for some consumer goods and services

- in euros

Code	Items	The measure	VIII- 2021	VII- 2022	VIII- 2022
101	Rice	1 kg	1.44	1.48	1.48
102	Wheat flour	1 kg	0.52	0.80	0.80
103	White bread	500 gr	0.36	0.50	0.51
111	Boneless beef	1 kg	6.64	8.29	8.54
112	Beef	1 kg	7.49	9.19	9.45
114	Chicken meat	1 kg	2.73	3.86	3.99
131	Milk (tetrapak)	1 lit	0.92	1.12	1.13
133	Yogurt	1 lit	0.88	1.07	1.08
137	Egg	30 copë	2.61	3.40	3.91
141	Edible sunflower oil	1 lit	1.55	2.76	2.67
151	Apple	1 kg	1.21	1.05	1.11
152	Pear	1 kg	1.95	1.98	1.67
153	Bananas	1 kg	1.11	1.29	1.34
155	Lemon	1 kg	1.89	1.86	1.82
161	Potato	1 kg	0.55	0.56	0.58
162	Tomato	1 kg	0.78	0.79	0.80
163	Legume	1 kg	2.51	2.86	2.83

167	Peppers without chili	1 kg	1.29	1.24	1.13
175	Sugar	1 kg	0.72	1.06	1.05
192	Ground coffee	1 kg	9.38	11.71	11.69
193	Tea	1 kg	7.90	8.55	8.62
195/1	Natural still water	1.5 lit	0.31	0.34	0.34
196	Coca cola	2 lit	1.29	1.37	1.36
197	Tree juice	1 lit	0.89	0.95	0.96
204	Beer	0.5 lit	0.67	0.73	0.72
216	Cigarettes-Ronson	1 pako	1.78	1.88	1.92
217	Cigarettes-Malboro	1 pako	2.80	2.89	2.89
416	Electricity (no fixed cost)	1 kwh	0.06	0.06	0.06
418	Fire wood	1 m ³	39.76	54.98	56.95
701	Gasoline	1 lit	1.19	1.67	1.55
702	Diesel	1 lit	1.16	1.76	1.66

Source: Kosovo Statistics Agency, Harmonized Index of Consumer Prices, Pristina, August, 2022, pg. 11.

Figure 4: Average prices for some consumer goods and services

The table reflects the progress of average prices for some items and services included in the consumer price index for the period August 2021 and compared to August 2022, expressed in euros, where an increasing trend of consumer prices in Kosovo is observed.

Economic growth is considered one of the main macroeconomic objectives. This is due to the fact that economic growth is closely related to the standard of living of the population of a country. The increase in the standard of living of the population comes as a result of the increase in the production of goods and services. An important indicator of the standard of living of the population is the production per capita of the population.

The improvement of the standard of living of the population of a country comes when each individual over time has at his disposal more goods and services to consume than before. One of the most well-known indicators and which is followed with interest by all economic entities is inflation. Inflation is a serious problem that negatively affects both the reproduction process and the social stability of the country. Inflation as a macroeconomic phenomenon affects almost all layers of the population, that is, everyone who buys or sells goods and services. The basket of the Kosovar consumer is characterized by a fairly high participation of products that have seasonal price movements. This includes food, energy, alcoholic beverages and tobacco which make up about half of the consumer's basket. The prices of these products have determined the movement of the general price index during the past years not only because of the high participation they have in the consumption basket but also because the movement of these prices has been more pronounced. Basic inflation, which excludes the categories characterized by more significant price changes, presents a clearer overview of inflation in Kosovo.

Since Kosovo's economy is small and import-dependent, it is natural that tradable components of goods and services have a high participation in the CPI and, therefore, determine the movement of the general price level. Tradable components make up about 81.9 percent of the Kosovar consumer basket, while non-tradable components (mainly services) make up about 18.1 percent of the consumer basket. The prices of non-tradable goods and services have historically been more stable compared to the prices of tradable goods, with the exception of the last two years where the decline in the prices of non-tradable goods was more pronounced.

Any inflation that exceeds the growth rate of more than 3%, then passes to levels where the created situation must be monitored because it can pass to frightening levels that can ruin the country's economy. Usually to calculate the price level economists start with the concept of the consumer basket (which has several common products). The cost of living is directly affected by the increase in prices, and in connection with this, the consumer tends to buy less and always tries to find substitute products.

5. Conclusion-Conclusions and recommendations

Inflation represents the continuous increase in general prices, where with a certain amount of money you can buy less products than before invalidation. Inflation indicates a decline in the purchasing power of a national economy, a reduction in domestic production and a dominance of external macroeconomic indicators, that in the case of Kosovo since the post-war period of 1999, the main indicator is the import that mercilessly hits the economy of Kosovo in the absence of local production capacities. Inflation hits all strata, but mostly those families where the monthly income is low or live on social assistance. Inflation is said to favor consumption in general, but in contrast to this favor, it reduces savings and even uses and spends previous savings. The reason for this is because confidence in money (its stability) is lost and everyone wants to be freed from money to buy even those goods that they probably don't need.

In general, the inflation in Kosovo in the previous years was normal, which means below 2 percent on an annual basis, while in 2021 with more pronounced growth trends, especially in 2022, reaching a double-digit inflation rate. Care should be taken regarding a careful macroeconomic governance regarding inflation, otherwise the situation may get out of control. In this regard, fiscal policy actions and measures must be taken (reduction of tax rates (VAT), tax relief) in the goods and services necessary for life, affecting the reduction of the prices of the goods and services of the consumer basket.

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STATISTICAL MANAGEMENT IN CONNECTION WITH THE CAPITALIZATION AND UPDATE OF ASSETS

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Abstract. When it comes to the definition of optimization models for capitalization and actualization of assets, then an all-around professional and scientific analysis is needed in relation to the problem in question. The models in question are closely related to terms such as interest, time, and financial operation. Interest, which is usually characterized as the interest rate, is the most used variable or indicator in financial operations. Here are related problems for the case when the loan is taken for a certain period of time, then the problem of depositing funds in banking institutions. In all such cases, we have the optimal policy of capitalization and actualization of funds, not only in the quantitative aspect but also in determining the optimal time period for such modeling.

Keywords: financial operations, financial model, actualization, re-actualization, interest rate, time of financial action

Introduction

The first risk that must be taken into account is the risk of losing the purchasing power of money, which is usually known as the risk of inflation. If the economy suffers from inflation during the time period of the debt, then it should be taken into consideration that there is no economy without inflation. It can only be different in different countries. For this reason, the borrower is not obliged to compensate the lender for the loss of purchasing power money. The second risk is that the money lent or invested may not be returned for this reason (which means that there is also the risk of project failure).

The loss of potential utility, the risk of inflation, and the risk of failure, all three together create the factor that the use of funds today is more desirable than in the future.

Time is one of the basic meanings of any kind of science. In financial operations, it is a variable or a main indicator of every financial operation. Time is a basic philosophical concept that is impossible to define. Time as a variable is the most independent variable. In the measurement of time, it is important to determine the base unit with which we will measure time, which we can now usually call a financial accounting period. The exchange of sums of money at different times can be called a financial operation.

In the general form of a financial operation, the set of pairs (t_i, x_i) is usually analyzed, for $t = 1, 2, \dots, n$, so that it is the moment of expiration for payment x_i . If we will mark with:

(1),

the expiration vector, and with

(2),

the vector of funds flows, then we can say that in the respective financial operation we are dealing with a pair of vectors (x/t) , with the same dimensions, when the first vector represents cash flows, while the second vector represents payment deadlines. In tabular form, the financial operation is presented as follows:

Snooze	Cash flow
t_1	X_1
t_2	X_2
t_n	X_n

Table 1.

Capitalization and actualization

The capitalization model will be analyzed in simple interest form:

(3),

as M - is the actualized value, C - is the value of the deposited (invested) capital, and i - is the nominal interest rate. The time period of the actualization is given by n - for example, for how long the tools in question are activated.

The capitalized and reactivated value can also be determined according to other models.

In most cases, the expression related to the transformation according to Laplace can also be used:

(4).

so that the function $f(t)$ is connected to the adequate models of the calculation of the activated value.

If the simple interest law is compared with the prepaid interest law, respectively for:

(5),

then the schematic presentation according to figure 1 is valid.

It can be observed that for the corresponding value $t = t^x$ the values of the functions $f_1(t)$ and $f_2(t)$ are equalized between them.

In connection with the assignment of the activated value according to the simple and the composite one, it is important to also assign the corresponding integrated value, according the:

(6).

Statistical management in relation to the problem in question

Figure 1: Graphical presentation of function $f(t)$.

The statistical managerial analysis related to the problem in question can be realized in different ways. For example, the corresponding statistical expectation (E), then the variation (V), the correlation coefficient, the corresponding statistical moments, the elasticity coefficient, and the like can be requested.

One of the relevant parameters is the elasticity coefficient.

For any two statistical quantities (X, Y), the elasticity coefficient can be determined according the:

(7).

As an example, in figure 2, the coefficient of elasticity $\varepsilon(V, \alpha)$ is graphically presented ($\beta = 0.17$). For example, for $\alpha = 0.4$ it is $\varepsilon(V, \alpha) = 10$, which means that when the parameter α changes by 1%, the magnitude V changes by 10%, and so on.

Figure 2: Graphical presentation of the coefficient of elasticity $\varepsilon(V, \alpha)$.

Discussion of the obtained results

In the paper, the issue of capitalization and updating of financial operations is elaborated. It has been emphasized that the choice of suitable financial models is particularly important to take into consideration: the risk of loss of purchasing power, the risk of failure of the financial project as well as the potential benefit of the time factor. When it comes to the choice of actualization models, then the actualization of simple and compound interest should be taken into account. In the reality of the financial operations in question, the dependency of the vector of cash flows as well as the vector of the time expiration is always taken into consideration. It is understood that this dependence can also be generalized in terms of the relevant matrix analysis. It has also been shown that in terms of statistical managerial analysis, relevant meritorious quantities can be determined such as the coefficient of elasticity, the correlation coefficient, relevant statistical moments, statistical expectation and variance, and similar.

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Digitalization and improvement of services for citizens by the Kosovo Police

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Abstract. The development of technology has affected the way institutions use digitalization in different services and products. The main affect is how they provide information and communicate with wider audiences. Therefore, the aim of this research is to emphasize how a public institution in Kosovo such as Kosovo Police uses digitalization to offer their citizens proper services. The paper is focused especially on analyzing the Digital Application "Inform the Police". The methodology used in this paper includes primary and secondary data analysis. Secondary analysis of data from the reports of the Kosovo Police, the general history of the main activities that the institution offers to its citizens and the establishment of digital platforms. The primary data analysis presents the data collected from the survey conducted with the citizens of the Republic of Kosovo through a questionnaire. Citizens over the age of 18 have given answers regarding the importance of digital activities nowadays carried out by institutions in Kosovo. Specifically, the main questions are focused about the Kosovo Police Institution and how they use the "Inform the Police" Application.

Keywords: Digitalization, public institution, citizen, information services, application

1. Introduction

The development of technology has influenced the improvement of the quality of services for the needs of citizens, thus replacing the performance of various activities through manual processes in digital ones.

Seeing that digitalization has expanded its impact in almost all areas of life, this research is elaborated on the impact of digitalization in the development of services for citizens by Kosovo Police.

From the information gathered in the Kosovo Police, the research has elaborated on the impact of the Department for Information Technology and Digitalization of Communications in the development of services for citizens, specifically the launch and use of the "Inform the Police" Application for Android phone users.

Also, from the data in the material collected for this research, the importance of marketing and the evolution that marketing has undergone over the years have been elaborated.

2. Literature Review

Digital technologies have affected the way businesses, organisations, institutions such as private and public approach their activities toward a wider market. In public sector digitalization has affected mainly the data process and information services. [1] As part of digitalization is also Digital Marketing and Advertising as a comprehensive promotional strategy that includes many aspects, such as: product, price, promotion and distribution in digital platforms. [2]

Marketing of products or services using digital technologies, mainly the Internet are part of digitalization and digital marketing, moreover the usage of mobile phones, digital advertising and any other digital medium. [3]

Digitalization offers customers and citizens more convenience and more competitive prices and enables businesses to reduce operational costs. [4]

Many authors discuss the advantages of digitalization over traditional media, especially the relation to digital marketing services and the main benefits are the cost effective and time effective process. [4] [5] [6]

2.1. History of the Kosovo Police and digitalization

Regarding the history of the establishment of the Kosovo Police, this paper emphasize that: On September 6, 1999, the OSCE Mission in Kosovo, in accordance with United Nations Resolution 1244, has opened the Police School and started training candidates for members of the Kosovo Police. This generation numbered 176 members who successfully completed the training and then began exercising police activity throughout the territory of Kosovo as the first Police Officers of this Service. [7]

The mission of KP is to provide law enforcement in Kosovo in a professional, effective and efficient manner. The vision of KP is to offer Kosovo a competent police service in all aspects of its strategic priorities, be trusted by the people of Kosovo and be proud of their performance. [7]

Technological development is as challenging as it is useful in improving the daily life of citizens. With the use of technology, citizens can do work faster and easier. What is more important is that technology today is also used as a life-saving and investigative tool by law enforcement.

2.2. Digital Reporting Program

Technological development is as challenging as it is useful in improving the daily life of citizens. With the use of technology, citizens can do work faster and easier, and they are also enabled to communicate with friends and families at any time and faster. More importantly, technology today is also used as a life-saving and investigative tool by law enforcement. Various incidents happen every day, such as thefts, assaults, traffic issues, abusive acts, rapes, murders, etc. In any case, it is very necessary to inform the Kosovo Police, in order to take immediate action to resolve the issue and at least plan methods and take preventive actions to reduce similar occurrences. Some of the incidents (events, misdemeanors, criminal offenses, etc.) are not reported to the Police due to citizens' reluctance to reveal their identity, or to exclude themselves from further proceedings related to the case. Furthermore, the lack of interaction of the general public with law enforcement to report incidents is one of the main challenges in building trust and mutual police-citizen communication. Despite this, there are incidents that are not reported, so there may

be unreported and unsolved incidents, all of which results in the creation of public insecurity and increased fear of crime. [7]

2.3. Application "Inform the Police"

The Digital Application "Inform the Police" is a telephone platform that develops the necessary standards of the time, where through the contribution and cooperation of citizens by Informing the police, it helps to achieve police objectives, our readiness, effectiveness and efficiency as an organization. The creation of this application is also an alternative opportunity for citizens to convey the necessary and real information within a few seconds, in which case they can convey the message to the Police Communication Operations Centers through telephone images. The application was built by the Directorate of Information Technology of the KP and the Directorate of Police in Community and Prevention based on the instructions of the management of the KP. The use of the Digital Application provides the Kosovo Police:

- Information
- Accuracy
- Location
- Effectiveness
- Orientation of resources (human and material)
- Achieving police objectives (Community Policing and Intelligence-Led Policing strategy)

The Digital Application enables citizens to:

- Report in real-time,
- Write text,
- Attached photos
- Video attachment (at a later stage)
- Reports location and
- Guarantees anonymity

Considering the above, the purpose of developing this application was to offer citizens a new alternative option for reporting various criminal activities, guaranteeing the anonymity of the reporters as well as the speed, effectiveness, and efficiency of the police response. The application enables the Kosovo Police to receive quick information, attached with photos and with the location of cases, so that the response to such cases is more accurate and faster. This application also offers KP the opportunity to have the most complete overview of incidents and other occurrences.

The application has two benefits: the first one enables the citizen to report the specific case and the second one provides the KP with the necessary evidence to address and adequately handle the case. This Application has seven reporting categories [8]:

- Violence
- Theft
- Communication
- Weapon
- Corruption
- Drugs
- Others

Fig. 1. The main page of the application

The use of the application provides the KP with additional sources of information, more effective, rational planning, respectively the orientation of human and material resources in an adequate manner, which is one of the objectives of the strategic documents in force of the KP. [8]

2.4. Program goal

The primary goal of the "Digital Reporting" program through the "Inform the Police" application is to increase police efficiency and effectiveness through the provision of quality services to citizens as well as the advancement of the concept of community policing. Also, this program will serve to sensitize and raise awareness among citizens, increase responsibility and culture of reporting. Another goal of the program is to save the citizen's time and other problems, which citizens face to report the case in the traditional way at the police stations. [9]

2.5. Purpose of the program

The "Digital Reporting" program is a continuation of the successful programs of the KP, within the framework of the implementation of the philosophy and concept of community policing. This program proves the commitment of KP to offer alternative ways of reporting crimes and other issues that affect the daily life of citizens throughout Kosovo. Through this program, it is intended to advance the cooperation of citizens with the Kosovo Police in the field of security, to create a safer environment for everyone. The program aims to improve police performance as a prerequisite for building faster communication between the Police and citizens. [7]

This program of the KP aims to improve the preventive police approach and at the same time increase public confidence in the KP through information and timely response to respond to citizens' problems. Another goal is to reduce unreported cases to the Police, providing security of information received, respect for the privacy of those who report the case, as well as the speed of police response.

The specific goals of the program are:

- Advancement of police work and implementation of the concept of community policing;
- Strengthening the partnership between the Police and citizens;
- Operational planning and management of resources based on information received from citizens;
- Responding and handling information without delay and solving reported problems;
- Transparency and accountability regarding received reports. [7]

Likewise, the privacy of the people who use this application is not violated because the Kosovo Police considers the protection of privacy and personal data to be very important, as provided by the Constitution of the Republic of Kosovo, Law No. 06/L-082 dated 14.02.2019 "On the protection of personal data". [7]

3. Problem Definition

For the research part of the case study in this paper, the Security Institution in the Republic of Kosovo - "Kosovo Police" has been chosen.

In the institution in question, the development of digitalization has influenced the facilitation of work for the development of services for citizens, therefore the marketing of the institution must be at an appropriate level, since it has to do with informing citizens about the activities undertaken by the Kosovo Police for security and informing them about the happenings in the country. This institution faces the problem that a large number of citizens of Kosovo are not aware that they, with their information, no matter how small it may seem from the corner where they are, can help in clarifying the cases, more precisely in finding the culprits after seeing various publications from the Kosovo Police on social networks. Also, the fear created among citizens that the Application "Inform the Police" violates the privacy of users (according to which, after using the

application for reporting cases of legal violations, other people can have access to their personal data and not only the persons authorized by the KP), has influenced the stagnation of the use of the application for reporting cases, where the sole purpose of launching this application is for the Police to be closer to citizens who are ready to declare any violation legal action they may face or when they feel endangered, threatened, violated, etc.

Since the topic is limited to the impact of digitalization in the development of services for citizens, then this problem has been addressed by researching the way in which KP uses digitalization in the publication of the activities they perform to achieve the institution's objectives, as well as in the exchange of new information from citizens for clarifying cases. This research is focused on the importance of digitalization in the development of services for citizens by the Kosovo Police, but we must take into account that the security institution in many cases identifies and solves the problem without having time for this information to be published in advance. Therefore, the citizens of Kosovo remain informed about the activities undertaken by the Police for their safety after the end of the mission of the Security Institution, KP.

Through the information provided by the Directorate of Information Technology and Communication in the Kosovo Police, as well as the examination of these materials in detail in order to adapt them to the material collected for the realization of this research, it has been concluded that digitization has positively influenced the marketing activities carried out by KP. Activities related to the development of services for citizens. However, the institution in question prioritizes maintaining order in the region and as a result, much information remains confidential and unpublished in advance for citizens, with the sole purpose of maintaining the safety of every individual within the territory of the Republic of Kosovo.

3.1. Research Questions:

- What are the effects of digitalization in the services for citizens from the Kosovo Police Security Institution?
- How effective is the integration of digitalization, in particular the Application "Inform the Police" and the impact on informing, improving and facilitating communication with the citizens of the Republic of Kosovo?

4. Methodology

The design of this research is based on the collection of literature from local and foreign authors and experts, various methods have been applied such as: research approach, data collection and processing.

During the formulation of the paper, theoretical and quantitative methods were used. The theoretical method used in this research is a qualitative method through which the meaning, purpose and reality related to the subject of the study, ethnographies, basic theoretical studies, various phenomena and narratives are explored. For the realization of the analysis of the research part of the paper, the qualitative method was used, a method which by nature is also inductive, through which theories, searching questions, various explanations and concepts were constructed using sources from literature research, from interviews, basic theories, etc. The scientific methodologies that have been applied during the formulation of this research are different, but mostly the work is based on the review of the literature of books with the content of the data that suit this research. The primary data was collected by the Security Institution in the Republic of Kosovo - "Kosovo Police", as well as the use of the questionnaire formulated for the citizens of the Republic of Kosovo. 32 citizens answered the questionnaire, including those who were familiar with the digital application offered by the Kosovo Police.

At the beginning of the work, data were collected and after finding the data, their analysis was done. The second part of the research was carried out based on the collection of information and

their elaboration for the selected case study in order to adapt to the theoretical part elaborated in the paper.

While, at the end, the best and most understandable materials for the specific cases have been adapted for each of them and based on the collected data, the importance of marketing has been presented, as well as the impact of digitalization on marketing activities for the Police of Kosovo, the implementation and challenges faced by the managers of the marketing department in the Kosovo Police.

5. Results and discussions

This chapter will discuss the results obtained from the research on the application of digital technology by the Kosovo Police in relation to the improvement of services for the citizens of the Republic of Kosovo. The creation and launch of the Application "Inform the Police", for users of Android smartphones, as well as the information collected from a questionnaire formulated to get faster answers from the citizens of Kosovo. This questionnaire aims to make a detailed analysis to understand how informed people are about the importance of digitalization in marketing activities, as well as in their information about the "Inform the Police" Application. The application was launched by the Security Institution in Kosovo to maintain order and the safety of every citizen.

The publication of information about the Kosovo Police on the website

<https://www.kosovopolice.com> has influenced the citizens of the Republic of Kosovo as well as all other interested persons to have easier access to the data on the history of the creation of the institution, the leading staff of each department and the regional directorates, as well as have access to various documents which include: Legislation, Strategic Documents, Official Journals, Awareness Campaigns, Internal Police Acts/Regulations-Administrative Instructions, International Cooperation Agreement Police as well as agreements with local institutions. Through this website, we can be informed every day about all the activities carried out by the KP, as well as published general statistics for: Fatal accidents, accidents with injuries, accidents without injuries, issued traffic tickets, arrests, and detention (in police station). The table below shows the general statistics from the Kosovo Police published on their website for the month of March 2022. Statistics that change constantly and can be forwarded by all citizens. [9]

Table 1. General statistics from the Kosovo Police

General statistics from the Kosovo Police	Fatal accidents	Accidents with injuries	Accidents without injuries	Traffic tickets issued	Arrests	In the hold
2022/03/03	0	19	31	2030	27	20
2022/03/09	0	14	41	2176	36	16
2022/03/11	0	19	45	1635	24	14
2022/03/21	0	11	28	1682	23	12
2022/03/30	0	20	43	1936	26	18

From the staff responsible for maintaining the website and accepting complaints from the citizens of Kosovo found it reasonable to create a special application for smartphone users in order to make it easier for them to declare their complaints. Therefore, on June 24, 2020, the "Inform the Police" application was created for Android phones. This application, although it is not yet known to all citizens of the Republic of Kosovo, has had a positive impact on solving cases of Violence, Theft, Weapons, Corruption, Drugs and other legal violations.

It has been pointed out that citizens who have this application on their mobile phones do not hesitate to report cases because they are well informed that their personal data is not made public. As a result of this, the KP has easier time-solving cases, specifically finding people who commit various criminal acts and maintaining order in our society.

The use of the Application "Inform the Police", by the citizens of the Republic of Kosovo, as well as the publication of the activities carried out by the police, on the website of the Institution in question, has influenced the creation of a greater rapprochement in the relationship between Civil Society and the Police.

Also, following many indicators, elaborating different methods implemented during the digitalization process as well as comparing marketing activities in the past, with the impact that digitalization has on these activities now, the expectation from this research turns out to be very rational in creating a more realistic overview of the digital marketing process. In the empirical analysis, the survey of citizens of the Republic of Kosovo over the age of 18 was done.

Through the answers to the research questions, we will understand how informed the citizens are about the "Inform the Police" Application.

In the table below are some statistics regarding the answers from the questionnaire [10]

Table 2. Main results from the questionnaire

	Completely agree	Agree	Neutral	Don't agree	Don't agree at all
The development of digitization has influenced the improvement of almost all spheres of life, and especially has directly influenced marketing activities.	100%	0%	0%	0%	0%
Digitalization has made it easier for users to access information published by Public and Private Institutions.	40%	60%	0%	0%	0%
In the "Kosovo Police" Security Institution, the maintenance of the website has a positive effect on informing citizens about the activities undertaken by the Police for the safety of citizens in Kosovo.	0%	100%	0%	0%	0%
The launch of the Application "Inform the Police" was necessary for the citizens of the Republic of Kosovo.	20%	60%	20%	0%	0%

The use of the Application "Inform the Police" by the citizens of Kosovo affects the creation of closer ties between Police - Citizens and vice versa Citizens - Police.	20%	60%	20%	0%	0%
Citizens need to be informed in more detail about the use of the "Inform the Police" Application.	20%	80%	0%	0%	0%
The "Inform the Police" application needs to be created for other phones as well, not only for Android (the "Inform the Police" application as of 2020 was created only for Android phones).	20%	60%	20%	0%	0%
It is easier for every citizen to report corruption, violence, theft, traffic irregularities, illegal weapons usage, drugs, etc. through the "Inform the Police" Application.	40%	60%	0%	0%	0%
The maintenance of the website of the Police of Kosovo and the Application "Inform the Police" affects the information, improvement and facilitation of communication with the citizens of the Republic of Kosovo.	40%	60%	0%	0%	0%

The table above presents the results of the questionnaire created for this research addressed to the citizens of the Republic of Kosovo.

The questions in this questionnaire refer to digitalisation, specifically the "Inform the Police" Application, and are divided into three phases:

The first phase of the questionnaire is mainly referred to the understanding of how informed citizens are about the impact of digitalization in all spheres of life. However, the focus has been on the impact of digitalization on marketing activities for the "Kosovo Police" Security Institution.

From the answers received, it has been understood that the largest number of people who answered this questionnaire are aware of the importance and impact of the development of digitalization today. How much easier and faster it is for them to have access to gathering information, publications, news, etc., through social networks such as Facebook, Instagram, Twitter, Websites, Television, Radio, etc.

The second phase of the questionnaire is focused on collecting information on how many citizens are informed about the Application "Inform the Police" created by the security institution of Kosovo for maintaining order and clarifying cases of violence, theft, crime, weapons, substances narcotics, etc. As well as simultaneously informing other citizens about the existence of this application.

6. Conclusions and Recommendations

The application of digitalization in the Kosovo Police has influenced positively in informing citizens about activities carried out by this institution and in facilitating the possibility for citizens

to report different cases to KP. Based on the results of the survey 60% of the respondents agree that the application was necessary for the citizens of the Republic of Kosovo. Moreover, 100% of the respondents agree that the maintenance of the website has a positive effect on informing citizens about the activities undertaken by the Police for the safety of citizens in Kosovo.

Considering that the last decade stands out for the rapid development of informative technology in the field of communication, including the use of social networks. This type of communication is faster and more accessible to all mankind. Therefore, the Police should adapt to the developments as well as the demands of the citizens for faster information using social networks. The launch of the "Inform the Police" Application has made it easier for citizens to report crime cases. Therefore, this research recommends that the application should be available to all smartphone users since 60% of the respondents from the survey agreed that the "Inform the Police" application needs to be created for other phones as well, not only for Android. Moreover, since the application is quite practical and effective, it should be promoted more actively to citizens, through digital diversity - the activities of digital marketing. A procedure which is achieved by using sponsorship through social networks where it can advertise the "Inform the Police" application.

It is recommended for future researchers to analyze the effect of digitization in other public institutions of Kosovo, to provide the citizens the most effective and proper informative and communicative tools.

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The Future of Selling Products and Services through Personalized Marketing

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Abstract.

Marketing is considered as one of the promoters and the main catalyst of the development of the enterprises, system and the state in general in the economic context, while the third millennium is presented with globalization unseen of world economics with particular emphasis on world markets and extreme competitiveness.

Marketing is a very broad concept and as such it focuses on identifying the specific concept or policy and activities that are relevant to the sale of products and services. The competitiveness and uncompromising fight for the markets respectively for each consumer has become even tougher by not selecting the place, time, forms, policies, tools and people to achieve their objectives, to position themselves in the target markets and to add their income. Personalized marketing is one of the most specific concepts which is presented as hope for a better future for the sale of products and services.

The purpose of this paper is to present the trend of the application of personalized marketing by national companies, highlighting the specifics of the application of personalized marketing as a concept of the future for the sale of products and services.

Personalized marketing or one-to-one marketing is the relationship marketing between the business and the consumer that promises to add value to the customer base, thus creating relationships and communication for all needs, demands and wishes so that the business can customize the product or service to meet those needs, demands and wishes. Therefore, each business company to implement personalized marketing must identify clients and consumers for their contacts, their attributes, for their habits, traditions, cultures and preferences for products and services.

Keywords: marketing, sales, product, personalized, one to one, customer.

1. Introduction

Although the third millennium has marked a turning point in the development of information technology, especially the development of social networks, while on the other side, competition has become relentless, fighting for even one consumer, pushing us to be as creative as possible to develop new concepts and/or to get the best practices from economically highly developed countries such as the EU and the USA. Therefore, in this way, the expectations of consumers have changed to a large extent, especially from the beginning of this millennium, when access to the product and for the product was the key to penetrate or position itself in the markets. This environment has pushed many companies to develop the conceptual creativity of a personalized marketing, identifying the consumer's desire to own a product that carries a personal signature that stands out. Thus, personalized marketing is the act of designing and producing products and services to resonate with consumer preferences. Sales organizations are being "reinvented" to better address the needs of the changing market place [1].

Service content and products that are tailored to customer preferences can reduce customer fatigue and time to make choices thereby reducing their cognitive load. Personalized marketing, focusing on new-age technologies that include artificial intelligence, big data, blockchain, the Internet of Things, and devices is encouraged to explore new ways to curate personalized experiences online and offline channels. Marketers discover this hidden need and the concept of personalization over with the development of technology development. The definition of the word "customization", according to the Oxford dictionary, is "the act of designing or producing something to meet one's individual requirements". Personalization is a way to recognize the uniqueness of each customer by satisfying them with products that are tailored to their preference [2]. Personalized marketing, otherwise One-to-one marketing advocates tailoring one or more aspects of the firm's marketing mix to the individual customer [3].

Therefore, to carry out this research, we used the data panel for 20 businesses operating in the Kosovo market.

In the explicit form in this research, we have posed three research questions:

RQ1: What are the attitudes of companies regarding the knowledge and use of personalized marketing?

RQ2: If you know about personalized marketing

RQ3: in what form have you customized your products or services.

2. Literature review

The paper contains the reviewed literature on the application of the personalized marketing concept of the companies in Kosovo for products and services, as well as the trend of the evolution of consumer knowledge about personalized marketing and the impact of personalized marketing on the purchase of products and services, therefore it is researched literature with different points of view, by different authors.

1. The Importance of Personalized Marketing

Personalized marketing, also known as one-to-one marketing, uses data collection, analysis and automation technology for companies to deliver individualized content to recipients. Further, personalized marketing is an important component of the marketing mix, wherein each customer is served using customized marketing strategies [4]. It's important because it improves the customer experience while maintaining consistency and cohesion across all channels, leading to

stronger brand loyalty and ultimately increased revenue. Today, personalization is more important than ever, as customers access content from multiple channels. Sometimes, users feel overwhelmed with information and won't bother to pay full attention. However, when people view their name, this personalized content can capture their interest. Personalized content is effective because it speaks directly to your customer. From this circumstance, many companies have developed the creative concept of personalized marketing, identifying the consumer's desire to own a product that bears a personal signature that stands out. Personalized marketing is the implementation of a strategy by which companies deliver individualized content to recipients through data collection, analysis, and the use of automation technology [5].

Therefore, personalized is the design of the production of marketing products and re personalized marketing, also known as one-to-one marketing or individual marketing, is a marketing strategy by which companies leverage data analysis and digital technology to deliver individualized messages and product offerings to current or prospective customers. Advancements in data collection methods, analytics, digital electronics, and digital economics, have enabled marketers to deploy more effective real-time and prolonged customer experience personalization tactics in order with its preferences [6].

Product content and products that are tailored to customer preferences can reduce customer fatigue and place, thereby it reduces familiarity. Marketers discovered this hidden need and the concept of personalization grew with the spread of technological advancement. Marketers discovered this hidden need and the concept of personalization sprouted with the spread of technological advancement.

The definition of the word "customization", according to the Oxford dictionary, is the act of designing or producing something that meets someone's individual requirements". In this regard, personalization is a way to recognize the uniqueness of each customer by satisfying them with products that are tailored to their preference.

Personalized marketing, also known as one-to-one marketing, advocates tailoring one or more aspects of the firm's marketing mix to the individual customer.

I.e. Personal marketing utilizes the personal data in order to match the consumers' needs or preferences with a specific product [7].

2. The benefits of personalized marketing

First, the most important thing is to understand the main benefits of personalized marketing and how it can help our businesses in the long run, it is distinguished in three components [8].

- *Improving customer experiences;*
- *Increasing brand loyalist;*
- *Driving revenue*
- *Improving customer experiences;*

For example, when they provide basic information during these processes, such as their name, city, or perhaps their birthday, in exchange for a discount code or special offer, that's personal customer data entering your arsenal.

- *Increasing brand loyalist;*

Businesses that dedicate the time and resources to implement successful personalized marketing strategies will achieve brand loyalty and customer satisfaction.

- ***Driving revenue;***

With the right information technology, marketers can identify which channels certain customers engage with the most, then this will automatically continue across other channels.

Personalization can also improve customer retention and brand affirmation. There are others benefits from Personalized Marketing strategies as [9]:

- Conversion
- Understanding of costumers
- Costumers engagement and feedback
- Social sharing and brand affinity
- Lead nurturing
- Costumer retention
- Higher revenue.

3. Personalized Marketing - The Future of Selling Products and Services

So, Personalized Marketing is the act of designing and manufacturing in ways that resonate with consumer preferences.

Service content and products that are customized according to customer preferences can reduce customer fatigue and time to make choices, thereby it reduces their cognitive load. Personalized marketing, focusing on new-age technologies that include artificial intelligence, big data, blockchain, the Internet of things, and devices is encouraged to explore new ways to curate personalized experiences online and offline channels.

Among the first of the application of personalized marketing which has started to apply this concept, is the transnational company Coca-Cola, which has reached all over the global markets.

Fig. 1. Coca Cola in cans and bottles with personalized names [10].

4. The challenges of personalized marketing

Personalized Marketing also faces various challenges respectively, businesses also face challenges with customer data when adopting personalized marketing strategies.

These challenges include:

- Lack of a unified view of the customer across the organization.
- Inability to utilize dynamic content.

- Data silos within an organization – especially between the sales and marketing departments.
- Privacy concerns about data [11].

5. Application of personalized marketing in Kosovo

Companies must personalize their experiences to keep up with the competition. Personalization is the key of success for organizations, and companies should expect to see more of it in the future. So personalization when done right allows messages to break through in a crowded landscape. Even in Kosovo, personalized marketing has begun to establish the first initiatives by prestigious Kosovar companies as well as by public figures of art or those who have contributed to issues of special interest to the community or the country.

I have identified three cases, examples that are giving very good results in local and international markets.

1. Comodita Home, Mattress
2. Stone Castle, Wine selected by the owner, Comentedand from Forbes Magazine
3. MB-face cream for women, public face from pop.

Fig. 2. Comodita mattress with the signature of the Italian footballer Francesco TOTTI [12].

Fig. 3. Stone Castle red wine, Gecaj Estate, Oven Choice [13].

Fig. 4. MB Mihrije Braha, Women's face cream [14]

3. Research Question – Survey

The survey was conducted in 20 companies through the main research questions. The answers and results of the research are presented further in this paper.

In the explicit form in this research, we have posed three research questions:

RQ1: What are the attitudes of companies regarding the knowledge and use of personalized marketing?

RQ2: If you know about personalized marketing

RQ3: in what form have you customized your products or service

4. Methodology

In this paper I used the quantitative and qualitative method as well as the use of data from primary and secondary sources.

The questionnaire was chosen as the source of primary data, which is the main instrument of this research paper. The questionnaire focuses on anonymous companies, which contains a total of 5 questions, all of which are closed questions so that the answers or results can be analyzed and presented more accurately.

In order to manage as best and as quickly as possible, the questionnaire was designed in google forms and distributed through e-mail and social networks, each time taking into account the independence and confidentiality of the data, while the secondary data is provided by the use of literature from different authors.

5. Commenting on the results

The results obtained from the survey support the research, namely our survey that the companies have declared on their activity, the structure of the operation, the application of the marketing strategy and plan, knowledge on personalized marketing, as well as in what form they have personalized their products and services.

The figures have the source of the results in the research done in 20 businesses in Kosova, as after research questions

Fig. 5. Participation of companies in the survey

In the graph mentioned above, the research shows a total of 20 companies, of which 12 companies with manufacturing activities and 8 companies with service activities have resulted, while expressed in %, it is 60% to 40%.

Fig. 6. Organizational structure in function with the marketing department

In the chart above, in the question of whether they have established a marketing department in their organizational structure, 20 companies also participated in the survey, while 14 companies answered, expressed in percentage 70% that they have established a marketing department, while 6 companies, corresponding to 30%, do not have an established marketing department in their companies.

Fig 7. Does the marketing department have: a plan, strategy and plan?

In Graph number 3, 14 companies that have an established marketing department, to the question of whether they have a plan and strategy or only a plan, the answer is: 10 companies, respectively 71%, have a plan and strategy, while 4 companies, respectively 29%, only have work plan.

Fig. 8. Companies that are aware of personalized marketing

In graph number 4, 14 companies are included in the question of whether they are aware of personalized marketing, the answer is: 9 companies, respectively 64%, are not aware, while 5 companies, respectively 36%, are aware of personalized marketing.

Fig. 9. Personalization of products and services

Graph 5 includes 5 companies that are aware and are applying personalized marketing, through which 5 companies personalize their products and services with the names of public, artistic and cultural figures, while no company has yet now they have not personalized their products and services with personal names, while they have declared to learn more about personalized marketing to apply this concept because the future of selling products and services is precisely with personalized marketing.

6. Conclusions

The future of selling products and services through personalized marketing is a concept of the future that claims to offer the market and consumers products and services with the personalization of consumer names, respectively with orders or clear messages for each consumer was based on their perceptions.

So, personalized marketing is a concept of this millennial, which focuses on the personal data of consumers to identify their behaviors, preferences, personal tastes and their positive perceptions, always keeping in mind the protection of privacy and confidentiality which are the challenges of this concept.

This research shows us that in Kosovo it is in the initial phase and there is a need to increase human capacities, training and research in the market.

7. Recommendation

Based on the development of this paper and the current situation in the market referring to the results of this research, we give the following recommendations to manufacturing and service enterprises:

- Increasing human capacities.
- Staff trainings for personalized marketing.
- Development of the sensitization campaign in the market related to personalized marketing.
- Creativity based on research and awareness campaign.
- Launching the pilot plan and applying the concept for personalized marketing.

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Does the Internal Auditor have an impact on Public Institutions? - Case study KRU "HIDRODRINI" SH. A, Peja

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Abstract

This study is an empirical analysis of the role of internal audit in an effective management control in public enterprises. It examines whether the effectiveness of the internal auditor plays a role in ensuring effective management in the public sector and whether the effectiveness of the internal auditor affects the increase in performance in the enterprise KRU "HIDRODRINI" SH. Ah, Peja.

The results obtained from the comparative analysis of the financial statements that we have done for five years show that the company has had an increase in the items that show that the performance of the company has increased over the years. Based also on the reports of the internal auditor of the Hidrodrini Company, we can conclude that the recommendations of the internal auditor implemented by the company in question have influenced the increase in the performance of the company in general. From the results of the comparative analysis, we found that the increase in performance of the company is increased by the auditor's recommendations and opinions.

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Keywords: Internal Audit, Public Enterprises, Performance, KRU "HIDRODRINI".

15 Introduction

Internal auditing is internationally recognized as a profession with a number of common elements and a set of recognized professional standards. The practice of internal auditing has been developed over a long period of time.

Internal auditing is an independent activity through which the management and control of a business or activity is ensured, it ensures that the activity uses money in the most effective way and ensures the improvement of the activity of the audited entities to improve the use of assets, assess the risk, increase the business performance, the surveillance systems and especially those of the management of the activity.

Internal auditors are qualified professionals according to the requirements established by law, they today play an important and decisive role in the protection of the public interest, they have an irreplaceable role in the use of public money and the maintenance of a genuine public financial system. What has made this profession take the importance and proper evaluation has been the rapid global development of the last years, where it has shown how powerful a process and with great potential the audit is and how I can influence the management of finances.

Concept of Internal Control System

The management of the organization has the responsibility of creating the internal control system so that the operations of its activities are in an efficient and well-regulated way [1]. That is, a good internal control system increases the efficiency of the organization. On the other hand, [2] has defined the internal control system as "a whole system of controls, financial and various, which is created by the management in order to carry out the business of the enterprise in an orderly and efficient manner, ensure compliance with management policies, preserve assets and ensure as much as possible the completeness and accuracy of data". Also, the Institute of Internal Auditors has defined internal control as "any action undertaken by management, the board and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved.

The role of the internal auditor in the enterprise

The starting place for internal auditing theory is the definition of internal auditing. A standard definition consists of important issues that form the basic framework of the principles of internal auditing, where the divergence of interpretation of the role of auditing is explored in terms of how we can in practice use internal auditing, standing slightly apart from standard definition [3].

Audit services as an important link in the reporting processes of financial business and corporations and non-profit providers [4]. Auditors play a key role in monitoring a company's risk profile

and in areas of risk identification [5]. The system is to audit organizational efficiency and effectiveness through what is known as constructive criticism.

The basic role that should be the audit is to manage its management.

Institute of Internal Auditors (IIA, 1999a) and defined internal auditing as: *“an independent, objective assurance and consulting activity designed to increase the value and improve the operation of an organization. Such an objective and its objectives by bringing such a disciplined system to determine the effectiveness of risk management, control and governance processes.”* [6]

Compliance with the principles set out in a mandatory guideline is necessary and essential for the professional practice of internal auditing. The mandatory guidance is developed following a defined due diligence process, which includes a public exposure period for input from interested parties. The mandatory elements of the IPPF are:

- Basic Principles for the Professional Practice of Internal Auditing
- Code of Ethics
- Standards
- Definition of Internal Audit

The Definition of Internal Auditing expresses the basic objectives, nature and scope of internal auditing. The main components of this definition are listed here and discussed in order below:

1. Helping the organization to meet its objectives
2. Evaluation and improvement of the effectiveness of risk management, control and
3. Governance processes [7].

The role of internal auditors in the effective management of the enterprise

Recently, due to the increase in size and operation of business organizations, the need for Internal Auditors has become more important [8].

Internal audit is effectively checking whether it fulfills the intended result it is supposed to bring. [9] states, the work of the internal auditor is not done until the defects are corrected and remain corrected. Then the author [10] explains that the effectiveness of internal audit in the public sector should be evaluated by the degree to which it contributes to the demonstration of effective and efficient service delivery, as this drives the demand for improved audit services. internal. Based on the results of a consultative forum that focused on improving public sector internal audit, [10] identified perceptions and ownership, organization and governance framework, legislation, improved professionalism, conceptual framework, and also resources as factors affecting the effectiveness of internal audit [11].

Effective body auditing can also protect the firm from breaches of good that can work on its strong performance. Effective and efficient audit function helps to improve shareholder values [12]. An internal audit function is effective in improving the firm's financial performance [13].

The primary objective of internal auditors

Professional independence, the Internal Auditor of the examination systems of accounting and procedures of administrative policies in order to verify the actions, according to the plan and of any deviation from the other side. The auditor aims to prevent errors and actions and manipulations in the books and control and internal control with the aim of improving and improving the improvement of its changes and improvements. [14]

Internal auditing in the public sector

To understand the role and capabilities of internal audit within the public, one must understand the evolution as an audit professional and the challenges facing this sector and the role of internal audit. Traditionally, internal audit actions in the public sector have previously been corrected in the financial control review or (financial audits). But then it focuses on auditing the organization of various processes. However, over the past two decades, the focus of auditing has shifted to the analysis of the economic and efficient use of public resources.

Public sector audit in the public sector by:

- Ministry of Finance:
- Internal audit committee:
- General Directorate of Audit:
- Internal audit units at the audited entities, according to the definition provided by law [15].

Scope of implementation of internal Audit

Internal auditing is applied to all public sector institutions, whose activity relies on public (state) property and which, during operation, use funds from the state budget or from international organizations, or funds obtained in the form of co-financing.

The field of application of internal audit includes all central government institutions, local government bodies, independent institutions and commercial companies, or any other form, including financial ones, where state capital is over 50% [15]. Although auditing is an international profession, different countries, and jurisdictions within the language, have environments and cultures of regulations that have the nature and operation of internal auditing. Likewise, the composition of the public sector, also referred to as public service or civil service, varies, even within language. Understandable then, view of public sector governance as well. This has an impact on the functioning of internal audit, and the configuration, role and creation of an internal audit.

Auditing is an independent activity, the objective of assurance and consultation, designed to add value and act in an organization. He an objective of its objective by bringing such a disciplined system to determine and the effectiveness of risk, management, control and governance processes [16].

The management of the national economy today is more complex and requires more competition from the real auditors and if it will do real in the state of the government to ensure that the scarce resources are distributed more efficiently and also face effectively for me. connected [17].

The main elements of an effective public sector audit activity

Internal audit should assess the risk exposure related to the governance, operations of the organization/unit and the information system in relation to:

- Reliability and integrity of financial and operational information;
- Effectiveness and efficiency of operations;
- Preservation of property; AND
- Compliance with laws, regulations and contracts. Reliability and integrity of financial and operational information.

Reliability and integrity of financial and operational information - Integrated auditors reassess the reliability and integrity of financial and operational information and the resources necessary for it: determination, maturity, classification and reporting of the information obtained.

Effectiveness and efficiency of operations - Internal auditors must evaluate the economy and efficiency of their resources. They should review the programs in order to determine the outcome extended to their goals and their objectives to reach their programs that are implemented or performed as expected.

Asset Safeguarding - Internal auditors should re-evaluate the ways and adequacy of asset safeguarding and verification of their assets.

Compliance with laws, regulations and contracts - Government auditors must re-evaluate the systems in place to deliver important policies, assurances, procedures, rules, laws and contracts. Compliance can have such an impact on operations and reports. By reassessing a company's established systems that the company is in compliance with laws, regulations and contracts as a whole [18].

Characteristics of Internal Audit

It is important to note that the size of the audit committee, independence of the audit committee, auditor qualification and auditors experience impact on the size of the firm.

Size of the Internal Audit Committee

When it comes to the most important factors of the audit committee, the size of the committee is considered as an important factor of internal audit. It is measured by the total number of members who are affiliated with the organization's audit committee [19]. Audit committees usually bridge the communication gap between stakeholders such as internal auditors, external auditors and the board of directors mainly during activities that occur within the company such as the appointment of auditors, review of the scope of internal audit and external and reporting the financial position that the firm has. [20]

Although it is an important component of internal auditing, very few researches have used this variable as a characteristic of internal auditing.

Independence of the Audit Committee

The independence of the audit committee is also one of the most important characteristics of internal auditing. The audit committee is said to have at least three directors. The ratio of non-executive directors should be 2/3 of the total members of the audit committee. Non-executive directors play an important role in ensuring good auditing practices to influence firm performance [21].

The public audit medium is changing, with greater access to public information via the Internet now widespread, but declining interest in traditional news media and a shift within the news media toward more opinion pieces and reduced direct coverage of news [22].

METHODOLOGY

This part presents the methods that were used during the study to analyze and interpret the collected data. It also provides information about data collection methods and instruments, as well as the procedures and processes followed during data collection.

After examining the impact of the role of the internal auditor in public enterprises, through a comparative analysis of the financial statements, we will compare the revenues, expenses, assets, liabilities and capital as they have changed over the years in the Hidrodrini enterprise also from the reports provided by the internal auditor of the Hidrodrini enterprise and its opinions during an interview with him we will show how the internal auditor's recommendations have influenced the enterprise's performance. The empirical data that was used to make the financial analysis of PF in the Hidro Drini company covers the period from 2017 to 2021 (5 years), while the source of data for the realization of this scientific research was the Hidrodrini company itself.

RESULTS

As a case study, we have chosen the Institution KRU "HidroDrini" SH. Ah, Peja. From this certainty, I managed to secure the statements and financial reports for which we will do the comparative analysis.

Comparative analysis

Incomes

Table 1. Income for the years 2017-2018

2017	2018	
4,219,996.00	4,224,008.00	
The change in euros from 2017-2018		€ ↑ 4,012.00
Change in % from 2017-2018		100%
COMMENT	The reason why this increase happened is because we have a profit carried over from the previous year, also in 2018 there was an increase in LL/A.	

Table 2. Income for the years 2018-2019

2018	2019	
4,224,008.00	4,441,489.00	
The change in euros from 2018-2019		€ ↑ 217,481.00
Change in % from 2018-2019		105%
COMMENT	The reason for the increase in income is because we have a loan scheme to pay for 2019 and we have a profit carried over from the previous year.	

Table 3. Income for the years 2019-2020

2019	2020	
4,441,489.00	4,989,892.00	
The change in euros from 2019-2020		€ ↑ 548,403.00
Change in % from 2019-2020		112%
COMMENT	The reason for the increase in income in 2020 is because we increased LL/A and have a profit carried over from the previous year.	

Table 4. Incomes for the years 2020-2021

2020	2021	
4,989,892.00	5,247,650.00	
The change in euros from 2021-2021		€ ↑ 257,758.00
Change in % from 2020-2021		105%
COMMENT	The reason for the increase in income is because we have increased the following investments and there has been an increase in the company's money.	

Expenses

Table 5. Expenses for the years 2017-2018

2017	2018	
4,193,032.00	4,188,805.00	
The change in euros from 2017-2018		€ ↓ (4,227.00)
Change in % from 2017-2018		100%
COMMENT	The reason why this reduction in expenses happened is because in 2018 there was no provision for bad debts	

Table 6. Expenses for the years 2018-2019

2018	2019	
4,188,805.00	4,194,100.00	
The change in euros from 2018-2019		€ ↑ 5,295.00
Change in % from 2018-2019		100%
COMMENT	The reason for the increase in expenses is that in 2019 administrative expenses, LL/P as well as deferred income increased	

Table 7. Expenses for the years 2019-2020

2019	2020	
4,194,100.00	4,662,625.00	
The change in euros from 2019-2020		€ ↑ 468,525.00
Change in % from 2019-2020		111%
COMMENT	The reason for the increase in expenses in 2020 is because deferred income as well as commercial and other payments have increased	

Table 8. Expenses for the years 2020-2021

2020	2021	
4,662,625.00	4,767,931.00	
The change in euros from 2021-2021		€ ↑ 105,306.00
Change in % from 2020-2021		102%
COMMENT	The reason for the increase in expenses in 2021 is because LL/P as well as personnel expenses have increased.	

Assets

Table 9. Assets for the years 2017-2018

2017	2018	
37,725,185.00	44,886,274.00	
The change in euros from 2017-2018		€ ↑ 7,161,089.00
Change in % from 2017-2018		119%
COMMENT	The reason why there was an increase in assets was because in 2018, in the part of short-term assets, there was an increase in cash and its equivalents, LL/A, and also in 2017 there were no further investments, while in 2018 they were 1,421,850 which made wealth increase in 2018.	

Table 10. Assets for the years 2018-2019

2018	2019	
37,725,185.00	44,886,274.00	
The change in euros from 2018-2019		€ ↑ 7,161,089.00
Change in % from 2018-2019		119%
COMMENT	The reason for the increase in assets in 2019 was that there was an increase in money and its equivalent, which is increasing more, there were further investments, which made the share of assets increase in 2019.	

Table 11. Assets for the years 2019-2020

2019	2020	
44,886,274.00	51,201,211.00	
The change in euros from 2019-2020		€ ↑ 6,314,937.00
Change in % from 2019-2020		114%
COMMENT	The reason for the increase in wealth in 2020 was that there was a large increase in the following investments.	

Table 12. Assets for the years 2020-2021

2020	2021	
51,201,211.00	55,863,410.00	
The change in euros from 2021-2021		€ ↑ 4,662,199.00
Change in % from 2020-2021		109%
COMMENT	The reason for the increase in Assets in 2021 has been that there is an increase in money and its equivalent, as well as a large increase in future investments.	

Obligations

Table 13. Obligations for 2017-2018

2017	2018	
12,336,110.00	17,292,485.00	
The change in euros from 2017-2018		€ ↑ 4,956,375.00
Change in % from 2017-2018		140%
COMMENT	The reason why there has been a strong increase is that they have increased in deferred and there has also been a significant increase in others.	

Table 14. Obligations for 2018-2019

2018	2019	
17,292,485.00	24,239,932.00	
The change in euros from 2018-2019		€ ↑ 6,947,447.00
Change in % from 2018-2019		140%
COMMENT	The reason for the increase in liabilities in 2019 was that there was an increase in LL/P as well as deferred income.	

Table 15. Obligations for the 2019-2020

2019	2020	
24,239,932.00	30,227,602.00	
The change in euros from 2019-2020		€ ↑ 5,987,670.00
Change in % from 2019-2020		125%
COMMENT	The reason for the increase in liabilities in 2020 was that there was a reduction in the loss carried forward and the income increased.	

Table 16. Obligations for the 2020-2021

2020	2021	
30,227,602.00	34,442,808.00	
The change in euros from 2021-2021		€ ↑ 4,215,206.00
Change in % from 2020-2021		114%
COMMENT	The reason for the increase in Liabilities in 2021 was that there was an increase in eferred income as well as commercial and other payables.	

Capital

Table 17. Capital for the years 2017-2018**Table 18.** Capital for the years 2018-2019

2017	2018	
20,276,092.00	20,432,699.00	
The change in euros from 2017-2018		€ ↑ 156,607.00
Change in % from 2017-2018		101%
COMMENT	The reason why there was an increase in Capital is that in 2018 we had a decrease in retained earnings.	

Table 19. Capital for the years 2019-2020

2019	2020	
20,646,342.00	20,973,609.00	
The change in euros from 2019-2020		€ ↑ 327,267.00
Change in % from 2019-2020		102%
COMMENT	The reason why there was an increase in capital is that in 2020 there was a decrease in income and the loss carried forward was reduced.	

2018	2019	
20,432,699.00	20,656,342.00	
The change in euros from 2018-2019		€ ↑ 223,643.00
Change in % from 2018-2019		101%
COMMENT	The reason why there was increase in Capital is that in 2019 there was an increase in income and the retained profit decreased.	

Table 20. Capital for the years 2020-2021

2020	2021	
20,973,609.00	21,420,602.00	
The change in euros from 2021-2021		€ ↑ 446,993.00
Change in % from 2020-2021		102%
COMMENT	The reason for the increase in Capital in 2021 was that there was an increase in income and a decrease in the loss carried forward.	

The results obtained from the comparative analysis of the financial statements that we have done for five years show that the company has had an increase in the items that show that the performance of the company has increased over the years. Based also on the reports of the internal auditor of the Hidrodrini company, we can conclude that the recommendations of the internal auditor implemented by the company in question have influenced the increase in the performance of the company in general. From the results of the comparative analysis, we found that the increase in performance of the company is increased by the auditor's recommendations and opinions.

During the audit done for PFV, we have noticed some areas where possible improvements are needed, about financial management and Control in Hidrodrini enterprise. Obvious weaknesses have been observed in important financial areas such as: Revenues, weaknesses in the management of receivables, failure to correctly present contingent liabilities in the PFV, misclassification of expenses in inadequate categories, as well as weaknesses in asset management, including control internal.

From many results of other authors and from the results of our research, we have come to the conclusion that AB has an impact on the management of finance authors, such as [17]; [16] have come to the conclusion that the management of finances in the public sector is a very complex process. The need for good governance and government accountability that will demonstrate more the impact of the auditor and all of it in the function of public funds and efficiency in the crime of services. Therefore, the knowledge of AB, financial management in public enterprises today requires more competence and professionalism from internal auditors if you are going to be able to govern to ensure that the scarce resources are distributed more efficiently.

The government auditor with his recommendations and opinions plays an important role in the effective management of public money as well as improving performance. We have managed to secure the recommendations of the AB in the Hidrodrini enterprise, and through these recommendations have been implemented by this enterprise.

Table 21. Recommendations of the Internal Auditor for the years 2017-2021- "Institution KRU "HIDRODRINI" SH. A, Peja"

Year of recommendation	Implemented	Not implemented	Total
2017	9	5	14
2018	11	8	19
2019	9	8	17
2020	6	7	13
2021	8	6	14

Table 22. Enterprise performance for the years 2017-2021-"Institution KRU "HIDRODRINI" SH. A, Peja"

Years	2017	2018	2019	2020	2021
Production (m3)	25,659,967	25,336,310	25,024,278	24,881,385	24,854,111
Invoiced (m3)	9,266,841	10,031,334	10,311,374	10,289,074	10,769,955
Loss %	62%	60%	58.80%	58.58%	57%
Expenses (euro)	2,448,283	2,501,846	2,549,860	2,577,415	2,929,290
Employment rate	1.21	1.30	1.47	1.50	1.70

The results of the empirical research that we have done suggest that the internal auditor has an impact on improving the performance and financial management of public enterprises. From the results of the comparative analysis, we found that the increase in the company's performance is increased by the auditor's recommendations and opinions. From the table of recommendations we see that there are many recommendations over the years that have not been implemented by the company, some have been implemented and some have been completed, we recommend the management of Hidrodrini to implement the given recommendations so that the same recommendations not be repeated in the following years.

CONCLUSIONS AND RECOMMENDATIONS

Internal auditing is an independent activity that provides objective assurance and an advisory activity designed to add value to and improve the operations of an organization. Internal auditing helps the organization to meet its objectives, promoting a systematic approach to evaluating and improving effectiveness in various aspects such as risk management, controls and governance

processes. Rapid change in business conditions, their growth, size, etc. has created the need for control by ensuring that this control is as effective as possible and that the risk is properly disclosed. The auditor maintains the independence as well as the objectivity of the internal audit in evaluating the effectiveness of controls, risk management and governance processes. When it comes to the PF of organizations, it is worth noting that the effective use of financial statements requires readers to understand the roles of those who are responsible first for the preparation of the PF and then also the audit of the financial statements. Financial statements are known to be the responsibility of management. When we use management statements, the user must acknowledge that in fact the preparation of these statements requires management to make significant accounting estimates, and must determine between several alternative accounting principles and methods that are appropriate in accounting, and generally accepted as standards.

Through the comparative analysis, we have made comparisons of the financial statements of the Hidrodrini company, where we have specified some items such as income, expenses, assets, liabilities and capital. Through this analysis we come to some conclusions about why there has been an increase or decrease in voices over the years. From the data provided, we come to the conclusion that for the Hidrodrini company, the auditor plays a very important role and has an impact on the Institution's performance. Of course, comparing the financial statements for 5 consecutive years and analyzing the Auditor's recommendations for the 5 years in question, it turns out that the auditor in this institution has an influence on the performance of his performance.

Recommendation

We recommend the Board of KUR Hidrodrini to ensure that:

- I attach the greatest importance to addressing the recommendations given by the internal auditor. In this sense, to prepare a related action plan for a certain time, with concrete actions and with certain responsibilities for addressing it.
- It is recommended by the working staff to pay attention to the importance of the auditor in the Institution-For this, it is recommended to hold more workshops in public institutions.
- And because the approval of the auditor's recommendations for the Institutions is increasing, it is recommended to carefully review these recommendations by the staff and to implement them all in time.
- In order to increase the efficiency in the work and more of the impact of the auditor's work, it is recommended first to see if the preliminary recommendations have been implemented, then to give the new recommendations if there are.

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The Impact of Digital Economy and Industrial Structure on Green Total Factor Productivity in China

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Abstract: The digital economy is a new driving force and engine of industrial transformation and economic development to improve quality and efficiency. This paper focuses on the green value of the digital economy. Based on measuring urban green total factor productivity (GTFP) through the SBM model, using panel data of 281 prefectural-level cities in China from 2011-2019, to examine the impact of the digital economy on GTFP and its underlying mechanisms in a multi-dimensional manner using high-dimensional fixed effects, mediating effects, threshold effects, and double-difference models. The study finds that the digital economy can directly promote GTFP and release GTFP dividends through the rationalization and advancement of industrial structure. This conclusion still holds after robustness tests such as selecting historical data as instrumental variables and "smart city" pilots as quasi-natural experiments. Further research finds that the digital economy can better promote GTFP in declining, regenerative, and non-resource-based cities. Threshold regression results verify the nonlinear effect characteristics of the digital economy.

Keywords: digital economy; industrial structure; green total factor productivity; smart city

JEL Classification: O13; O33; Q56

1. Introduction

The digital economy has become a key force in restructuring global factor resources, reshaping the global economic structure and reconfiguring the global competitive landscape due to its unprecedented development speed, radiation and depth of influence. China's digital economy reached \$39.2 trillion in 2020, accounting for 38.6% of GDP. Meanwhile, green development oriented to improve GTFP is an inevitable choice to resolve the contradiction between economic growth and resources and environment and achieve high-quality economic development. So, can the digital economy contribute to GTFP? Is there a linear relationship for this effect if the answer is yes? How to effectively unleash the power of the digital economy to boost GTFP? Is there heterogeneity in the impact of the digital economy on GTFP? Answering these questions is significant for releasing the green value of the digital economy, optimizing industrial structure, and promoting GTFP. Early studies on the digital economy focused on conceptual definition (Vial, 2019), development trends (Lyytinen et al., 2016), industry characteristics and theoretical challenges (Teece, 2018), and a few scholars used empirical studies to measure the economic benefits from specific information technology applications (Chalfinet al., 2016). As the digital economy has gradually become the most active field in China's economic development (Zhao et al., 2020), researchers have shifted their focus to aspects of the digital economy, such as value creation and release. At the macro level, the researches include "economic volume growth" (Corbett, 2018), "innovation model evolution" (Mullainathan & Obermeyer, 2017), "economic geography reshaping" (Elhorst, 2012), "green total factor productivity" (Chalfinet al., 2016). Meso-level studies comprise "industrial structure upgrading" (Yao, 2022), "industrial organization innovation" (Kuhn & Skuterud, 2004). Micro-level researches are on "production efficiency improvement"

(Ferreira et al., 2019), "capital market performance" (Wu et al., 2021), "corporate management change" (Ghasemaghahi & Calic, 2019), etc. In the area of GTFP, researchers mainly focus on the perspectives of "focus point", "mechanism interpretation", and "theoretical connotation" (Ke & Lin, 2016). However, most of the existing studies are qualitative studies on the relationship between the digital economy and GTFP, and there is a lack of empirical studies on the release of the green value of the digital economy and its mechanism. Few kinds of literature explore the impact of the digital economy on GTFP from the perspective of industrial structure upgrading, and even fewer empirical studies include all three in the same framework.

In summary, the possible marginal contributions of this paper are mainly three. (1) The GTFP of Chinese cities is re-measured through a non-radial and non-angle SBM (Slack-Based Measure) model for non-desired outputs based on China's economic and social characteristics. (2) This paper deepens the existing literature by taking an industrial structure perspective, comprehensively assessing the industrial structure upgrading effect of the digital economy, and verifying the impact and mechanism of action of the digital economy on GTFP under a unified framework. (3) Considering China's current urban development situation, this paper analyzes the heterogeneous effects of the digital economy on GTFP in terms of city size and resource endowment and establishes a panel threshold model to explore the non-linear relationship between the digital economy and GTFP. Furthermore, this paper also conducts an exogenous shock test with the help of a "smart city" pilot, which improves the robustness.

This paper explores the role of the digital economy on GTFP from the perspective of industrial structure upgrading and proposes the following research hypotheses to be tested by constructing a theoretical framework.

1. *Direct mechanism of the digital economy to promote GTFP*

With digital technology as the core driving force, the digital economy can directly promote changes in the dynamics, efficiency and quality of economic and social development through artificial intelligence, big data, cloud computing and other new-generation information technologies. Specifically, at the macro level, digital technology enhances eco-environmental governance by transforming the inputs and outputs of traditional factors of production, which in turn improves the efficiency of the combination of green factors of production and increases GTFP. At the micro level, market players can rely on digital technology to form new division of labor and production methods, greatly improving the innovation efficiency and pollution control capabilities of enterprises in the entire production process.

Hypothesis 1: The digital economy can promote GTFP.

1.2. *Indirect mechanism of the digital economy to promote GTFP*

The digital economy has the unique advantages of high innovation, intense penetration and comprehensive coverage. It can form an economic environment conducive to industrial upgrading with economies of scale, scope and long-tail effect. Through digital technology, China's traditional industries and industrial chains can be transformed. The new engine of the digital economy can enable the transformation and upgrading of traditional industries and adjust China's labour-intensive and heavy industry-based industrial structure to a rationalized advanced stage. Upgrading industrial structure means that production factors flow to sectors with high productivity or growth rates and generate "structural dividends". And it can optimize the efficiency of social resource allocation and environment, balance the distribution of production factors in each segment, and ultimately increase the total urban output.

Hypothesis 2: The digital economy can promote the GTFP of Chinese cities by facilitating upgrading their industrial structure.

1.3. *Non-linear effects of the digital economy on GTFP*

The digital economy embodies an industrialized and market-oriented information technology revolution compared with the traditional economy. And its development is governed by Metcalfe's Law, Moore's Law and Davidoff's Law, which determines the characteristics of the digital economy of increasing marginal returns and decreasing marginal costs. Specifically, in the early stage of China's digital economy, the digital infrastructure construction was not perfect, and the "digital dividend" could not be effectively brought into play. With the iterative upgrading of digital technology, the transaction cost of interaction between economic agents decreases, the marginal cost of digital technology research and development also decrease, and the scale reward of market agents keeps increasing. The economic benefits of innovation and environmental improvements grow geometrically, and the GTFP of cities can be rapidly enhanced. When the rationalization and heightening of the industrial structure reaches a certain level, the economic and social environment conducive to the role of the digital economy will also gradually take shape. The effect of digital technology on GTFP boosts shows a marginal incremental state. Thus, it follows that the digital economy can only give full play to its boosting effect on GTFP if it is closely integrated with the upgrading of industrial structure.

Hypothesis 3: The digital economy has a non-linear characteristic of "increasing marginal effect" on GTFP. This "non-linear characteristic" is influenced by the development of the digital economy and the upgrading of industrial structures.

2. Methodology

2.1. Model building

To test the research hypothesis proposed above, first, we construct the following basic model for the direct mechanism of action of the digital economy affecting GTFP.

(1)

In equation (1), $GTFP_{i,t}$ represents the level of GTFP of city i in period t ; $Dig_{i,t}$ represents the level of digital economic development of city i in period t ; $X_{i,t}$ represents a set of control variables; α_0 represents the intercept term; α_1 represents the estimated parameters of the core explanatory variables; μ_i represents the individual fixed effect that controls city i from changing over time; δ_t represents the time fixed effect, and $\varepsilon_{i,t}$ is a random disturbance term.

To test whether industrial structure upgrading ($Isu_{i,t}$) plays an intermediary role in the process of digital economy promoting GTFP. Firstly, based on α_1 passing the significance test in model (1), the linear regression models (2)(3) of the digital economy on industrial structure upgrading and digital economy and industrial structure upgrading on GTFP are constructed respectively. Secondly, the significance of β_1 , γ_1 and γ_2 are used to judge whether industrial structure upgrading plays an intermediary effect respectively, and set the specific form of the above model as follows:

(2)

(3)

According to the above theory, based on the analysis of the mediating effect of industrial structure upgrading, to further explore the non-linear dynamic impact of the digital economy and industrial structure on GTFP, the following panel threshold effect model is set using Hansen's (1999) approach.

In equation (4)(5), $Isu_{i,t}$ and $Dig_{i,t}$ denotes the threshold variables of the digital economy and industrial structure development, θ is the threshold value to be estimated, and $I(\cdot)$ is the indicative function that takes the value of 1 when the corresponding condition is proper and 0 otherwise. The sample is divided into two intervals according to whether the threshold variable is greater than the threshold value. And as in equation (1) interpret other variables.

2.2. Variable measures and descriptions

1. Explained variable: GTFP level

This paper draws on the study of Tone K (2010) to construct the Slacked-Based Measure (SBM) directional distance function to estimate GTFP. We build the SBM directional distance function with land, capital stock, labor, water, and energy as input indicators (Wei et al., 2019). GDP and industrial triple waste (industrial wastewater emissions, industrial SO₂ emissions, industrial SO₂ emissions, and industrial soot emissions) as the SBM directional distance functions of desired and undesired outputs.

2. Core explanatory variable: level of digital economy development (Dig)

The article draws on existing studies that combine city-level data to comprehensively measure the level of digital economy development in cities from two perspectives: the level of Internet development and the level of digital financial inclusion. Among them, the level of Internet development includes four indicators: the level of Internet-related output, the number of Internet-related employees, the Internet penetration rate, and the number of mobile Internet users. The development of inclusive digital finance uses the China Digital Inclusive Finance Index jointly compiled by the Digital Finance Research Center of Peking University and Ant Financial Services Group (Guo et al., 2020). After standardizing the data, this paper's comprehensive index of digital economy development was calculated by the entropy method and linear weighting.

3. Mediating variable: industrial structural upgrading (Isu)

Rationalization and advanced industrial structure are two necessary processes in the transformation and upgrading of industrial structure, which jointly promotes the optimization of industrial structure. In this paper, based on the industrial structure hierarchy coefficient method, from the perspective of "quality" and "quantity", the following formula portrays the advanced industrial structure (Asp).

(5)

In equation (5), $y_{i,m,t}$ indicates the proportion of the industry of city i in period t , which is the connotation of "quantity" of the advanced industrial structure. The definition of "quality" of advanced industrial construction is the weighted value of the proportional relationship between industries and the product of labor productivity ($lp_{i,m,t}$) of each sector. The specific formula of labor productivity is as follows:

(6)

In equation (6), $Y_{i,m,t}$ represents the value-added of industry m of the city i in period t , and $L_{i,m,t}$ represents the employed persons in industry m of the city i in period t . It is worth noting that labor productivity needs to be dimensionless utilizing averaging.

The rationalization index of industrial structure (Rsp) concentrates on the coordination ability between industries and the degree of effective utilization of resources. This paper uses the inverse of the Thiel index to measure the rational level of industrial structure, and the Thiel index is calculated as follows:

(7)

In equation (7), the meaning of $y_{i,m,t}$ is the same as equation (5), $l_{i,m,t}$ indicates the proportion of employed persons in the m industry of city i to the total employed persons in period t . The industrial structure Thiel index ($TL_{i,t}$) is an inverse indicator $Rsp=1/TL$, the larger the TL value is, the higher the degree of irrational industrial structure is.

4. Control Variable

With reference to existing studies (Zhao et al., 2020; Lee & Yu, 2014), the control variables in this paper include (1) the level of economic development ($\ln Pgd$); (2) foreign investment ($Pfdi$); (3) fixed asset investment ($Pfai$); (4) the level of transportation (Ptb); (5) population size ($\ln Peo$); (6) government expenditure (Gov); (7) the level of financial development (Fia).

2.3. Data source

This paper examines the data of 281 Chinese prefecture-level cities from 2011-2019, with relevant data from the China Urban Statistical Yearbook and the China Urban Construction Statistical Yearbook, and energy data from the China Environmental Statistical Yearbook, with missing values made up by looking up the corresponding provincial and prefecture-level city statistical yearbooks and statistical bulletins.

3. Results

3.1. Benchmark regression results

Table 1 indicates the results of the benchmark regression of digital economy development on GTFP, in which columns (1)(2), the estimated coefficient of digital economy development (Dig) is significantly positive, which indicates that the development of the digital economy can contribute substantially to GTFP at the city level in China. Columns (3)(5) show the mediating effect of industrial upgrading, and both estimated coefficients pass the 10% significance test, indicating that the digital economy can significantly contribute to industrial upgrading in China. Columns (4)(6) add the digital economy and industrial upgrading indicators together into the regression equation, and the regression results of Dig are smaller than the estimated coefficient without industrial upgrading (0.099), verifying that the partial mediating effect of industrial structure upgrading. The digital economy can promote GTFP by optimizing China's industrial structure. The indirect impact of industrial structure rationalization is more significant than industrial structure upgrading. To further verify the robustness of the intermediation mechanism test, we use the Sobel test and Bootstrap to test the intermediation effect of industrial structure upgrading. The Sobel Z-value, Goodman-1 (Aroian) Z-value, and Goodman-2 Z-values corresponding to the p-value are significant at the 5% level to reject the original hypothesis. And Bootstrap's test results under different sampling numbers show that the 95% confidence interval of the regression does not contain zero, thus rejecting the original hypothesis. Therefore, industrial structure upgrading plays a mediating role in the impact of the digital economy on GTFP.

Table 1. Impact of the digital economy on GTFP and mechanisms

Variable	Gtfp (1)	Gtfp (2)	Asp (3)	Gtfp (4)	Rsp (5)	Gtfp (6)
Dig	0.129*** (0.021)	0.099*** (0.014)	0.257*** (0.025)	0.091*** (0.012)	0.391*** (0.092)	0.089*** (0.013)
				0.029*** (0.006)		0.025*** (0.004)
Control Variable	No	Yes	Yes	Yes	Yes	Yes
City fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
N	2529	2529	2529	2529	2529	2529
R ²	0.286	0.324	0.792	0.289	0.690	0.378

¹Note: Robust city-level standard errors are reported in parentheses, ***, **, * are significant at 1%, 5%, and 10%, respectively, as in the following table.

3.2. Heterogeneity Analysis

In this paper, according to the resource-based cities and their classifications delineated in the National Sustainable Development Plan for Resource-based Cities (2013-2020), Chinese cities are divided into five categories to conduct fixed-effects model regressions separately. Table 2 reports the heterogeneous regression results for each type of city, respectively. The development of the digital economy has a significant contribution to GTFP in declining, regenerating and non-resource-based cities in China. In contrast, for growing and mature cities with a high level of economic and social development and a relatively reasonable industrial structure, the digital economy has a limited role in enhancing GTFP in these cities.

Table 2. Examination of urban resource heterogeneity in the impact of the digital economy on GTFP

Variable	Gtfp				
	Growing City	Grow-up City	Recession-ary City	Regenerative City	Non-resource-based City
Dig	-0.022 (0.021)	0.015 (0.048)	0.155** (0.074)	0.143*** (0.032)	0.125*** (0.012)
Control Variable	Yes	Yes	Yes	Yes	Yes
City fixed effect	Yes	Yes	Yes	Yes	Yes
Time fixed effect	Yes	Yes	Yes	Yes	Yes
N	144	567	216	144	1458
R ²	0.649	0.142	0.538	0.669	0.338

3.3. Further analysis: threshold effect

The panel threshold model was used to test the nonlinear relationship. The presence of threshold was tested by referring to Hansen's (1999) Bootstrap test for each threshold variable (Hansen, 1999), and the digital economy (Dig), advanced industrial structure (Asp), and rationalization of industrial structure (Rsp) significantly passed the single threshold test. It did not pass the double threshold test. Based on this, the panel threshold effect model with a single threshold test in this paper and the estimation results are in Table 3. From column (1), we can see that the promotion effect of the digital economy on GTFP shows a non-linear process of "from nothing to something". And the promotion effect of the digital economy on GTFP is not significant when the development level of the digital economy in Chinese cities is below 0.221; when the development level of the digital economy is greater than or equal to 0.221, the promotion effect of the digital economy on GTFP is not significant. The promotion effect of the digital economy on GTFP is significantly positive at the 1% level with a coefficient of 0.049. For model (2) with advanced industrial structure as the threshold variable, when the advanced level of industrial design in Chinese cities is less than 7.185, the promotion effect of the digital economy on GTFP is not significant. When the advanced level of industrial structure is greater than or equal to 7.185, the promotion effect of the digital economy on GTFP is significantly positive at the 1% level, with an estimated coefficient of 0.066. In model (3), the level of industrial structure rationalization is taken as the threshold value of 11.971. The effect of the digital economy on GTFP increases around the threshold value, and its estimated coefficient increases from 0.029 to 0.076. It indicates that the development of urban digital economy and industrial structure upgrading can form a positive interaction and work together on GTFP (Zhao et al., 2020).

Table 3. Test of the threshold effect of the digital economy on GTFP.

Variable	Gtfp		
	(1)	(2)	(3)
Dig (dig<0.221)	0.006 (0.021)		
Dig (dig≥0.221)	0.049*** (0.012)		
Asp (Asp<7.185)		0.021 (0.015)	
Asp (Asp≥7.185)		0.069*** (0.012)	
Rsp (Rsp<11.971)			0.028** (0.013)
Rsp (Rsp≥11.971)			0.079*** (0.015)
Single Threshold effect (P)	0.041	0.011	0.023
Control Variable	Yes	Yes	Yes
N	2529	2529	2529
R ²	0.315	0.327	0.295

4. Discussion

4.1. Exogenous impact test

To obtain more robust conclusions, this paper uses "smart city" pilot projects as exogenous impacts to verify the effects of digital economy development on GTFP. The government-promoted "smart city" pilot construction can exogenously promote the level of Internet development and digital finance development. Its urban construction investment and digital technology diffusion can drive industries' digital transformation and provide a digital technology platform for GTFP (Vanolo, 2013); therefore, in this paper, the "national smart city" construction policy is used as a quasi-natural experiment. An asymptotic double-difference model is set up based on existing studies (Vanolo, 2013) to identify the impact of the digital economy on GTFP and its mechanism of action more "cleanly".

In addition, this paper uses the event study method to show the parallel trend of the DID model. According to Figure 1, there is no systematic difference between the experimental and control groups before implementing the "smart city" pilot policy. To mitigate the endogeneity problem as much as possible, we further control for province and province multiplier year fixed effects based on the fixed effects model with control variables. Table 4 further shows the regression results of the "smart city" pilot on GTFP. The results in column (1)(2)(3) indicate that the "smart city" pilot policy can promote GTFP more robustly, and the results in column (4)(6) suggest that the "smart city" pilot can encourage the upgrading of China's industrial structure. Following the mediating effect model, after adding mediating variables, the results in columns (5) and (7) show that the coefficient of the differential term of the "smart city" pilot decreases, thus proving that the industrial structure upgrading is the mechanism of the "smart city" promoting GTFP. According to the Chinese "smart city" pilots, randomly generate the treatment groups and replicate 1000 times the Chinese "smart city" pilots. The results in Figure 2 report that no random factors influenced the effect of the "smart city" pilot.

Table 4. Examination of the effect of "smart city" construction on GTFP and its mechanism

Variable	Gtfp	Gtfp	Gtfp	Asp	Gtfp	Rsp	Gtfp
	(1)	(2)	(3)	(4)	(5)	(6)	(7)

	0.049** * (0.005)	0.014** * (0.003)	0.012* * (0.005)	0.039** * (0.011)	0.011** * (0.002)	0.034* * (0.129)	0.010** * (0.002)
DID							
Asp					0.061** * (0.015)		
Rsp							0.091** * (0.017)
Control Variable	No	Yes	Yes	Yes	Yes	Yes	Yes
Province effect	No	No	Yes	No	No	No	No
Province*Year	No	No	Yes	No	No	No	No
City fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2529	2529	2529	2529	2529	2529	2529
R ²	0.237	0.383	0.376	0.681	0.381	0.593	0.394

Figure 1. Impact of "smart cities" on GTFP.**Figure 2.** Placebo test

4.2. Robustness tests

Given that omitted variables' macro-systematic environmental changes and endogeneity issues may affect the results. This paper conducts robustness tests by controlling for province fixed effects and province time fixed effects and instrumental variables method. We use the interaction term between the number of telephones per million people in 1984 and the number of national Internet users in the previous year in each city as the instrumental variable for the city's level of digital economic development. The regression results in Table 5 are consistent with the earlier paper, so this paper's conclusions remain robust.

Table 5. Robustness tests for the impact of the digital economy on GTFP.

Variable	<i>Gtfp</i>			
	Controlled macro factors		Instrumental variables method	
<i>Dig</i>	0.108*** (0.012)	0.104*** (0.012)	0.358*** (0.039)	0.274*** (0.031)
Control Variable	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
Province effect	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>

Province*Year	No	Yes	No	No
City fixed effect	Yes	Yes	Yes	Yes
Time fixed effect	Yes	Yes	Yes	Yes
<i>Kleibergen-Paap rk</i>			37.184	52.873
<i>LM</i>			{0.000}	{0.000}
<i>Kleibergen-Paap rk</i>			110.236	49.752
<i>Wald F</i>			{16.38}	{16.38}
<i>N</i>	2529	2529	2529	2529
<i>R</i> ²	0.218	0.337	0.561	0.779

¹Note: In the instrumental variable method, values within [] are p-values and values within { } are critical values at the 10% level of the Stock-Yogo test for weak instrumental variables.

5. Conclusion

Based on the specific fact that the digital economy has become a new driving force for sustainable development of the world economy, this paper focuses on the green value of the digital economy. This paper examines the impact of the digital economy on GTFP and its underlying mechanism from the perspective of industrial structure upgrading in multiple dimensions. The study's main findings are as follows: First, the digital economy can effectively contribute to the improvement of GTFP, and industrial structure upgrading is the mechanism of action of the digital economy to empower GTFP, and this conclusion still holds after various robustness tests. Second, the heterogeneity analysis shows that compared with other resource-based cities, the development of the digital economy has a significant contribution to GTFP in declining, regenerating and non-resource-based cities in China. The heterogeneity analysis verifies the critical role of the digital economy in promoting coordinated regional development and breaking the "The heterogeneity analysis verifies the key role of the digital economy in promoting coordinated regional development and breaking the "resource curse trap". Thirdly, there is a single threshold effect of digital economy development level and industrial structure rationalization and advancement on GTFP. When the regional digital economy development level and industrial structure rationalization and advancement exceed the threshold value, the promotion effect of the digital economy on GTFP is significantly enhanced. It also indicates that the development of the digital economy in cities can combine with industrial structure upgrade on GTFP to form a propulsive synergy.

Based on the above findings, we propose the following policy recommendations: First, build a modern market-oriented digital technology innovation system by increasing investment in digital industries, accelerating digital project development, and strengthening digital talent training. Second, by implementing a dynamic and differentiated strategy for developing China's digital economy, we should pay attention to the application of digital technology in solving the unbalanced development among cities and breaking the "resource curse trap". Third, by enhancing digital economy development, promoting the rationalization and advanced industrial structure, and fully releasing the synergy formed by the positive interaction between digital economy development and industrial construction upgrading, the GTFP promotion effect of the digital economy "enters the fast lane".

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Challenges in managing innovation-marketing projects in retail industries

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Abstract. Every industry have their own challenges that need to face when planning to bring innovation. In every situation, the leading company have the responsibility to bring new era of innovation, especially in marketing campaign. The planning process, for these projects is more complicated and need special focus and commitment from core team.

With this paper, we will investigate and present the results from our research in 3 main retail companies in Republic of Kosovo.

The aim of the paper is to present the main challenges, categorized, that all marketing team need to consider before planning marketing campaigns and innovation.

Based on the results, marketing planning is very dynamic in retail industry, because the competition is very strong, and consumer's behavior is changing rapidly, especially after Covid 19 period. The survey results shows that the main focus of the marketing team is to create a good goods offer for the consumer's and making creative offer announcements. The other planning campaigns are linked with the sales and brand awareness.

Keywords: project management, marketing, retail.

16 Managing innovation marketing projects

16.1 Brief description of Marketing projects

We know that marketing, marketing methods and practices have been described and defined by several associations and bodies of knowledge. Generally speaking, marketing is the promotion and selling of products and services. It is everything that you do to reach and persuade prospects. The Chartered Institute of Marketing stated that marketing is the management process responsible for iden-

tifying, anticipating and satisfying customer requirements profitability. Additionally, Philip Kotler defines marketing as 'satisfying needs and wants through an exchange process.' (Kotler, P., & Lane, K., 2008)

Marketing is not about providing products or services. It is essentially about providing changing benefits to the changing needs and demands of the customer. 'Marketing is a project function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefits the project and its stakeholders.' American Marketing Association describes marketing as the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society

The group of project marketing researchers (Cova, B., & Salle, R., 2005), (Cova, B., Ghauri, P., & Salle, R., 2002), (Skaates, Maria Anne & Tikkanen, Henrikki, 2003), (Tikkanen, H., Kujala, J., & Arto, K., 2007), (Lecoeuvre-Soudain, L., & Deshayes, P., 2006), (Blomquist, T. & Wilson, T., 2007), (Cova, B., & Hoskins, S., 1997)) claims that while project management deals with organizational and management issues, project marketing deals with sales and marketing issues of projects. They define a project strictly from the marketing perspective stating that project is a complex transaction covering a package of products, services and works, specifically designed to create capital assets that produce benefits for a buyer over an extended period of time (Cova, B., & Salle, R., 2005).

They emphasize that the project concept must be re-defined to include the activities from the very early pre-project phase to the very late post-project phase. These broader time frames have diverse origins (Cova, B., Ghauri, P., & Salle, R., 2002):

- Customer based approach to project management
- Supply chain management
- Project strategic orientation

Good marketing project management allows teams to work more efficiently, and it helps keep marketing campaigns aligned with industry trends and consumer preferences.

16.2 Innovation marketing

The term innovation derives from the Latin word *innovatus*, which is the noun form of *innovare* "to renew or change," stemming from *in-*"into" + *novus-*"new". Although the term is broadly used, innovation generally refers to the creation of better or more effective products, processes, technologies, or ideas that affect markets, governments, and society. Innovation differs from invention or renovation in that innovation generally signifies a substantial change compared to entirely new or incremental changes.

Marketing innovations are aimed at better addressing customer needs, opening up new markets, or newly positioning a firm's product on the market, with the objective of increasing the firm's sales.

The distinguishing feature of a marketing innovation compared to other changes in a firm's marketing instruments is the implementation of a marketing method

not previously used by the firm. It must be part of a new marketing concept or strategy that represents a significant departure from the firm's existing marketing methods. The new marketing method can either be developed by the innovating firm or adopted from other firms or organizations. New marketing methods can be implemented for both, new and existing products. (Chandrakhanthan & Karthika.R, 2021)

16.3 Pillars to take in consideration during the process

Planning and organizing a marketing project is similar to other projects. It involves researching, setting goals, and coming up with a marketing strategy. The difference is that your projects are specific to marketing, so research may look like:

- Studying industry trends
- Defining your target audience
- Creating or updating buyer personas if needed

All projects tend to have a lot of moving parts, but marketing projects are especially complex. This is because marketing projects require collaboration from a wide range of professionals, such as:

- SEO professionals
- Subject matter experts
- Writers and editors
- Graphic designers

Event planners, developers, and more

Most marketing projects require a greater range of cross-team

collaboration. It's common for these projects to consist of remote and in-house teams, which can make marketing project management even more challenging if you're not used to working with distributed teams. (Moore, 2022)

17 Methodology

In this section, we will describe the methodology used to complete the study of the project marketing application in the industry. While seeking explanation of the observed organizational phenomena of project marketing, we intend to explore the practitioner's perspective. We used a mixed methods approach with a qualitative method of a multiple case study and with a survey (questionnaire) in a quantitative orientation.

The questionnaire with retail companies has 10 questions, and the Likert with 5 agreement scales were used as a measure of respondents' agreement with various statements.

Through this survey, we tried to obtain opinions of retail businesses operating in Republic of Kosovo, out of their daily practice, on the relevance of application of innovative marketing strategies in their company, and the influence of such

innovation on improved performance. The second questionnaire were conducted with consumers and has 3 questions. The purpose of choosing the data from two sources was with intention to provide the real perception of innovation marketing, from two different perspectives.

17.1 Hypothesis

For this research, the following hypothesis were raised:

H: Digital marketing is the strongest supporter to innovate

H: Market research provide useful information for decision making process

18 Evidence from the research

18.1 General overview of the sector

- The retail sector in Republic of Kosovo is well developed and have sustainable growth
- The retail sector currently have the highest employment compare to other sectors
- In some categories there is only one market player, that determinate the market rules
- The competition is high and new international players are creating strategy to expand their business in Western Balkan, with special focus in Republic of Kosovo

18.2 Data analysis

Since our research is multi-dimensional, we have aimed to analyses information from different viewpoints. In this case, we have prepared a study targeting consumers who produce on daily basis in one of the three retailers. This survey included 102 respondents, of which 40% male and 60% female. All details of respondents involved are presented in the table below. According to data, 16% of respondents are under the age of 20, of which 11% male and 5% female, age 20-34 around 40% of respondents, 14% of which men and 26% women. The ages between 35 and 49 had a total of 16% of respondents, of which 2% were male, and 14% female; respondents in ages 50 to 64 were 15%, where 2% were male and 13% female, while over the age of 65, a total of 13% were interviewed, counting for 11% of men and 2% women.

Table 23 – Results from survey with consumers - Correlation between Age and Sex

		Age				
		<20	<35	<50	<65	>65
Sex	Male	12	14	2	2	11
	Female	5	26	14	14	2

Authors' calculations

Our research continues with analyzing the correlation between digital marketing and coverage offered by it, compare to traditional marketing. The results are as follow:

Table 24 - Results from survey with firms - Correlation between “All the information’s (in-

		Digital Marketing is more attractive compare to traditional marketing					Total
		Strongly agree	Agree	Neutral thinking	I disagree	Strongly disagree	
All the information’s (including offers) I get from social media	Strongly agree	35	5	18	6	2	66
	Agree	2	2	3	0	3	10
	Neutral thinking	3	1	7	2	3	16
	I disagree	1	1	0	0	2	4
	Strongly disagree	3	0	3	0	0	6
Total		43	9	30	8	10	102

cluding offers) I get from social media” and “Digital Marketing is more attractive compare to traditional marketing”

Authors' calculations

Following the trends in retail business is very hard, but the digital marketing team need firstly to understand the consumer behavior and consumer needs, before creating marketing strategy. In digitalization era, the responsibility of being innovative and it is not a need, but it became a must. Using artificial intelligence can be one of the solutions to personalize the offer for different consumer’s needs, which will impact directly in brand awareness and consumer loyalty.

We need to highlight that marketing is always related to sales and this is an approval why the retail companies nowadays are focusing more in digital marketing. It cost, but you have a direct communication with the consumers. The team can

follow the trends, and react immediately if something is not in the right direction. With digital marketing, the companies also can measure the sentiment for the company, offers and posts which is very important to make differentiation and cover huge campaigns.

18.3 Hypothesis testing

In an effort to provide a contribution with this paper, we have established a key hypothesis, which is formulated as follows:

H0: Digital marketing is not the strongest supporter to innovate

H1: Digital marketing is the strongest supporter to innovate

Table 25 – Results of question “Is your company willing to invest more in digital marketing?”

Bootstrap for One-Sample Test

	Mean Difference	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Is your company willing to invest more in digital marketing?	1.286	.037 ^b	.153 ^b	.001 ^b	1.143 ^b	1.571 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 913 samples

Authors’ calculations

Based on literature, by using Bootstrap methods, we had intention to calculate standard errors and construct confidence intervals. The bootstrap function tends to estimate the sampling distribution of the mean, which will then be used to create a confidence interval. With bootstrap method we have tried to test the first hypothesis, and results are commented below.

The center of the distribution (mean) is 1.286 and the standard deviation error is 0.153, from this result has been found a small standard deviation, which means that do not have spread data, the data are very close to the mean. In both cases we have use the Likert scale as measure, and the result express the difference between mean. As has been found from the result, the significance level is 0.001 that is lower than 0.05, which means that the null hypothesis was rejected.

Digital Marketing trends, and possibilities for the companies to benefit from such trends, are large. As has been underlined in this paper, digital performance has a major influence on business development. This is validated by the fact that an ever increasing turnover in medium-sized enterprises, and the expansion of the

range of products, largely impacts the timelines of strategic decision-making. Businesses that have developed digital marketing have been able to benefit in two directions. The first direction is that by applying real data, management obtains detailed and appropriate information to build strategic decisions, while on the other hand; the communication and feedback from the audience it is in real time and can impact directly in brand awareness.

An accessory hypothesis for this paper is the following:

H0: Market research did not provide always useful information for decision making process

H1: Market research provide useful information for decision making process

Table 26 – Results of question “The hardest part in market research is gathering data from primary sources for specific questions”

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The hardest part in market research is gathering data from primary sources for specific questions	102	1	2	1.20	.402
Valid N (listwise)	102				

Authors' calculations

The center of distribution (mean) is 1.20 and the standard deviation is 0.402, from this result has been found a small standard deviation, which means that we do not have spread data, or data are very close to the mean. As results show, the significance level is 0.072 that is higher than 0.05, which means that the null hypothesis was rejected.

Knowing the relevance of market research, surveyed companies have invested largely, by making very often market research in different fields. The most important part of market research, based on companies approaches are price comparisons, since the competition is very strong and the consumers now are more price sensitive. This cost a lot, because in Republic of Kosovo, still the professional institutions didn't take this responsibility because of the complexity.

Table 27 – Results of question “The hardest part in market research is gathering data from primary sources for specific questions” ANOVA results

ANOVA
The hardest part in market research is gathering data from primary sources for specific questions

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,371	4	.343	2,225	.072
Within Groups	14,629	95	.154		
Total	16,000	99			

Authors' calculations

Conclusions and Recommendations

The differentiation in market today can be achieved only if you are offering the right assortment based on consumer's needs, and if you are using Digital Marketing strategies to convince the consumers for the products and quality of services that you are providing.

Based on the research, we can argue that following elements need to be very effective in order to win the game.

- Update the skillset
- Perform customer research and market analysis
- Capture your customer success stories
- Update your editorial line, brand guidelines, and brand governance
- Update or redesign the web, blog, and social media accounts
- Set up scalable processes and agile workflows
- Evaluate new tools
- Explore your existing tools
- Create or update your marketing plan
- Maintain your existing content
- Repurpose your existing content
- Explore the world of video marketing
- Experiment with growth hacks
- Take care of your employer brand

The fact is that the retail business is the fast growing sector in Republic of Kosovo, which means that they need to focus more on trends and personalized offers for different group segmentation. When we speak of innovation marketing, then we can foresee the complexity. Managing marketing projects needs high focus of project manager (of course with marketing background), budget and huge data analyzing.

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Analysis of the transformation of electrical energy from thermal energy to alternative energy as an economic and ecological need in Kosovo

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Abstract. Former United Nations Secretary-General Ban Ki-Moon said at the Rio Earth Summit in 2012: "The road ahead is long and difficult." Sustainable development represents social development, which meets current needs, without harming the needs of future generations. In this respect, energy and the environment are essential factors of social development. Most problems of a physical environment can be solved, at least to a degree, when we have enough energy and when the same energy is not expensive and can be used without creating major environmental problems. Coal in Kosovo is the primary resource, respectively the primary producer of mechanical and electrical energy, at the same time today it is the most encouraging source for sustainable energy production in the conditions of the Republic of Kosovo. The search for finding, developing, and using energy from other renewable sources is constantly encouraged. Using various wastes and discharges of an organic nature serves to balance the need for thermal energy (heat) and electricity in the energy sector. It is worth mentioning the fact that it is fully possible to use such wastes as agricultural waste, food waste, and anything that can be discharged organically to produce Bio-energy.

Through this paper, we will analyze in scientific terms by shedding a little light at the same time recommending how Kosovo should approach the provision of electricity using coal or to focus on alternative energy with the sole purpose that businesses and citizens are sufficiently supplied with electricity while preserving the environment.

Keywords: Electricity, Alternative energy, Sustainable development, and Environment

1 Introduction and scientific definition of energy

The term sustainability reflects the need for a careful balance between economic growth and the preservation of the environment. (Todaro, Smith, Minxhozi, Malaj, Bexheti, 2018, p. 530). There are over 100 definitions of sustainable development, but the best known and most classic is that of the World Commission on Environment and Development, "Our Common Future", otherwise known as the Brundtland Report. According to this definition, "Sustainable development is the development that meets the needs of the present without compromising the opportunities of future generations to meet their needs. Sustainable development maintains a delicate balance between human needs to improve material and moral well-being on the one hand and the conservation of natural resources and ecosystems on which we and future generations rely. Sustainable development involves economic growth along with protecting the quality of the environment, where one reinforces the other. The essence of this form of development is a stable relationship between human activities and the natural world, which does not diminish the prospects for future generations to enjoy a quality of life at least as good as ours. The guiding principles are that humanity should not take from nature more than nature can compensate. This means adopting lifestyles and development paths that respect and work within natural limits. The American President John F. Kennedy (1961-1963) has emphasized that "it is our duty to our time and our generation to pass on to those who come after us, as our ancestors passed on to us, our riches and our beauties. Natural. (Guri, Guri, Guri, 2015, pp. 66,67). The sustainable economic and social development of Kosovo is a challenge, which is being posed not only before the state institutions but increasingly becoming a serious preoccupation of Kosovar science. Efforts are being made to identify key points. Efforts are being made to identify the main points, which should be supported, and comparative advantages for a more intensive economic development. Identifying potentials, as well as defining advantages by science, requires an additional commitment of planning and decision-making factors that the identified potentials are used through the development and implementation of national development policies and plans. (Authors, 2012, p. 5)

The history of the development of the meaning of energy is very wide, it is one of the basic concepts of physics not only the formation and existence of our planet but also the formation and existence of the universe, billions of years ago, are directly related to energy. While energy is the main meaning of the formation of the existence of the universe, there is not and cannot be an adequate definition that would fully describe this meaning in fewer words, as it is presented in many infinite forms and sizes. Energy is everywhere and always, from the nucleus of the atom to the universe itself, from microorganisms to the very composition of our planet (Begolli, 2018, p. 28). Energy is the branch of physics that deals with the study of energy. Branch of technology that deals with the conversion and use of different types of energy, branch of economics that deals with energy sources and ways of its use. (Samara, Haxhillazi, Shehu, Feka, Memisha, Goga, 2006). Thermal energy is the rate at which fuel can be burned, with a continuous maximum coefficient, multiplied by the net chlorine value of the fuel and expressed in megawatts of energy. Energy can be obtained from the sun, water sources, fuels, earthquakes, volcanoes, wind, sea waves, etc. (Bërxfholi, 2008, p. 49)

Renewable energy is a form of energy created from inexhaustible sources. Like the sun and the wind. Electricity - energy produced from water, wind, thermal energy, and nuclear energy, building the respective industry of production of this energy. (Kabashi, Shehu, Lama, 2015, pp. 2004, 2005, 2006)

2 Scientific treatment

Many economists do not accept the idea that the relationship between supply and demand is determined by mechanical adjustments made by the market. They show the difference between this stream of thought, inherited from the eighteenth century, and the reality of modern societies. Here I want to talk about the regulatory role of enterprises and states. Certainly, it is not the

market that articulates and coordinates the production activities, the enterprises themselves play a big role. It is another matter then whether they operate by competing with each other and should meet customer expectations. The nature and evolution of this living collective being as an enterprise, constitute a fundamental dimension of the real economy. (Calame, 2011, pp. 75,76). The process of economic globalization has turned into globalization, after 1989, with the worldwide expansion of the neo-liberal economy. Across the globe, this expansion was accompanied by the expansion of capitalism, which in itself was accompanied by the dominance of financial capitalism. Continuous productive growth and development are still seen as the way out by most states. (Morin, 2016, pp. 124,125). The economic downturn of 2008 and 2009 demonstrated the need for good governance, as it reminded us that investors and financial policymakers are rushing for short-term gains, ignoring long-term risks. For this reason, we should not presume that markets are self-regulating, and intelligent (moderate) government intervention can help prevent market collapse from shocks across society. (Bremmer, 2020, pp. 231,232). Kosovo currently has available about 0.05% of the world population and about 0.008% of the land area and produces 0.08% of total world production, measured by Gross Domestic Product (World Bank, 2016). These comparisons are based on the market value of all goods and services produced in Kosovo within a year (Gross Domestic Product) compared to the market value of all goods and services produced in all countries of the world. (Authors g., 2018, pp. 42,43). It has been known since ancient times that the prosperity and economic development of a country or region is valued by underground resources and prosperity, and the search for raw materials not only in the past but even today remains an important branch of economics and one of the faculties of human well-being. (Shabani, 1997, p. 9). Sustainable development is the development of the present without compromising the opportunities of future generations to meet their needs. Energy and the environment are essential factors for sustainable development. (Group of Authors, 2014, p. 9). At the beginning of the new century, it is important to know that economic, environmental, and social goals are integrally linked and that the policies that are being developed should reflect these reports. (Group of Authors, 2014, p. 10). The impact of fossil energy generation on environmental pollution has made renewable energy a priority in many countries in Europe and the world. In this respect, wind energy is one of the main forms of creating renewable energy. However, the level of alignment, as well as the financial viability of this type of power generation, depends very much on the level of technology used in the wind turbine. (Group of Authors, 2014, p. 79). Wind energy plays a very important role in the development of sustainable energy capacities and, as a result, the number of wind turbines is constantly increasing worldwide. Wind energy is renewable energy, clean, as well as economically competitive with conventional energy generation technologies. The wind energy sector is undoubtedly the sector with the highest annual growth. In the last five years, installations of wind power generation capacities have increased on average 22.7% per year, reaching 282,430MW at the end of 2012. (Group of Authors, 2014, pp. 79,80). The first underground works in the extraction of Kosovo coal date back to the time of the First World War. After the end of this war, some small research works were done in narrow locations to compare the quality of coal and the most suitable extraction conditions. The coal reserves of the Kosovo basin before the Second World War were not known, much less those of the Dukagjini region. (Dushi, 2009, p. 28). In the past period, hydrogeological research in the area of Kosovo has not had a long-term character and a systematic work, but for the most part, has been conducted at the request of stakeholders, most often to solve an acute problem. The basic conclusion of all research can be the assessment of groundwaters and the opportunities they offer to solve some problems in this area, generally not given the importance it deserves. (Dushi, Kosovo Mineral Resources, Volume Two, 2009, pp. 187,188). Natural resources are an important factor in economic development. They could have been a much more important development factor if investments had been more oriented towards more intensive processing of pro-regenerative and non-regenerative materials. The future development strategy should take into account these problems, where an important component is the more economical use of natural resources, taking care of the accumulated direct effects, and incorporating more rationally. (Gusia, 2010, p.

173). Whether or not Kosovo needs a new power plant does not need comment. This question, of course, even the most skilled experts will not answer immediately, without doing some preliminary studies based on the needs that Kosovo has today and will have tomorrow. So, in well-studied circumstances, Kosovar officials and experts can think about building a new power plant, interrupting the operation of the Kosovo A power plant, and modernizing the Kosovo B power plant, because these are extreme factors of environmental pollution as a risk for the health of the population. (Begolli, 2018, p. 378). In the conditions of price liberalization, monopoly of raw materials for energy (oil, gas, coal, etc.) from different countries not only on a European scale, the use of always in increasing renewable energy from developed countries, market, and effective competition remain the main influential preconditions for stable supply and use with energy-saving (efficiency). (Begolli, 2018, p. 379). A secure energy supply is, at the same time, an adequate and uninterrupted supply to consumers, regardless of energy sources. Lack of energy raw materials, which makes many countries dependent on energy imports, as they do not have production opportunities in their countries, lack of relevant investments in this sector, lack of adequate distribution network and other infrastructure, often cause serious problems and extreme uncertainty for consumers, as in the case of Kosovo, although raw materials of this type are in abundance. In the conditions of numerous possibilities for the use of alternative energies (solar, wind, water, biomass, geothermal, etc.), as well as numerous possibilities of combining many types of energies, even this problem can be reduced to a minimum. (Begolli, 2018, p. 379). The development of renewable energy sources is affected and influenced by the activity of several public institutions in the country, which include institutions of policy-making, resource management, sector regulation, and monitoring the implementation of policies and legislation. (authors, 2020, p. 539). Wind energy, among all renewable energy sources, occupies a significant place in the energy market, experiencing over the last decade the largest growth worldwide. Among the main benefits of wind energy are the environmental advantages it presents compared to the energy produced from traditional fuels. Moreover, the cost of generating electricity from wind is among the cheapest compared to the costs of electricity produced by exploiting other renewable energy sources. It is also increasingly comparable to the costs of generating electricity from fossil fuels. (authors, 2020, p. 497). Intensive efforts are being made all over the world to provide alternative energy sources, to meet the ever-increasing needs of society. Fossil resources (oil, coal, natural gas) have become very scarce and cannot afford not only the growth of the population but also the demands of modernization and continuity of life on our planet. It is a known fact that the higher the amount of energy that is consumed in Europe is of fossil origin, but their combustion has a major environmental impact on the energy sector. In addition to the pollutants that fossil fuels release when burned, they have a high content of carbon dioxide, CO₂, which is a greenhouse gas, which contributes to Climate change. Numerous materials and publications from authoritarian institutions have recently spread the idea of the urgent need to turn the chemical industry into a green industry", with demands for large masses of materials and renewable energy. (2020, p. 124). The strategy of the Republic of Kosovo for the period 2009-2018 has a special focus, in addition to the security of sustainable electricity supply, has also had the diversification of electricity sources. Lignite, given the large reserves that Kosovo has, is the primary source with which is going to be achieved basic supply, but also with renewable energy sources, which is considered important to meet market demands. (Group of Authors, 2014, p. 525).

3 Research and analysis

The economy and the environment are inextricably linked. For example, economic development is one of the primary reasons for climate change, but it can also solve this problem. Similarly, the study of economics is at the forefront of research on global warming, and it is economic tools - such as taxes and guidelines - that are most likely to encourage people to pollute the environment less in the future. (Conway, 2015, p. 182). In recent years, economists have increasingly focused on the important implications of environmental issues for the success of development efforts.

The classic market failures lead to greater environmental degradation. Environmental degradation can hamper the pace of economic development by imposing high costs in developing countries through health-related costs and reduced resource productivity. (Todaro, Smith, Minxhozi, Malaj, Bexheti, 2018, pp. 528,529). The comparative advantage of each state is the specialization in marketing what they produce with greater comparability productivity and lower comparative cost. (Skenderi, 2010, p. 193). Creating new products is a high-risk venture, given the high number of new products and services that fail. There have even been times when even large companies, which have long-experienced research and development departments, have created products and services that have failed. There are several ways that a new idea for a product or service can be developed, although they find it difficult to come up with new concepts. Ways new ideas can be developed:

- Be aware that something is missing in the market,
- Upgrade existing products,
- Combine the characteristics of different industries,
- Know the socio-economic trends,
- Be attentive to everything around you,
- Question any widely accepted ideas or assumptions,
- Enter the name first and then develop the product.
- Conduct an extensive market study
- Meet a market need,
- Try to gain an advantage by launching a high-quality product,
- Try that the quality, price, customer experience are from the beginning as they should be,
- Use the right distribution channels. (Lambing, R.Kuehl, 2018, pp. 78,79,80,81,82)

The water potential in Kosovo is modest, however, with new investments and projects hundreds of thousands of megawatt-hours of electricity can be extracted, especially from the large rivers in Kosovo. Hydropower plants such as Gazivoda, Zhur, Rugova have been left out and no investments have been made for the construction of any new facilities. This is due to the orientation mainly in the power plants of Kosovo, but the possibility of valorization of Thermo-mineral waters as an energy source is not excluded, especially for industry, housing heating, and especially agricultural needs. (Blaku, 2005, p. 251). In addition to the pollution problems described above, there are several other challenges to be faced within the environmental sector. As in other areas of Kosovo society, most such reform issues are closely linked to the relative levels of investment available. (Blaku, 2005, p. 337). The quality of the environment also has a direct impact on the health of society. Pollution levels in Kosovo are high, policymakers need to provide opportunities to reverse such a trend by formulating sound environmental development policies while working to reduce current pollution. Some of the main sources of pollution are coal-based electricity generation, extraction, and production of non-ferrous metals and the chemical industry. The light industry also contributes to pollution, including the production of textiles, leather, rubber, paper, and building materials. (Blaku, 2005, p. 34). To be correct with the nature of the work and the treatment of the topic that we have for competent treatment we have offered a wide scientific and professional color as a focus of smelling scientific nectar we have oriented to professionals who know and are sympathetic to the daily work in the field of the energy economy. We targeted 25 respondents as economists, technologists, hydrologists, university professors, ecologists, geologists, and non-governmental organizations. The readiness and variety of the answers of the respondents give the firm to the work and research, being somewhat relieved by prejudices, by narrow interests to the detriment of the social interest. It is a fact that the Republic of Kosovo has underground resources but the economic dynamics do not give us the comfort to exalt ourselves

while we are ranked among the underdeveloped countries this makes us open the way to electricity production in ways and methods which are easier and more economical. Availability of respondents that in addition to the development of conventional energy we have available (coal) but giving priority to the production of alternative energies as a need of the time. From the answers, we have these results where from economists two claim alternative energy, one denies it and two leave it to time for alternative energy. Technologists claim and leave time for switching to alternative energy as well as hydrologists, just as technologists claim and leave time, also university professors claim and leave time. Specialized businesses claim 100% being willing to invest in alternative energy, ecologists claim 100% in favor of transforming electricity generation, while geologists deny transforming electricity generation, the same stated by technologists, while ecologists affirm the transition. Practical scientific resources and research provide us with an insight that in addition to the use of conventional energy or coal at the same time, we must be in step with time thinking about new alternatives in the production of electricity.

Table.1. The Transition from conventional energy to alternative energy.

Nr	No. of participants	Profession	Claim	Deny	Time factor
1	5	Economist	2	1	2
2	2	Technologist	1	0	1
3	3	Hydrologist	1	0	2
4	6	University Professor	5	0	1
5	3	Specialized businesses	3	0	0
6	1	Ecologist	1	0	0
7	1	Geologist		1	
8	4	Non-governmental organizations	0	0	4
	25		13	2	10

Fig. The Transition from conventional energy to alternative energy.

4 Conclusions and recommendations

Renewable energies already constitute the main direction of the development of energy sources all over the world. Rapid growth, especially in the energy production sector, is driven by many factors, including cost reductions, support policies, improving financial opportunities, energy supply risks and environmental problems, increasing energy demand in developing economies, and the need for a presence in contemporary energy sources. New markets are constantly emerging in all regions, both for concentrated renewable energy sources and distributed ones. Intensive efforts are being made all over the world to provide alternative energy sources, to meet the ever-increasing needs of society. Fossil resources (oil, coal, natural gas) have become very scarce and cannot afford not only the growth of the population but also the demands of modernity and continuity of life on our planet. It is a known fact that the highest amount of energy which is consumed in Europe has fossil origins, but the environmental impact of their combustion is high in the energy sector, of course, Kosovo is the same in terms of fossil-based electricity production.

4.1 Recommendations:

The essence of any research is the recommendations that, of course, based on scientific data and practices, we can recommend:

- Rigorous implementation of laws for the protection of natural resources,
- Strict control for protection from industrial pollution with special emphasis on electricity.
- Encouraging scientific research and incorporating new technologies during energy production to protect the environment.
- Adherence to the spatial plan in Kosovo by European standards.
- Utilization of alternative energies such as solar energy, hydropower, thermal water, and bio-energy.
- Application of modern methods of industrial and urban waste treatment, including recycling.
- Participation and involvement in all regional initiatives and beyond to protect the environment.

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