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Each of the articles published in the “Economics & Management” Magazine, edition of the Faculty of Economics at the SWU “Neofit Rilski”, after preliminary selection by the Editorial board, is a subject of preliminary review by two tenured reviewers, specialists in the respective scientific domain.

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SOME ASPECTS OF REGULATORY OPTIMIZATIONS IN THE FINANCIAL SECTOR

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Abstract

Rapid development of the high technologies sector undoubtedly reflects the present-day financial regulation. Innovations like blockchain, cloud computing and artificial intelligence underlie the foundations of newly appeared RegTech firms and SupTech initiatives and quickly appear in the toolbox of contemporary financial supervision. The article examines some key trends related to their involvement and implementation by financial institutions and supervisors. Several arguments supporting the thesis for gradual transition to a more integrated and interactive model of financial regulation, characterized by a change from institutional to platform financial regulatory infrastructure, are presented.

Keywords: financial regulations; blockchain; artificial intelligence; big data; FinTech; RegTech; SupTech

JEL Codes: G18, G28, O30

1. Introduction

In the era of large-scale digital transformations, the financial sector needs a skillful *management of the regulatory "climate"*. Innovations like Open Banking, Cloud Computing, Blockchain, Artificial Intelligence (AI) and Machine Learning (ML) possess a large creative potential for: increase in the digital data volumes; "enrichment" of the value offer; imposition of a unified approach to the risk management; evolution in customer experiences; emergence of new market players with advanced business models, and etc. Their contribution to the increasingly tangible change in traditional channels for providing financial products and services is also indisputable. Neobanks, money transfer blockchain-based platforms, crowdfunding and P2P networks, the transformation of some global

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technology companies (BigTechs) into providers of financial services are only some illustrations for the substantial change in financial landscape. The logical consequence from that change is the transformation in the field of financial regulation. From a normative point of view, the “modernization” of the regulatory framework is more than visible through the introduction of new and renewal of existing regulations. For example, PSD2 practically institutionalizes the revolution in the field of transfer operations, giving a green light for the development of "open banking". However, the regulatory burden emerges as a key challenge for financial institutions¹.

The article outlines several high-tech trends from recent years, that change the vision of financial regulation and assist to mitigate the excessive regulatory load financial institutions are forced to bear. Marked high-tech innovations are considered as basis for reformatting the overall supervisory framework in direction of creating an integral and interactive environment for financial regulatory activities. Considering these circumstances below are presented arguments in support of the thesis for a gradual transition to a more integrated and interactive model of financial regulation, characterized by a change from institutional to platform-based financial regulatory infrastructure. As a conclusion are outlined several possible scenarios for future development in short-term and long-term period.

2. High-tech and financial regulation – an inevitable cooperation

The period following the global financial crisis of 2007-2008 is characterized by significant regulatory change, introduction of new and renewal of a remarkable number of existing regulations. Their implementation into the practice of financial institutions becomes a top priority, and the assumption of inefficiency often means imposition of significant sanctions for noncompliance. There is no doubt about the hardship that regulatory compliance units are facing with². Implementing and ensuring compliance with regulations like EMIR (2013), CSMAD and MAR (2014), AMLD 4 (2015), Solvency II (2016), SFTR (2016), CSDR (2017), AMLD 5 (2018), GDPR (2018), IFRS 9 (2018), MiFID 2 (2018), PSD 2 (2018) cost the financial sector tens of billions of dollars. Moreover, increases in the order of hundreds of percent could be found when comparing the levels of compliance costs for 2017 with those for 2008! For example, during the mentioned period current compliance costs of operating in EU investment banks increased 46 times, while their one-time investment costs increased by 620%. In 2008, the average current compliance costs of other banking institutions amount to € 5 million, while in 2017 their volume already reaches € 43 million. For their part, in 2008 the average compliance

costs of European asset management funds totaled € 1.6 million which volume rises to € 32 million in 2017 (European Commission, 2019, p. 9).

Very indicative in this respect is the finding that only in banking a regulatory change happens every 12 minutes (Skinner, 2017). Against this background, the involvement of *RegTech* companies in the regulatory infrastructure is proving to be a lifeline for traditional financial institutions³.

Appearance of *RegTech* firms could be associated with the *FinTech* sector, but unlike it, their focus is not purely financial and extends to other areas⁴. Also, while the rise of *FinTech* companies has been fueled by many emerging startups in direct competition with traditional financial institutions, the entry of *RegTech* firms appears to be a response to the institutional demand for a top-down regulatory expertise – a direct result of rising regulatory compliance costs (Barberis et al., 2019, p. vi).

A research of Deloitte (2016) identifies following four key characteristics of *RegTech*: 1) *agility* for de-coupling and organization of large data sets through “Extract, Transfer, Load (ETL) technologies; 2) *speed* in configuring, generating and processing information for regulatory reporting; 3) *integration* in term of getting solutions and running in short timeframes, and 4) smart *analytical* tools allowing manipulation and of large data sets (Deloitte, 2016, p. 5).

Despite the huge number and variety of different *RegTech* areas, following profiles of their product range could be systematized:

- basic *compliance decisions*, related to instruments for covering basic regulatory and supervisory requirements;
- products for *monitoring of operations* – monitoring and analysis of interrelations in wire transfers, card operations, securities transactions, used primarily, but not limited to, the anti-money laundering and anti-terrorist financing activities;
- *customer identification and verification* (including digital identity) management modules, which application appears to be critical after introduction of the PSD 2 regulation and the entry of open banking and non-banks;
 - modules for *risk management* in a broad range of financial areas⁵;
 - automated *regulatory disclosure and reporting* tools, generating various reports and periodically required supervisory inquiries;
 - modules for automated *monitoring of regulatory changes* and advising on their implementation⁶.

The great competitive advantage of the *RegTech* sector lies in its uniqueness and expertise in information and data management. The tendency to turn into data each activity (the so-called process of *datafication*) applies in full force to the modern financial

infrastructure. The huge data sets generated within the daily activities of financial intermediaries require adequate technological support for their processing and analysis not only by the institutions creating them, but also by regulators and other counterparties. In addition, the gradual movement towards decentralized platform models inevitably brings out the necessity to implement the most innovative and modern methods for "smart" data processing, such as: mechanisms for extracting knowledge from data; analysis by analogy; rule-based expert systems; detection of anomalies in databases; machine learning, tools for converting voice and text to computer code, processing information in the cloud, and etc.

The trend towards all over regulation determines the need for a completely new reporting architecture, which to be able to generate information from dozens, and in some cases from hundreds, different information arrays - customer files, analytical reports, registers of transactions, log files with transactions information, payment instruments, archived databases and much more. Meanwhile, traditional information and accounting core systems used by financial intermediaries are not always able to provide all that variety of demanded information. In this respect RegTech firms find themselves in the situation of the necessary external provider of regulatory expertise, facilitating the achievement of regulatory compliance with the increasingly complex external environment.

All this represents a huge opportunity for the RegTech sector to benefit from traditional financial institutions, and especially from banks that are increasingly looking for relief and efficiency in meeting regulatory requirements. Hence, until 2022 processes automation and application of AI – an integral part of the RegTech arsenal, only in customer identification (KYC) area is expected to reduce the time for performance of relevant activities by 90%, generating savings of 5.4 million hours per year (Juniper Research, 2017). A confirmation of these forecasts is the data from 2018 for which year some analyzers report a 2.5 times increase compared to the previous year and almost fivefold increase in investment in the sector over a five-year period. The largest growth for the period 2014-2018 is created by investments for meeting the new regulatory requirements in the field of KYC (+ 34.5%), anti-money laundering (+ 28%), GDPR (+13.1%), MiFID II (+ 6.4%), Basel III (+ 2%), PSD 2 (+ 2%), and etc. (FinTech Global, 2019).

Therefore, in order to adapt more quickly to present-day realities, financial institutions should not only to adopt new technologies for facilitating their compliance issues with regulatory requirements, but also to integrate them as a key element of their digital transformation agenda. Thereby to banks, asset managers and insurers are being recommended four "correct" options for application of RegTech opportunities: 1) a precise assessment of the needs of the organization; 2) strong understanding of possible solution

options; 3) acceleration of the efforts for remediation, and 4) creating the proper design of the RegTech solutions and the most suitable operation model it will be engaged with (Pollari et al., 2019).

Examples for RegTech products in this regard are the software platforms for simplification and acceleration of the identification processes and these for transmission of low quality data; the solutions for compliance with different marketing requirements and for creation of dynamic platforms with personalized offers; solutions for compliance with risk management requirements and regulations relying on unique combinations between consulting and regulatory information and technologies. For example, application of AI-based algorithms ensuring end-to-end transparency is considered by some authors (Dzhaparov, 2020) as bringing incomparable benefits in bank risk management and providing possibilities for processing large data arrays by retrieving useful information from vast sets of unstructured data (Dzhaparov, 2020, p. 48).

The *benefits* from such platforms could be summarized in following three *directions* (BCBS, 2017, p. 23-24): 1) stimulating the emergence of new processes, distribution channels, products or new business organizations that help banks to comply with regulatory requirements and manage risk more effectively, including through outsourcing or outsourcing processes; 2) implementation of the digital transformation of the control and support functions in banks (risk, compliance, legal, finance, IT); 3) expanding the range of regulatory reporting requirements, financial crime, operational risk (including cybersecurity and fraud detection), consumer and data protection.⁷

Despite the uncertainty surrounding the *coronavirus pandemic*, RegTech will increasingly support financial institutions to comply with enhanced regulatory requirements. According to a study by Juniper Research, global investments in the sector will increase from approximately \$ 18 billion in 2018 to about \$ 115.9 billion by 2023. The largest share of them belongs to North America (\$ 41.8 billion), followed by Western Europe (\$ 37.4 billion) and the rest of the world – \$ 36.8 billion. As a result of this increase, in just three years, 40% of global compliance costs would be “outsourced” to the RegTech sector (Payments NEXT, 2020).

It is logical to expect that *regulators* will show a growing interest in supervisory technologies and the need for their prudent management. Moreover, they will strive to “remain educated and think proactively about what’s new in the market – for example, cryptocurrency. Almost every global regulator – from the UK’s FCA to Australia’s ASIC – has highlighted technology and RegTech as a priority for the year to come. (...) We’ve already seen messages from the FCA, FINRA & the SEC in the US, and ASIC in Australia that RegTech is no longer just a nice-to-have, but something that regulators are expecting

to be a must-have. Firms need to be looking to stay ahead of the curve and avoid falling behind – both in terms of their peers and regulatory expectation” (Kumar, 2020).

At the same time the European Central Bank places the use of regulatory technologies as a key point that should be taken into account in EU banking regulation. (European Central Bank, 2020, pp. 11-12). In particular, according to the ECB, following widely used by banks digital innovations should be of supervisory interest: 1) the increased use of cloud services, provoking a *concentration of several providers* of such services (large technology companies); 2) the use of *artificial intelligence* (AI) in a number of activities (like credit assessment and robot advice); 3) transition to *open banking*; 4) gaining popularity of the *distributed ledger technology* (DLT), especially in certain areas like trade financing; 5) compliance with regulatory requirements through the application of *RegTech*⁸. Similar findings could be found in researches on this issue by various governmental and regulatory agencies⁹.

3. The high-tech regulators

The trends towards total digitalization and technologicalization of the financial infrastructure do not pass the activities of regulatory and supervisory institutions.

Taken the lessons from their failure during the global financial crisis of 2007-2008, regulators are aware of the inevitability of their own commitment to the high-tech sphere. This commitment lays the foundations for another new player in the regulatory infrastructure, derived from the unbundling the field of *Supervisory Technologies* (*SupTech*) into a separate segment incorporating development and application of different high-tech solutions for the needs of financial regulation and supervision. If for traditional regulatory approaches the “outsourcing” of supervisory activities to external “subcontractors” is unknown and impossible for implementation, thanks to the technological development and the successful positioning of the RegTech sector as a reliable provider of regulatory expertise, nowadays supervisory agencies “open” themselves for such cooperation with the tech sector demonstrating a conceptually new model for interactive communication and cooperation with regulated entities. Such statement is supported by different national and supranational supervisory institutions, according to which the activities in the field of financial regulation are evolving in the direction of more pronounced commitment to the RegTech sector, but also in the direction of strengthening their own high-tech research and development (R&D) activities¹⁰.

As an illustration could be highlighted various high-tech regulatory initiatives. Such examples are:

- The *DLT-based decentralized portal* for exchange of regulatory information for publicly traded companies in the EU (Financial Transparency Gateway, EFTG), connecting the market infrastructures of individual EU member states which was developed under the auspices of the European Commission.

- The projects undertaken by the monetary authorities of Singapore and Hong Kong, and the Central Bank of Canada, connected with the establishment of *blockchain-based infrastructure* for exchange of financial information.

- The International Association for Trusted Blockchain Applications (INATBA), established in 2018 under the auspices of the European Commission.

The International Monetary Fund, the European Central Bank, the US Federal Reserve, the financial regulators of Great Britain and Germany, as well as the Swedish Central Bank also carry out their own innovative projects in the field of financial regulation¹¹.

In addition, the construction of *Regulatory Sandboxes*, representing a controlled environment for testing various high-tech solutions, is increasingly common in the practice of financial regulators¹².

Taking the form of peculiar “incubators” for testing individual supervisory innovations, they facilitate the formation a two-way cooperation between regulators, financial institutions and individual RegTech firms. Here could be mentioned platforms like Corda, Ethereum and HyperLedger Fabric, offering open source basic infrastructure and which could be considered as a kernel for building *shared environments* with regulators and other government institutions.

According to Deloitte research, similar to the technology of internet browsers, the adoption of unified management standards such as ISO, IEEE and ITU could be seen as a potential to reconfigure the traditional financial infrastructure in terms of servicing various financial activities – account and cash management, lending, risk management, shared financing, securities trading and settlement, cross-border payment processing, trade finance, including better management of trade services by improving the value chain (Deloitte, 2020).

Prioritization of the SupTech initiatives by financial regulators is supported also in the recommendations set out in the Final report of the Expert Group on Regulatory Obstacles to Financial Innovation¹³. According to the 9th Recommendation in the report “The Commission, in cooperation with the ESAs, and in co-ordination with relevant authorities and international standard setters, should develop and implement a comprehensive and ambitious agenda to support the adoption of advanced RegTech and SupTech by the financial sector”. The fourteenth recommendation of the report states that

„The Commission and the ESAs should further assess the need to establish an EU-level ‘regulatory sandbox’, or similar scheme, taking account of the experience acquired in the context of European Forum for Innovation Facilitators” (ROFIEG, 2019, pp. 17-18).

Current technological development and levels of cooperation between regulators and financial institutions allows SupTech also to favor the development of regulatory reporting. More specifically, here could be qualified the applications for supervisory disclosure, the mechanisms for direct retrieval of data from financial intermediaries' information systems, automated data validation and consolidation, applications for analysis of misconduct (insider trading technologies, money laundering), providing regulatory control and real-time auditing options and liquidity risk monitoring systems. Improved analyzes in the field of micro- and macroprudential regulation, harmonization and obtaining feedback on the effectiveness of supervisory policies are among the other prospects of the massification of SupTech (Broeders and Prenio, 2018, p. 1; Burnmark, Alvarez & Marsal, 2018, p. 29).

Mentioned above may raise the question does SupTech duplicate and compete with private RegTech initiatives? Employment of machine learning and artificial intelligence to examine vast data sets benefits regulators in prevention of identify breaches or cases of misconduct (Pollari et. al., 2019). Moreover, the application of this technological capacity provides supervisors with advantage “to predict risk areas that the institution does not see coming” (Pollari et. al., 2019). Here technological innovations are in support of the proactive role of supervisors. It can be also recalled that the lack of such regulatory proactivity is one of the factors led to the Global financial crisis. Their inability to assess adequately and in time emerging risks provoked by securitization, the financial innovation of that time, and all overcomplicated internal models for credit risk assessment resulted in the financial turmoil of 2007-2008. From this perspective, today`s cooperation between SupTech and RegTech sectors could be considered as learned by regulating authorities lesson that lagging behind innovations often leads to future failures.

Today we witness a number of supported by regulatory agencies joint initiatives between financial institutions and technology companies. Projects like Voltron, Marco Polo, Batavia, We.Trade, HKTFP bring together global banking institutions, technology and regulatory expertise providers and supervisory agencies in common platforms to share data, implement smart contracts, speed up transactions, prevent misconduct and fraud. In this way, a fundamentally new type of ecosystems, based on shared information and resource security, is formed (Valverde & Fernández, 2019, pp. 23-24).

Undoubtedly, innovations implemented by regulators gravitate around the technologies for processing large data sets, their “smart” processing and analysis and the creation of “safe” blockchain-based channels for information exchange. Broeders & Prenio

(2018) summarize in following two categories the technological tools used by supervisory agencies in their SupTech R&D activities: 1) data collection tools, including application programming interfaces (APIs), automated data collection mechanisms, data processing in the cloud, chatbots, and 2) data analysis tools, including individual instruments for processing large data sets, and information analysis using artificial intelligence (Broeders & Prenio, 2018, pp. 5-6).

Presented above brief examples for incorporation of various high-tech achievements in the field of financial regulation testify for an outlined trend towards technological inclusion. And if presented above systematization classifies SupTech initiatives in terms of their technological characteristics, from *institutional point of view* could be outlined the following levels for generating, testing and implementing innovations in the field of financial supervision:

- Independent R&D activities of the supervisory agencies through independent development and testing of various innovations.
- Cooperation of different SupTech and RegTech initiatives by attracting RegTech firms like partners in different SupTech ecosystems.
- Attracting traditional financial institutions like participants in different stages of the regulatory innovations` R&D process.
- Formation of joint test environments (like sandboxes, accelerators and innovation hubs) where participants are regulating authorities, RegTech firms and financial service providers (both traditional and FinTech).

This level of cooperation should be considered as a conditional systematization highlighting the technological expansion in the field of financial regulation. On this basis, several *arguments* can be presented in support of the thesis for an observed tendency for transition to a peculiar *platform model for financial regulation*, where SupTech and RegTech could be represented as two integrated parts of a *decentralized* and *platform-oriented* financial infrastructure.

First, the growing popularity of *blockchain technology* outside the sphere of cryptocurrencies, and more precisely its perception for various financial purposes, including regulatory, could be taken into consideration. Information sharing platforms using DLT technology, introduced by the Singapore and Hong Kong Monetary Authorities, are already operational and prove their functionality and ability to integrate a wide range of actors into a single and secure database¹⁴. Moreover, the blockchain technology gains popularity as an alternative of traditional trade, remittance and wire transfer systems. Examples here are: The “One Pay FX” project of Santander; The Pan-Nordic bank consortium “P27”; The “Marco Polo” trade finance initiative, including 30 global banks;

the “Komgo” consortium of 15 financial institutions; the consortium between Swiss UBS and 14 global banks; the intention of SWIFT to introduce own DLT payment infrastructure. All they illustrate the ongoing process of next level technological renovation were the DLT mechanism could support different levels of cooperation and integration.

In this regard, Auer (2019) offers the concept for embedded supervision, based on data sharing via DLT. Although the focus there is on decentralized markets, the concept is fully applicable to any market participant resorting to platform solutions. The main advantage of automated (built-in) supervisory mechanisms is the minimization of compliance costs and the achievement of equality between small and large financial service providers (Auer, 2019: 1-2).

In the area of financial regulation, similar opportunity for secure information sharing would inevitably support the creation of interactive joint databases between regulators, regulatory providers (RegTech) and regulated institutions. It is the *integration of different institutions* in the scope of unified databases that this can be related to the *second* argument, which is based on observations of already established platforms for exchange and sharing of information and expertise between regulators, financial institutions and providers of technological solutions. A joint study on the topic conducted by TheCityUK, Deloitte and Santander indicates following seven possible types of shared platforms: platforms for transactions monitoring, for collateral management, for fraud counteraction, for customer identification (KYC), for regulatory reporting, for syndicated loans processing and for trade financing¹⁵.

Third argument is related to the integration of the internal compliance organization within the general corporate governance and risk management policy (the so called triad GCR – Governance, Risk Management and Compliance) and the integration of individual compliance processes in the unified risk management policy in the respective financial institution¹⁶. Once again, technological innovations play a crucial role here, converting the silo compliance reporting systems into a "smart" alternative for regulatory compliance. This finding is supported by the ROFIEG report cited above, according to which regulatory platforms, regulatory compliance processes and information reporting can be useful in overcoming a number of regulatory disclosure challenges (ROFIEG, 2019, p. 60).

A concrete example of the importance of innovative compliance platform solutions is the expected single European whistleblowing legislation through the transposition of the Directive on the protection of persons who report breaches of Union law¹⁷. According to some authors (Staelens, 2020), a certified software platform allowing two-way encrypted communication with all internal and external stakeholders related to the specific

irregularity signal is critical to the effective implementation of such regulations at the level of an individual financial institution.

4. Visions for future development

Taking into account changes highlighted above, we could summarize a few tendencies outlining the transition from a traditional bipolar dispositive model of financial regulation (regulator – regulated entities) to an *interactive regulatory environment* involving more participants in the supervisory process¹⁸. Main components of such technologized regulatory infrastructure are:

- The supervisory agencies as initiators of different high-tech regulatory activities.
- The regulated entities, being involved as “partners” in the supervisory process.
- RegTech providers of regulatory expertise as outsourcing partners, mainly for financial institutions, but also as participants in the common regulatory ecosystems.
- Supervisors` SupTech initiatives, for creation, testing and implementation of technological innovations.

Such a transition would inevitably be a long process, starting with the provision of technological resources provided by different blockchain, big data and AI solutions.

In *short-term* could be expected in-depth cooperation between the RegTech and SupTech sectors especially in the field of sharing data and resources. From a technological point of view, this would require additional development of already started processes of automation and robotization of some compliance operations and processes. It is reasonable expectation that the implementation of innovative solutions based on blockchain, large data sets processing, computing in cloud environment and usage of different AI tools will continue to rise. From a normative point of view, there is an urgent need to develop a regulatory and supervisory framework for new services such as virtual and crypto asset management or alternative financing (Gonzalez-Paramo, 2018). The shift from physical structures of local importance to globalized network structures also requires development of even more global financial regulations, following the example of Basel IV, but aimed at a wider range of financial service providers. (Skinner, 2019).

The preamble of the proposed by the Euro Commission in 2020 Regulation on Markets in Crypto-assets (MiCA) demonstrates the beginning of such policy implementations. More precisely, it is stated that “the EU financial services regulatory framework is innovation-friendly and does not pose obstacles to the application of new technologies. This proposal, together with the proposal on a DLT pilot regime, represents the first concrete action within this area”. As pointed in the European Commission Proposal, such normative initiatives “create an EU framework that both enables markets in

crypto-assets as well as the tokenisation of traditional financial assets and wider use of DLT in financial services” (European Commission, 2020).

In nearest perspective the consequences of the COVID-pandemic are already being considered. It sounds paradoxical, but it is already provoking some *positive reflections* on banking activities, mostly because it “will accelerate the convergence of digital and physical” (Pylarinou, 2020), forcing innovations to “come from the core part of the business. Up to now the path of least resistance for many traditional institutions has been to set up a digital bank that runs in parallel to the main institution. Now, the business case for running a multi-brand strategy with your own challenger bank running beside your core bank is going to be far weaker, because the question will be asked, “Why aren’t you doing that with the main bank?” (Streeter, 2020).

It is known, for example, that today “are now making decisions about cloud-based operations and permanently having staff at home, with technology decisions that have been bubbling away for years being made in weeks” (Skinner, 2020). However, some of them still *do not have* an adequate regulatory projection, which (among other things) must take into account the greater decentralization of the digital economy caused by technological innovation¹⁹.

COVID-19 could also be associated with high hopes to catalyze the work of legislators and regulators on “introducing Open banking. Perhaps the only way banks will truly embrace the new data/AI ecosystem is if they are compelled to do so via a secondary wave of legislation – aka Open Banking 2.0” (Gauhman, 2020). It is seen by somebody like an alternative to merging between banking data centers. The newly created “open” platform could successfully compete with large and “data-driven” platforms from the US and China, which are entering the European financial market.²⁰

The technologicalization of the regulatory process is indisputable, but the ubiquitous application of regulatory innovations is still limited. Some interpret this circumstance as a reaction to fears of regulatory requirements (McIntyre et al., 2018, p. 17). According to others, their use (for example by robotic consultants in the investment process) has a high potential for growth, but stricter regulation would result in loss of simplicity (Hartdegen u.a., 2019, S. 15). For example, offered today Robo Advice and digital asset management represent a step towards platform service of “normally rich” clients (Affluents) with standardized or automated offers, rather than an emanation of a new Private Banking model. This is because the “higher” asset segments, resp. the needs of many and ultra-rich clients, are too complex and do not submit to standardized investment decisions.²¹

In a *longer-term perspective*, however, a complete redesign of the existing regulatory infrastructure could be expected. The complete automation of operational compliance

activities, the fully automated interaction between financial institutions and supervisory agencies, together with the integration of external providers of regulatory expertise within the scope of a single platform model outline its future appearance.

However, a series of questions on adapting regulatory changes to the risk potential of innovative technologies like smart algorithms, for example, which “are often portrayed as some sort of panacea, solving business need and consumer service” (Risk & Compliance Platform Europe, 2020) also awaits a timely solution. For example, how will be treated the risks of “smart” machine solutions? To what extent could be included risk-based machine learning techniques providing easier regulation of payment fraud for customers? And is it possible to “construct” a regulatory framework of risks provoked by morally dubious decisions, which no one has foreseen and there is no possibility for direct control over them? Who and at what cost will be responsible for the consequences of one or another “catastrophic” decision of the artificial system?

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REFERENCES:

- Auer, R. (2019). Embedded Supervision: How to Build Regulation into Blockchain Finance, Bank for International Settlements, [Online]. Available at: <https://www.bis.org/publ/work811.pdf>.
- Barberis, J. D. Arner, R. Buckley (2019). The REGTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation. Wiley.
- Basel Committee on Banking Supervision, BCBS (2017). Sound Practices: Implications of fintech developments for banks and bank supervisors. Consultative Document. Issued for comment by 31 October 2017, [Online]. Available at: <https://www.bis.org/bcbs/publ/d415.pdf>.
- Basel Committee on Banking Supervision, BCBS (2018). Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors, [Online]. Available at: <https://www.bis.org/bcbs/publ/d431.pdf>.
- Broeders, D., J. Prenio (2018). Innovative technology in financial supervision (suptech) – the experience of early users // *FSI Insights on policy implementation*, No 9, July 2018, [Online]. Available at: <https://www.bis.org/fsi/publ/insights9.pdf>.
- Bundesverband deutscher Banken (2020). Cloud Computing bei Banken, 21. August, 2020. [Online]. Available at: <https://bankenverband.de/themen/cloud-computing-bei-banken/>.

- Burnmark, Alvarez & Marsal (2018), RegTech 2.0, [Online]. Available at: https://www.alvarezandmarsal.com/sites/default/files/regtech_2.0_report_final.pdf.
- Congressional Research Service (2020). Fintech: Overview of Innovative Financial Technology and Selected Policy Issues, April 28, 2020. [Online]. Available at: <https://crsreports.congress.gov/product/pdf/R/R46332>.
- Deloitte (2016). RegTech is the new FinTech. How agile regulatory technology is helping firms better understand and manage their risks. [Online]. Available at: https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/FinancialServices/IE_2016_FS_RegTech_is_the_new_FinTech.pdf.
- Deloitte (2020). Does Blockchain mean an end to regulatory reporting as we know it?, [Online]. Available at: <https://www2.deloitte.com/uk/en/pages/financial-services/articles/does-blockchain-mean-an-end-to-regulatory-reporting.html>.
- Dzharparov, Pl. (2020). Application of blockchain and artificial intelligence in bank risk management. // *Economics and Management*, Vol. XVII, Issue: 1, pp.43-57.
- ESMA, EBA, EIOPA (2019). FinTech: Regulatory sandboxes and innovation hubs, Report. JC 2018 74, [Online]. Available at: <https://esas-joint-committee.europa.eu/Publications/Reports/JC%202018%2074%20Joint%20Report%20on%20Regulatory%20Sandboxes%20and%20Innovation%20Hubs.pdf>.
- European Central Bank (2020). ESCB/European banking supervision response to the European Commission's public consultation on a new digital finance strategy for Europe/FinTech action plan. August 2020. [Online]. Available at: <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.esbceuropeanbankingsupervisionresponsetoeuropeancommissionpublicconsultationdigitalfinancestrategyeuropelifintechactionplan2020~b2e6cd0dc4.en.pdf>.
- European Commission (2020). Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and Amending Directive (EU) 2019/1937, [Online]. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>
- European Commission (2019). Directorate-General for Financial Stability, Financial Services and Capital Markets Union (FISMA). Study on the costs of compliance for the financial sector. Final Report. [Online]. Available at: <https://op.europa.eu/en/publication-detail/-/publication/4b62e682-4e0f-11ea-aece-01aa75ed71a1>
- Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG) (2019). 30 Recommendations on Regulation, Innovation and Finance. Final Report to the European Commission, December 2019, [Online]. Available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/191113-report-expert-group-regulatory-obstacles-financial-innovation_en.pdf.
- Financial Conduct Authority, FCA (2015). Call for Input: Supporting the development and adoption of RegTech, [Online]. Available at: <https://www.fca.org.uk/publication/call-for-input/regtech-call-for-input.pdf>.

- Financial Stability Board (2020). The Use of Supervisory and Regulatory Technology by Authorities and Regulated Institutions: Market developments and financial stability implications, 9 October 2020, [Online]. Available at: <https://www.fsb.org/wp-content/uploads/P091020.pdf>.
- FinTech Global (2019). More than \$9.5bn has been invested in RegTech companies globally over the last five years. [Online]. Available at: <https://fintech.global/more-than-9-5bn-has-been-invested-in-regtech-companies-globally-over-the-last-five-years/>.
- Gauhman, L. (2020). 4 Digital Transformation Lessons that Banks Need to Learn from Covid-19. // Finextra Research, 20 May, 2020, [Online]. Available at: <https://www.finextra.com/blogposting/18776/4-digital-transformation-lessons-that-banks-need-to-learn-from-covid-19>.
- Gonzalez-Paramo, J. M. (2018). Opportunities and challenges for banking regulation and supervision in the digital age. *SUERF Policy Note*, Issue No 31, April 2018, [Online]. Available at: <https://www.suerf.org/policynotes/2511/opportunities-and-challenges-for-banking-regulation-and-supervision-in-the-digital-age/html>.
- Hartdegen, Chr., A. Peters, St. Weber (2019). KI-unterstützte Automation an der Kunde-Bank-Schnittstelle. // *ibi Research Report*, *ibi research an der Universität Regensburg*, Oktober, <https://ibi.de/veroeffentlichungen/ki-unterstuetzte-Automation-an-der-kunde-bank-schnittstelle>.
- Kumar, S. (2020). Digital Transformation of Regulatory Compliance for Financial Institutions. // *MEDICI*, May 27, [Online]. Available at: https://gomedici.com/digital-transformation-of-regulatory-compliance-for-financial-institutions?__s=8fgunq2isrsqt5tmhri.
- Iansiti, M., K. R. Lakhani (2019). Competing in the Age of AI. // *Harvard Business Review*, From the January–February 2020 Issue, [Online]. Available at: https://hbr.org/2020/01/competing-in-the-age-of-ai?utm_source=facebook&utm_campaign=hbr&utm_medium=social&fbclid=IwAR3wmk3FbE2xY4YBToSkySSW3TNNXC79Q3OASfs-yoiEU2D4fAFtFOGbLOk
- McIntyre, A., C. Rainusso, Fr. Rohde, J. Bant (2018). Want Bank Revenue Growth? Price For Customer Lifetime Value. 2018 RETAIL BANK PRICING SURVEY.// Accenture, [Online]. Available at: https://www.accenture.com/_acnmedia/accenture/conversion-assets/dotcom/documents/global/pdf/dualpub_20/accenture-retail-bank-pricing-survey.pdf.
- McKinsey & Company (2020). The 2020McKinsey Global Payments Report. [Online]. Available at: <https://www.mckinsey.com/~media/mckinsey/industries/financial%20services/our%20insights/accelerating%20winds%20of%20change%20in%20global%20payments/2020-mckinsey-global-payments-report-vf.pdf>
- Nedelchev, M. (2020). Origin and Definition of RegTech. // *Economics and Management*, Vol. XVII, Issue: 1, pp.1-9.
- Payments NEXT (2020). Regtech compliance disruption growing; spending will reach \$115.9 billion, [Online]. Available at: <https://paymentsnext.com/regtech-compliance-disruption-growing-spending-will-reach-115-9-billion/>.
- Pollari, I., D. Milligan, Ch. Steele, F. Gobbo (2019). Regtech beyond compliance. How can banks, asset managers and insurers determine the right regtech solution for their needs? KPMG.

- [Online]. Available at: <https://home.kpmg/xx/en/home/insights/2019/03/beyond-compliance-fs.html>.
- Pylarinou, E. (2020). COVID-19 is a catalyst for business innovation. Daily Fintech. [Online]. Available at: <https://dailyfintech.com/2020/03/10/covid-19-is-a-catalyst-for-business-innovation/>.
- Risk & Compliance Platform Europe. (2020). Christopher Woolard asks himself: “What kind of regulations do we want?”, 22 September 2020. [Online]. Available at: <https://www.riskcompliance.biz/news/christopher-woolard-asks-himself-what-kind-of-regulations-do-we-want/>.
- Schizas, E., Gr. McKain, Br. Zhanig et al. (2019). The Global RegTech Industry Benchmark Report. Cambridge Centre for Alternative Finance. [Online]. Available at: <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2019-12-ccaf-global-regtech-benchmarking-report.pdf>
- Skinner, Ch. (2017). Bank Regulations Change Every 12 Minutes. The Finanser. Chris Skinner`s Blog. [Online]. Available at: <https://thefinanser.com/2017/01/bank-regulations-change-every-12-minutes.html/>
- Skinner, Ch. (2019). Time for a global regulator. TheFinanser, Apr 4, [Online]. [Online]. Available at: <https://thefinanser.com/2019/04/time-for-a-global-regulator.html/>.
- Skinner, Chr. (2020). This is no Black Swan. // The Finanser, May 26, 2020, [Online]. Available at: <https://thefinanser.com/2020/05/this-is-no-black-swan.html/>.
- Staelens, Fr. (2020). Whistleblowing Management: The Coming Regulatory Storm. // Risk & Compliance Platform Europe, 4 August 2020, [Online]. Available at: <https://www.riskcompliance.biz/news/whistleblowing-management-the-coming-regulatory-storm/>.
- Streeter, B. (2020). Pandemic Gives Traditional Banks a Rare Chance to Catch Up Digitally. // The Financial Brand, May 18, 2020, [Online]. Available at: <https://thefinancialbrand.com/96505/covid-digital-banking-fintech-traditional-branch/>.
- TheCityUK, Deloitte, Santander (2018). Splitting the Bill. The role for shared platforms in financial services regulation. November 2018, [Online]. Available at: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-thecityuk-splitting-the-bill-the-role-for-shared-platforms-in-financial-services-regulation.pdf>.
- U.S. Department of the Treasury (2018). A Financial System That Creates Economic Opportunities. Nonbank Financials, Fintech, and Innovation. Report to President Donald J. Trump. Executive Order 13772 on Core Principles for Regulating the United States Financial System, [Online]. Available at: <https://home.treasury.gov/sites/default/files/2018-07/A-Financial-System-that-Creates-Economic-Opportunities---Nonbank-Financi....pdf>.
- Valkanov, N. (2019a). Compliance v pomosht na finansovoto regulirane. Varna: Nauka I ikonomika.
- Valkanov, N. (2019b). Mitigation of Regulations Burden in Financial Sector by Application of High Tech Solutions // *Economics and Management*, Vol. XVI, No 1, pp. 19-30.

Valverde, C., Fr. Fernández (2019). The future of blockchain in the European banking system. // *Funcas SEFO*, Vol. 8, No. 1, January 2019, [Online]. Available at: https://www.sefofuncas.com/pdf/Carbo_8.1.pdf.

¹ A research of the European Commission reports that in 2017 the compliance costs form on average between 2 and 4% of the total operating costs in industries like banking, insurance, asset management and securities operations. The largest share of the operating compliance costs is taken by regulatory reporting costs – 30% on average of the one-off and 27% of the ongoing costs (European Commission, 2019, p. 7).

² For the regulatory reformatting that followed the global financial crisis of 2007-2008 and the burden of over-regulation see: Valkanov 2019a, pp. 38-57.

³ RegTech (from Regulatory Technology) is a collective term, generalizing the application of advanced information technologies for the needs of financial regulation. A detailed functional definition for RegTech is given by the Cambridge Centre for Alternative Finance (CCAF) – see: Schizas et al., 2019, pp. 18-19; On the origin and evolution of RegTech see also Nedelchev, 2020, pp. 1-9.

⁴ According to Barberis et al. (2019) the appearance of RegTechs dates since the 90s and the first years of the new millennium and could be associated primarily with the development of own technologies for risk management reporting and measurement (Value at Risk) in accordance with the capital regulations in force at the time, as well as with the compliance with regulatory requirements for monitoring abnormal movements in the securities markets. To some extent, it is the overconfidence of this first wave of technological innovation (RegTech 1.0) that contributed to the 2007 financial crisis. Following increased post-crisis regulatory requirements provoke the emergence of their modern version (RegTech 2.0), focusing on digitalization and the importance of data for the needs of regulatory compliance and supervisory disclosure – see: Barberis et al., 2019, pp. viii-ix.

⁵ The application of blockchain and AI in bank risk management is discussed in Dzhaparov, 2020, pp.43-57.

⁶ In details for different RegTech variations see: Deloitte, 2018; Schizas et al., 2019.

⁷ See: Valkanov, 2019a, pp. 176-186. **Compared to other industries, the management of sensitive data at the highest level is not unknown to the financial sector and especially to the banks. On the contrary, many credit institutions have well-established procedures for managing confidential and sensitive information, for example in the areas of Corporate and Investment Banking. In this sense, the new data protection directive** (General Data Protection Regulation, GDPR) is another challenge for observing and ensuring the inviolability of personal user data, which exists in large volumes and is “scattered” in many groups.

⁸ See: European Central Bank, 2020, pp. 11-12.

⁹ For example, see: Financial Conduct Authority, 2015; Broeders and Prenio, 2018; U.S. Department of the Treasury, 2018; Financial Stability Board, 2020; Congressional Research Service, 2020.

¹⁰ See: Basel Committee on Banking Supervision, 2018, p. 24; Auer, 2019, pp. 19-20; U.S. Department of the Treasury, 2018, p. 13; Financial Conduct Authority, 2015, p. 5.

¹¹ In details for each of them see: Valverde & Fernández, 2019, p. 28.

¹² More than 50 national financial regulators have announced their current or forthcoming initiatives in this direction. A detailed list is published on following URL:

<https://dfsobservatory.com/content/regulatory-sandboxes>. Detailed statistics on regulatory sandboxes and innovation hubs in EU countries are provided by ESMA, EBA and EIOPA, 2019.

¹³ The Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG) is established in 2018 by the European Commission in order to assist the Commission by providing high-level expertise on EU financial services legislation in relation to financial technology. See: https://ec.europa.eu/info/publications/180308-fintech-call-for-applications_en.

¹⁴ The McKinsey 2020 Global Payments Report confirms the benefits from “different shared-utility opportunities (...) in joint know-your-customer (KYC) and fraud-prevention initiatives” (McKinsey, 2020, p. 30).

¹⁵ See: TheCityUK, Deloitte, Santander, 2018, p. 10.

¹⁶ More about the application of the platform model in the field of regulatory compliance see in: Valkanov, 2019a, p. 170-175.

¹⁷ Directive (EU) 2019/1937. First whistleblowing legislation was introduced in the United States in 1989 by the Whistleblower Protection Act. In the United Kingdom a similar enactment is the Public Interest Disclosure Act (PIDA) of 1998.

¹⁸ For more details on expected changes in the financial regulation sector see: Valkanov, 2019b.

¹⁹ According to the German Banking Association “today's regulation is not yet sufficiently designed for the widespread use of the cloud by banks” and “in order to change this, the following adjustments are needed in particular: 1. The regulation of cloud outsourcing must be based on risk-based approach. 2. Reporting requirements for supervisors and exit strategies must be clear and uniform across Europe. 3. In order to minimize the risks of concentrating on several cloud providers, standards must be put in place that create seamless portability between cloud providers.” (Bundesverband deutscher Banken, 2020).

²⁰ Introduction of open banking frameworks in the European Union, the United Kingdom, India, Hong Kong and Singapore raises expectations of an “explosion” of third-country providers that seize “territory” from traditional credit institutions (...). Although the United States has not taken a regulatory approach to “open banking”, the country “does not lag behind the rest of the world” and “demonstrates great activity that reflects “open banking”, even if it is not labeled as such.” (Streeter, 2020).

²¹ Compared to traditional private banking, new platforms possess some indisputable advantages: the potential to create more critical mass and “big data”, the lack of “own” systems, reduced regulatory complexity, etc. Not from the point of view of trusting personal relationships between clients and consultations, as a differentiated value of the offer factor, some see in platform models “investment ruins”.

CHALLENGES AND PROSPECTS OF E-COMMERCE MANAGEMENT IN THE BANKING SECTOR

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Abstract

In the context of the globalization of the world economy, e-commerce plays an important role in the development of the banking sector. In particular, by using the global Internet, it significantly reduces the time and financial costs of banking operations, which enable banks to conduct financial transactions faster, deliver new banking products and increase their customer base. Consequently, at the present stage, the countries that use e-commerce extensively in the banking sector are developing the fastest. Given the scarce economic resources of our country, the Internet economy is the means by which it is possible to achieve greater socio-economic effects, the development of trade, currency and credit relations. In Georgia, these opportunities are not used properly. The reason for this is the challenges in e-commerce in the banking sector of our country and the mismanagement of their elimination processes.

Keywords: *E-Commerce; Banks, Banking Products; Banking, Cyber Security; Banking Process Management.*

JEL Codes: *G21, L81, L86*

Introduction

In the aftermath of the global financial crisis and especially in the wake of the covid-19 pandemic, e-commerce has become an integral part of the banking system. The mobile banking system has simplified transfers, which has enabled customers to use their cash better and more securely. Although the development of e-commerce in our country's banking sector is hampered by shortcomings in the development of Internet technologies, Georgia still tries not to lag behind technological innovations. The widespread spread of the COVID 19 pandemic has posed many challenges to the Georgian banking sector. The solvency of consumers of banking products has decreased, the share of bad loans has

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increased, and commercial banks have delayed the obligation to repay the main part of the loan for several months, which has reduced the financial stability of banks. Many leased businesses were shut down altogether, with companies, vehicles, restaurants, hotels, wholesalers and retailers operating at the expense of loans previously taken from commercial banks. The level of banking risks has increased, attacks on bank branches have increased, the level of banking cyber security has decreased, due to the decrease in the scale of work in traditional businesses, the profit margin has decreased. Retailers, wholesalers, restaurants, catering establishments and other economically active businesses have moved from the traditional form of business to e-commerce, which has led to the creation of new websites and online platforms. This has increased the demand for ISPs, servers, online services. All of this has overwhelmed the Internet space, and ISPs have faced the need to increase server capacity and bandwidth.

Against this background, the population in some regions of Georgia does not have access to the Internet at all. The problem of internetization is still present in the mountainous and border regions of our country. Therefore, the state should actively seek the mass introduction of Internet technologies. The need for mass use of the Internet is also important in the marketing and delivery of banking products by commercial banks, and in the selection of banking products by the consumer, as the Internet provides more information to the public about financial processes (Katamadze et al., 2019). Having a wealth of information, especially in the banking sector, helps citizens to make and implement a variety of financial decisions, make informed credit choices, and manage their chosen loan portfolio.

Literature review

Authors L. Bregadze (2020), Y. Blount (2005), Abuselidze and Mamaladze (2021), P. Lata (2016) discusses the general principles, features of e-commerce, models of e-commerce organization, development trends of e-commerce, the pros and cons of using electronic technologies, etc. Todua and Abuladze (2011) in the monograph "Georgian Internet Market Marketing Research" examines the global computer and Internet market and their development trends at the present stage, outlines the state of e-business and development peculiarities in the world, marketing research of Georgian consumers' behavior towards Internet services.

Authors Kapanadze, Zhvania, and Tskhadadze (2017) Discuss the essence of e-business, principles, development directions, organizing models, e-commerce development trends in world business. And st. Janjgava discusses the factors that affect the development of e-commerce in Georgia. Angelakopoulos & Mihiotis (2011), S. Bakare (2015), R. T.

Watson et al., (2008), Kardaras and Papathanassiou (2001), H.H.M. Rashwan (2020), S. Rehman (2012), V. Ratten 2008; 2016), E. Jarrett, J. (2016), e-commerce is considered as one of the promising directions of strategic development of companies.

V. Lobzhanidze (2009) discusses the types of e-business, the involvement of modern technologies in international business, the advantages and disadvantages of Internet business. Tsiuri Nozadze discusses the essence of e-commerce, Internet technologies, local data protection technologies, tax systems in e-commerce. Teimuraz Sukhiashvili discusses the research and modeling of business processes of the modern electronic tax system based on UML diagrams, for their further software implementation. Z. Surmanidze (2018) discusses the theoretical-methodological aspects of Internet economy, its origin and development factors, peculiarities of e-commerce, the role of Internet economy in the world economy, Internet economy development trends, difficulties of Internet economy development, potential opportunities (perspectives) and its importance in Georgia's economic development.

3. Results and Discussion

3.1 Challenges of e-commerce in the banking sector

Due to the use of 4G internet at the modern stage, the use of "smartphones" is becoming more and more popular, as a result of which the number of e-commerce users in the banking sector is steadily increasing. According to the data of the National Bank of Georgia, in the IV quarter of 2019, 919 million GEL was paid online, which is 8% more than in the previous III quarter. Compared to the IV quarter of 2018, the number of Internet payments decreased by 8% and the amount increased by 7%. Compared to the index of the third quarter, the share of the number of Internet payments decreased by 1%, and the share of the amount by 5%”(Turashvili, 2013, p. 13). A comparison of the share of Internet payments is given in Diagram 1.

Diagram no. 1 Number of cards Issued in Georgia (2015-2019)



Chip cards are widely used in the banking sector of Georgia. The global network of the Internet is full of comprehensive information and accessible guides for everyone, which makes it possible to use contactless cards in our country. In addition, thanks to the information posted on the Internet, many bank managers find the necessary staff at work, as well as many people find jobs in the banking sector, which significantly affects the efficiency of commercial banks in our country and the sale of banking products.

The worldwide spread of the COVID 19 pandemic has hampered the development of not only Georgia but the entire world economy (Abuselidze and Mamaladze, 2020; Abuselidze and Slobodanyk, 2021). Its negative effect, along with other sectors of the economy, was reflected in the banking sector. The massive spread of the COVID 19 pandemic has significantly reduced the share of traditional businesses in the banking sector. Against this background, the role of e-commerce in this sector of the economy has sharply increased, an open banking system has been prepared and launched, the number of employees in the traditional banking sector has been reduced, some of them have been retrained and new banking products have been adapted to new jobs.

In such conditions, it is necessary for the National Bank of Georgia to develop such a long-term strategy for the development of the banking sector, which, if properly managed, will create a favorable financial, credit and investment environment for the development of this sector. Despite the many advantages, the use of e-commerce in the banking sector also has drawbacks, which are manifested in the availability of financial indicators, hacking of bank accounts by hackers and insecurity of personal data of users of banking products. Internet users entrust their bank card data to various companies, and failure to provide such information can lead to crimes such as Internet fraud, embezzlement and other cybercrimes.

Cyber security is one of the most important directions of the security policy of the Georgian banking sector, which means protection of the banking system from online attacks, as it poses a threat to the bank's owners, managers and employees, as well as consumers of banking products. The banking sector of our country is acutely aware of the threat of cyber attacks. Therefore, for the full implementation of e-commerce in the Georgian banking sector, our country's commercial banks need to develop a credit policy that ensures their e-commerce and cyber security.

Cyber attacks in the banking sector damage software packages, disrupt computer services. Georgian commercial banks have been repeatedly attacked by cyber-attacks, and many banking programs and banks' websites have been deliberately damaged. Cyber attacks are a problem not only in the Georgian banking space, but also in the entire world banking system, which poses a significant threat to the use of e-commerce tools in the banking sector. Therefore, commercial banks are trying to develop an effective cyber

security system. The National Bank of Georgia, by introducing e-commerce in the banking sector, is trying to simplify and accelerate banking operations. In recent years, a number of projects have been launched to promote Fintech, including: the Financial Innovation Office and the Regulatory Laboratory, the Digital Banking model, the Open Banking Standards Framework, the first phase of Open Banking is now available to commercial banks from 31 March. Nevertheless, the commercial banks of our country still face great difficulties in this area.

3.2 Prospects for e-commerce in the banking sector

Problems in the banking sector can be eliminated with proper and correct management of banking processes, and with the help of e-commerce, these processes can be accelerated and become more efficient. Therefore, the online trading mechanism should be used more fully in the banking sector of Georgia, the population should get used to various online services of a commercial bank, using open banking. For this purpose, it is possible to use the platform for online sales of banking products, which offers the customer a convenient banking payment system.

Commercial banks can sell their banking product through their electronic platform, by leasing it from B2C, with the banking created through this platform, users will be able to take advantage of the features of the online trading mechanism. Therefore, the role of open banking in the Georgian market should be significantly increased in defining bank liabilities, offering new loan terms, establishing banking services, finding information about the bank's cooperation with other companies and shopping centers, etc. Sh.

The development of open banking depends on the readiness of the consumer of banking products to use the banking system. It is the advantages seen by the consumer towards banking that should determine the intensity of the use of e-commerce in the banking sector. When studying the mechanism of using e-commerce in the banking sector, the consumer prefers to purchase a banking product and service online and not traditionally, due to the practicality and efficiency of its use. Due to the fact that the share of e-commerce in the Georgian banking sector is still quite low, the e-Commerce Association aims to harness the existing potential in this area and promote the growth of online sales of commercial banks playing in the domestic market.

The purpose of the Georgian E-Commerce Association is to facilitate credit relations between commercial banks and its corporate clients, companies, logistics providers and other individuals wishing to receive banking products (services) online. Therefore, e-commerce is characterized by a rapid development trend in the Georgian banking sector. Accordingly, the banking sector is actively involved in the development of e-commerce in our country. One of the manifestations of this is TBC Group, which is starting to develop

e-commerce in Georgia. The new digital trading platform VENDOO will be added to the market soon, which will allow consumers to buy products comfortably and quickly without leaving home, and small and medium-sized entrepreneurs will be able to provide their products to the population of Georgia via the Internet. VENDOO online store is created on the basis of SWOOP, 100% of which was acquired by TBC Group. SWOOP is a well-known online marketplace discount and sales company. It will remain a separate brand and will continue to operate in the same way, while existing users will be able to use the services of both brands' websites. "TBC" Bank through VENDOO will bring all kinds of products that are produced in Georgia or imported from abroad. Customers will be able to buy the product they want without leaving home. The platform will be available to everyone and will offer customers a wide selection of products, as well as for users of banking products it will implement personalized installment offers. The main purpose of its operation is to simplify banking services. This platform, on the one hand, will enable commercial banks of Georgia to successfully market and sell banking products, and on the other hand, will enable customers to purchase higher quality banking services.

Customers will be able to make easier and faster decisions regarding online purchases of banking products. Thus, the digital trading platform will help commercial banks to scale their business, which will help them to increase sales of banking products, make loans available to the private sector faster and easier (without extra bureaucratic barriers), conduct online marketing of banking products. E-commerce is one of the fastest growing areas in Georgian commercial banks. In today's world of technology, online shopping is becoming more and more popular. The new digital platforms, on the one hand, will make it easier for consumers to purchase the desired banking products, on the other hand, will facilitate business development.

Voice of E-commerce - The group was created to help the development of e-commerce in the banking sector, the main purpose of its operation is to unite all the employees in the field of e-commerce. The Group is ready to assist commercial banks in managing force majeure situations, provide relevant and objective information on current developments in the business sector, and provide advice and recommendations so that banks can quickly overcome the challenges they face. Any bank can join the group, for whom it is important to use online sales tools in order to successfully develop and profit business.

E-commerce does not only mean "online" store, this field includes platforms, as well as logistics companies, payment providers, etc. Group members can receive information that is critical to them and speak unanimously to relevant government agencies, address them and share their position on behalf of the group. The greatest good of the group is the

ease of information exchange, which allows us to respond quickly to critical issues. voice of E-commerce - the group protects the interests of the banking sector, and creates new opportunities for the development of e-commerce in this area, at the present time the group brings together more than 400 people from relevant fields.

As it is known, in order to limit the spread of Covid 19, during 2020 the Georgian government has repeatedly imposed restrictions on traditional business. The bans did not only apply to e-commerce, food delivery, bank and postal items. This circumstance further facilitated the development of e-commerce, moving the business from the traditional to the online format. As a result, local companies engaged in online commerce have experienced rapid growth, while traditional businesses have suffered significant losses. Since the spread of Covid 19 infection became a global problem, restrictions have affected many businesses, including online retailers.

This issue turned out to be especially painful for the Georgian banking sector, because unlike other countries, only certain types of banking products could be purchased so far, which in itself had a negative impact on the development of the banking sector. Losses due to restrictions are associated with quite large amounts. Despite all this, e-commerce has a good prospect of development in the Georgian banking sector. The interest of the banking sector in e-commerce clearly shows that this field is developing and growing, as banks in developed countries have a high level of customer confidence, which simplifies the development of credit relations between them.

In 2020, due to the proliferation of Covid 19, consumer isolation has further enhanced the role of e-commerce in the banking sector. In such conditions, Georgia has the best opportunity to develop e-commerce in the banking sector, which will lead to beneficial shifts, such as: creating new jobs, facilitating the search for key markets for entrepreneurs, and more. All this will give impetus to the development of local production.

At the present stage, there are thousands of small and medium-sized online stores in Georgia, which employ tens of thousands of people. They trade independently through subscription or their own handmade products through various online platforms. Starting this business requires quite a bit of capital investment and is, in fact, available to everyone. Due to the fact that e-commerce is not well developed in Georgia's neighboring countries, this circumstance gives our country the opportunity to become a regional center. In order for the e-commerce mechanism to develop faster in the Georgian banking sector, it is necessary to remove certain legislative barriers so that the population of our country can benefit more from the benefits of e-commerce.

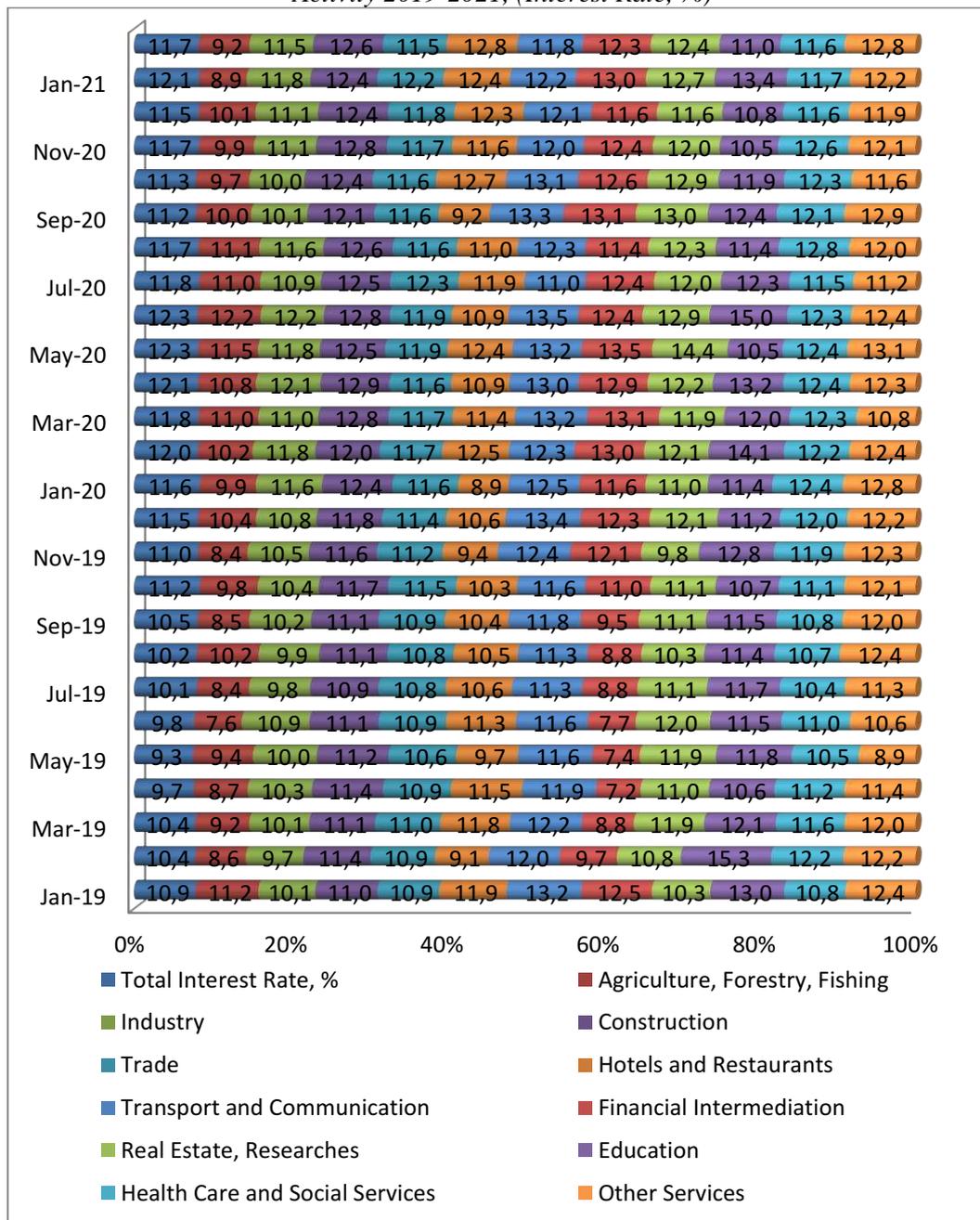
In order to study the challenges in the management of the electronics of the Georgian banking sector and to outline the prospects for its development, we conducted an in-depth

study. In particular, there are 15 banks operating in our country, of which, based on a direct interview, we interviewed the managers of the leading banks in this field (Bank of Georgia, TBC Bank, Bank-Credo and others). The study revealed the development trends of e-commerce in these banks, which can be generalized to the entire banking space of Georgia and thus see the overall dynamics (with an error of 1-2%), which is the allowable limit according to the statistical research methodology.

In particular, an in-depth study on the development of e-commerce at Credo Bank showed that the question: ***how many consumer loans were issued in 2019 and 2020, including what percentage was issued through the electronic platform (remote means)?*** - The answer was as follows: Lending to Bank Credo through an electronic platform was introduced in November 2020 and during the same month (between 1.11.2020 and 30.11.2020) only 1% of the 678 loans issued from the first branch were issued through an electronic platform, issued from the second branch 2% out of 384 loans were issued through electronic platform, out of 523 loans in the third branch - 1%, out of 131 loans in the fourth branch - 1%, etc. Sh. Similar data for December 2020 looks as follows: between 1.12.2020-31.12.2020 2% of 791 branch's 798 loans were issued via electronic platform, №2 of №2 branch's 353 loans - 2%, №3 branch 12 612 loans - 3%; № Out of 161 branches - 3%. It is true that e-platform loans in December increased from 1-2% to 2-3% compared to November 2020, but this is not enough to prove that e-commerce is firmly entrenched in this bank and is represented by a high interest rate. One of the obstacles to issuing loans online through Credo Bank is that certain types of loans (eg, refinancing another bank, co-borrower / guarantor loan), which are issued in large quantities during the month, cannot be processed electronically due to certain software limitations. In addition, the lack of an electronic platform at Bank Credo in 2019 is explained by its short history of operating as a bank. In particular, "Credo" has been operating in the credit market as a bank since 2017. In the case of Bank of Georgia, up to 80-85% of the pre-approved limits are issued through Internet Banking and the system has been operating for many years (source: <https://bankofgeorgia.ge/ka>).

As for the second question of the in-depth study: ***how many real estate loans were issued in 2019 and 2020, including what percentage were issued through electronic platform (remote means)?*** - Issuance of real estate loans in the banking sector of Georgia by electronic platform is not possible due to the complexity of the procedure.

Figure no. 1 Volume and Interest Rates on Commercial Banks Loans, Granted in National Currency to the Resident Legal Entities in the Reporting Period, by Type of Activity 2019-2021, (Interest Rate, %)



Source: Compiled by the authors based on the data of the National Bank of Georgia for 2019-2021

As for the third question of the in-depth study: ***the number of loans issued in 2019 by type of activity, including what percentage was issued through the electronic platform (remote means)?*** - The analysis of the answers given by the respondents revealed that in most banks operating in Georgia, most loans are issued through electronic platform to individuals with fixed salaries, because with the borrower's consent, the salary is checked with a single button. The loan amount is transferred to the account.

As for the fourth question of the in-depth study: ***List the number of loans issued in 2020 by type of activity, including what percentage was issued through the electronic platform (remote means)?*** - The analysis of the answers given by the respondents reveals that according to the types of activities, as in 2019, in 2020, loans were issued mainly to employees in the public sector and the private sector, because the pandemic, for the most part, did not stop receiving employment of employees of government agencies or private organizations. . Employees in those sectors whose economic activities have been restricted to minimize the spread of the pandemic (restaurants, grocery stores, foreign trade, etc.) receive income on hand.

As for the fifth question of the in-depth study: ***How many active operations were carried out by the commercial bank in 2019 and 2020? Among them: What percentage by remote (electronic and other means of communication)?*** - The answer of the majority of respondents was as follows: “The program does not count and we can not summarize it. The only thing is that if we single out a few active operations, we will get an idea of the number of operations carried out according to the branch plan, because the plan is often completed. ”

As for the sixth question of the in-depth study: ***how many passive operations were carried out by a commercial bank in 2019 and 2020? Among them: What percentage by remote (electronic and other means of communication)?*** - The majority of respondents answered this question as follows: “The number of passive operations can not be determined programmatically. They will give us an idea about the planned passive operations carried out by the branches, because the planned passive operations are usually completed. ”

As for the seventh question of the in-depth study: ***by what percentage has the bank's income increased or decreased on the basis of loan deferrals in 2020 compared to 2019?*** - The total assets of Georgian banks, despite the economic crisis, have increased by 22% annually and amount to 56.9 billion GEL. However, the total profit of the sector decreased eight times. If in 2019 the total profit of 15 banks was 853 million GEL, in 2020 the total profit of the sector was 99 million GEL, with 8 banks having a loss instead of a profit. Cartu Bank suffered the largest loss of 24.7 million. TBC Bank had the highest net profit of 123

million. As can be seen from the financial figures presented here, the main determinant of the current loss is the accumulation of GEL 1.2 billion in the expected credit loss reserve by banks. In total, Georgian commercial banks have reserved GEL 1.22 billion in the "Assets Losses" buffer, which reflects the amount of possible loan losses due to the expected crisis.

As for the eighth question of the in-depth study: by what percentage has the cost decreased or increased based on the issuance of loans electronically in 2020 compared to 2019? - The analysis of the answers given by the respondents revealed that "if we consider the cost of the borrower, the electronic issuance / non-issuance did not affect either the nominal or the effective rate. However, it would be logical for banks to encourage borrowers who would receive services electronically and not increase queues at banks, especially in a pandemic. It is not technically possible to accurately calculate the costs incurred by the bank for the software refinement and continuous development of the electronic platform. Therefore this data is not countable. Remuneration of a branch employee for issuing loans electronically is the same and the data does not change in this regard.

As the analysis of the results of our in-depth research conducted in the banks operating in Georgia has shown, e-commerce (the practice of issuing loans through the electronic platform) has not yet been introduced in the banking space of Georgia. The only exceptions are a few leading banks where e-commerce is in its infancy. It is this circumstance (among other factors) that has led these banks to hold oligopolistic positions in the Georgian banking sector. Other factors include the monopolistic influence of the banking sector on the financial market due to the underdevelopment of its competitor, the securities market, whose assets have been purchased by the banking sector in order to block the development of this market. These remarks are made by American experts in the field of finance, as a result of a study of the Georgian financial market, who argue that the Georgian securities market is underdeveloped due to the acquisition of its competitors in the embryo market by the banking sector.

Conclusion and Recommendations

Based on our in-depth research and review of the theoretical literature, we can draw the following conclusion:

1. In the banking sector of Georgia, such areas of e-commerce are developing at a fairly rapid pace, such as: offering banking services, online sales of banking products, Internet advertising about banking activities, online platforms, online marketing research in the banking sector, electronic tax systems, etc .;

2. The share of e-commerce (including network commerce) and commerce in the activities of commercial banks in our country is growing quite rapidly;

3. Although the use of e-commerce opportunities in the banking sector has many and very important advantages (advantages), it also has very significant disadvantages (namely, hacker attacks, cyber-security challenges, etc.), which must be taken into account;

4. E-commerce has connected the banking sector with the sectors of the Georgian economy through more and more flexible communication channels, such as trade, tourism, construction, energy, transport, agriculture, etc., which has made these sectors even more interdependent and interdependent;

5. The main advantage of using e-commerce tools in the banking sector is to save time and effort, as well as the ability to get the desired banking products or services faster, at a lower price and better quality than traditional mechanisms;

6. The introduction of e-commerce leverage in the banking sector requires quite a bit of capital investment and is, in fact, accessible to everyone;

7. Due to the scarce economic resources of Georgia, using the e-commerce mechanism in the banking sector, it is possible to accelerate sales of banking products, improve the quality of banking services, financial stability, rapid investment of bank capital and its rapid return, acceleration of banking operations, etc. ;

8. Due to the fact that e-commerce in the banking sector of Georgia's neighboring countries is not well developed, our country has the opportunity to become a regional center in this area;

9. In order to develop the e-commerce system in the banking space of Georgia more quickly, it is necessary to improve the legal framework in this direction and remove certain legislative barriers;

10. In order to diversify the financial market of Georgia, it is necessary for the government of our country to take effective measures by neutralizing the monopolistic positions of banks in the securities market and developing competition in this field.

REFERENCES

Abuladze, R. (2014). Georgian Electronic Business Environment.

Abuselidze, G., & Mamaladze, L. (2020). The Impact of the COVID-19 Outbreak on the Socio-Economic Issues of the Black Sea Region Countries. *Lecture Notes in Computer Science*, 12253, 453-467. doi:10.1007/978-3-030-58814-4_32

Abuselidze, G., & Slobodanyk, A. (2021). Pandeconomic Crisis and Its Impact on Small Open Economies: A Case Study of COVID-19. *Advances in Intelligent Systems and Computing*, 1258, 718-728. doi:10.1007/978-3-030-57450-5_61

- Abuselidze, G., & Mamaladze, L. (2021). The impact of artificial intelligence on employment before and during pandemic: A comparative analysis. *Journal of Physics: Conference Series*, 1840, 012040.
doi:10.1088/1742-6596/1840/1/012040
- Angelakopoulos, G., & Mihiotis, A. (2011). E-banking: challenges and opportunities in the Greek banking sector. *Electronic Commerce Research*, 11(3), 297-319. doi:10.1007/s10660-011-9076-2
- Bakare, S. (2015). Varying Impacts of Electronic Banking on the Banking Industry. *The Journal of Internet Banking and Commerce*, 20(2). doi:10.4172/1204-5357.1000111
- Blount, Y., Castleman, T., & Swatman, P. M. C. (2005). E-Commerce, Human Resource Strategies, and Competitive Advantage: Two Australian Banking Case Studies. *International Journal of Electronic Commerce*, 9(3), 74–89. doi:10.1080/10864415.2005.11044335
- Bregadze, L. (2020). E-Commerce Development Trends and Prospects in Georgia.
- Gabisonia, Z. (2016). E-Commerce. National Parliamentary Library of Georgia.
- Katamadze, D., Abuselidze, G., Katamadze, G., & Slobodanyk, A. (2019). Bank Marketing Problems and Some Aspects of their Management. *Economics and Management*, 16(2), 120-130.
- Janjgava, St. (2016). E-Commerce: Its Essence, Significance and Factors Affecting It. *Economy and Business*, 1.
- Kardaras, D., & Papatthanassiou, E. (2001). Electronic commerce opportunities for improving corporate customer support in banking in Greece. *International Journal of Bank Marketing*.
- Kapanadze, D., Zhvania, T., & Tskhadadze, B. (2017). Electronic Business. Tbilisi.
- Lata, P. (2016). Role of Information Technology in Banking Sector. *Journal of Commerce and Management Thought*, 7(1), 186. doi:10.5958/0976-478x.2016.00013.6
- Lobzhanidze, V. (2009). *International Electronic Business*. (ed. J. Tolordava, I / M N. Morgoshia), Tbilisi.
- Nozadze, Ts. (2010). *Electronic Commerce Information Technologies*.
- Official Website of the National Bank of Georgia: from <https://www.nbg.gov.ge/index.php?m=202>
- Rashwan, H. H. M., Mansi, A. L. M., & Hassan, H. E. (2020). Exploring electronic -loyalty antecedents in Egyptian commercial banks; Electronic customer relationship management and banking electronic satisfaction. *Journal of Business & Retail Management Research*, 14(02). doi:10.24052/jbrmr/v14is02/art-06
- Rehman, S. (2012). Influence of e-commerce and its emerging innovations in banks. *International Journal of Marketing and Technology*, 2(8), 289-303.
- Ratten, V. (2008). Technological innovations in the m-commerce industry: A conceptual model of WAP banking intentions. *The Journal of High Technology Management Research*, 18(2), 111–117. doi:10.1016/j.hitech.2007.12.007

- Ratten, V. (2016). E-Commerce Development and Mobile Banking Using Social Cognitive Theory. *Encyclopedia of E-Commerce Development, Implementation, and Management*, 1345–1358. doi:10.4018/978-1-4666-9787-4.ch095
- E. Jarrett, J. (2016). Internet Banking and E-commerce: A Consumer Perspective. *The Journal of Internet Banking and Commerce*, 01(s2). doi:10.4172/1204-5357.s2-e101
- Sukhiashvili, T. (2010). Development of electronic tax system management processes. *Automated Control Systems*, 1(8).
- Surmanidze, Z. (2018). The role of Internet economy in the socio-economic development of Georgia.
- Todua, N., & Abuladze, R. (2008). *Georgian Internet Market Marketing Research*. Tbilisi, Universal Publishing House.
- Turashvili, T. (2013). Development of Electronic Communication in Georgia - Internet Access.
- Watson, R.T., Berthon, P., Pitt, L.F., & Zinkhan, G.M. (2008). Electronic commerce: the strategic perspective.
- Zautashvili, D. (2008). E-Commerce.

EFFECT OF FUEL PRICE VOLATILITY ON REAL ACTIVITIES EARNINGS MANAGEMENT IN AIRLINES RELATED TO FUEL PRICE HEDGING

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Abstract

In the search for efficient fuel cost reduction measures, many airlines have implemented hedging strategies to cope up with fuel price volatility because high and volatile fuel prices can substantially affect profit margins or losses in the airline industry. Earnings management encompasses the methods used by business executives to manipulate earnings. Therefore, we collected airline data for the period from 2007 to 2015 and examined the association between fuel price volatility and earnings management to determine whether airline executives perform fuel hedging.

The results indicate that fuel price volatility is not significantly related to real earnings management (cash flow from operations, production costs, and discretionary expenditures), regardless of whether airlines conduct fuel hedging. However, fuel price volatility (i.e., the standard deviation of fuel price changes) is significantly positively related to manipulating cash flow from operations.

Keywords: *fuel price; real activities; earnings management; airlines; fuel price hedging*

JEL Codes: *E3, F3, F4*

1. Introduction

The airline industry is split between air freight and passenger air transportation. In the past, most airline companies were government-owned; nowadays, although some are still state-owned, new private airlines have been introduced into the market in several countries, creating more competition. To continue developing business or to remain competitive, most air carrier companies had to merge, becoming acquired within the industry, to improve their operational and financial efficiency. They may also enter into an

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alliance with one of the three large airline alliances—One World, Star Alliance, or Sky Team—to ensure their operation (Kristjanpoller & Concha,2016).

Due to its global range, the airline industry is sensitive to economic growth, political events, international trade, and terrorism. The International Air Transport Association (IATA) proclaimed that the industry safely transported 3.3 billion passengers and 50 million metric tons of cargo across a network of almost 50000 routes in 2013; however, the industry could not generate enough revenue to compensate for the cost of operations until 2015. Treanor et al. (2014) described that, according to a 2009 IATA report, fuel costs accounted for more than 35% of passenger airlines' total operating costs during the third quarter of 2008.

Quinn (1996) considered that one of the most critical sources of volatility in airline earnings is fuel prices, because airlines' exposure to this risk is greater than their exposures to either the interest rate or foreign exchange risk. Ndung'u and Mouni (2016) indicated that because the airline industry is fuel-intensive, high and volatile fuel prices can have a significant impact on airlines' bottom lines; if fuel costs are not actively managed, they can result in lower profit margins or losses for the airline company. This motivates airlines to search for efficient fuel cost reduction measures. Hedging strategies are the most effective option to cope with the fuel price increase (Turner & Lim, 2015; Zarb,2016) and to prevent large swings in operating expenses and bottom line profitability (Ndung & Mouni,2016).

Earnings management encompasses the methods used by business executives to manipulate earnings through the flexibility of accounting rules or by structuring transactions (Healy & Wahlen, 1999). The tools of earnings management, such as discretionary accrual items, are a component of accounting accruals or involve altering the timing and scale of operating decisions (i.e., sales, cost of goods for sale, and expenses). According to these references, airlines executives may use fuel price hedging to cover their fuel costs given fuel price volatility; thus, a significant relationship between fuel price volatility and earnings management is not likely in the airline industry. Although fuel costs make up a substantial part of total operating costs and airlines have no control over them, this method gives airlines more control over their fuel expenditure and makes them less dependent on the volatile fuel price.

Based on our research, this study is the first to examine the association between fuel price volatility and earnings management in the airline industry and whether airlines conduct fuel price hedging to cover their fuel costs. We adopted real earnings management (REM) activities to measure earnings management and the Platts index to measure fuel price volatility.

By investigating whether fuel price volatility influences airlines' earnings management from the perspective of investors, this study provides third-party investors with a method for analyzing the true value of an airline given fuel price volatility. The remainder of the paper is organized as follows. Section 2 presents a brief review of the related literature. Section 3 provides details of the research design and sample selection procedure and develops our model. Section 4 presents our empirical findings. Section 5 contains a summary and conclusions.

2. Literature review

2.1. Real activities Earnings Management

Real activities earnings management involves adjusting timing records and the scale of operating decisions to distort earnings through measures such as sales manipulation, overproduction, and discretionary expenses (Gunny, 2010; Cohen et al., 2008; Roychowdhury, 2006). According to the literature, motivations underlying real activities earnings management include the disclosure environment or corporate governance structure (Kang & Kim,2012; Cheng et al., 2016; Visvanathan,2008; Malik et al.,2015; Ge & Kim,2014; Goh et al.,2013), growth firms (Nabar & Son,2017), internal controls (Järvinen & Myllymäki,2016), the International Financial Reporting Standards (Hastuti et al.,2016; Dewi & Ahmar,2015), the Sarbanes-Oxley Act of 2002 (SOX) (Hsieh et al.,2014), CEO compensation (Fabrizi & Parbonetti,2016), leverage (Vakilfard & Mortazavi,2016), IPOs (Alhadab et al.,2016), political connections (Braam et al.,2015), market power (Mitra et al., 2013), bond issuers (Pae & Quinn,2011), and performance (Badertscher,2011).

Kang and Kim (2012) demonstrated that real activities earnings management decreases if the size of the board is larger or if a greater proportion of external directors sit on the board. Cheng et al. (2016) found that the extent of REM decreases with the number of years to retirement of the board members and their compensation relative to the CEO's compensation, because through internal governance, these characteristics of executives provide checks and balances in the organization and affect corporate decisions. Visvanathan (2008) examined board characteristics and audit committee characteristics in the context of REM and found that having a higher proportion of independent directors on the board or committee may limit this type of earnings management; this result should be of interest to investors and regulators who rely on governance mechanisms to oversee the integrity of corporate financial reporting. Malik et al. (2015) revealed that real activities earnings management is less prevalent for firms that have larger institutional investors; however, no evidence has indicated the role of the board in preventing REM. Ge and Kim

(2014) reported that the level of REM is higher when a firm is faced with tough board monitoring, and that takeover protection may reduce managerial incentives for REM. Goh et al. (2013) indicated that REM significantly decreases in the upward earnings management incentive bracket as the majority shareholder ownership increases, because majority shareholders are more sensitive to upward REM, which has a negative effect on future performance.

Nabar and Son (2017) found that growth firms are less likely to utilize REM (discretionary expenditures) than nongrowth firms, because trimming these expenditures is prohibitively costly for growth firms. Järvinen and Myllymäki (2016) reported that companies with existing material weaknesses in their internal controls engage in more manipulation of real activities, particularly inventory overproduction, because the management's weak commitment to provide an effective internal control system and high-quality financial information relate to a tendency to use REM methods. Hastuti et al. (2016) examined the effect of adopting the International Financial Reporting Standards (IFRS) on the REM moderated by the internal control structure. They found that adopting the IFRS-based accounting standard had a positive effect on the REM. Dewi and Ahmar (2015) measured cash flow from operations and found no difference in REM before and after the implementation of IFRS.

Hsieh et al. (2014) demonstrated that before SOX, companies with overconfident CEOs are more likely than other CEOs to manage earnings by accelerating the timing of cash flow from operations, thereby achieving analyst forecast benchmarks. After SOX, overconfident CEOs are more likely to engage in real activities earnings management through abnormally high cash flows and were more likely to have abnormally low discretionary expenses. Fabrizi and Parbonetti (2016) showed that CEOs with high risk incentives (e.g., option compensation) engage less in real activity manipulations that encompass cutting discretionary expenditures than do executives with low incentives, because CEOs incentivized by risk avoid engaging in real management activities that can decrease a firm's future risk profile. Vakilfard and Mortazavi (2016) indicated that managers tend to engage more in REM once their leverage increases. Alhadab et al. (2016) showed that IPO firms listed on the lightly regulated Alternative Investment Market in the United Kingdom have higher (or lower) levels of sales-based (discretionary expenses-based) earnings management around the IPO than do firms listed on the heavily regulated Main Market in the United Kingdom. Braam et al. (2015) showed that politically connected firms are more likely to conduct REM strategies than nonconnected firms because of higher secrecy and the potential to mask political favors; furthermore, when public monitoring and therefore the risk of detection increases, politically connected firms are more likely to

resort to less detectable REM strategies. Mitra et al. (2013) indicated that although firms manage real activities to varying degrees, firms with greater product market power and the ability to differentiate their products to earn additional revenue are less inclined to engage in real activities earnings management in suspect economic situations than firms with lower market power. Pae and Quinn (2011) found that bond issuers engage in REM. According to Badertscher (2011), the duration of firm overvaluation is an important determinant of managements' choice of alternative earnings management mechanisms; the longer the firm is overvalued, the greater is its total earnings management.

Multiple studies have examined several effects originating from real activities earnings management, including audit fees (Ghanbari et al.,2014 Greiner et al.,2017), earnings thresholds (Irani & Oesch,2016), performance (Machdar et al.,2017; Leggett et al., 2016,Tabassum et al.,2013 Hashemi & Rabiee,2011), and the cost of capital (Meini & Siregar,2014). Ghanbari et al. (2014) confirmed that REM through increased production costs and decreased discretionary expenditures positively influences audit fees; however, REM through increased sales does not influence audit fees. Greiner et al. (2017) found that with the exception of abnormal reductions in SG&A, aggressive income-increasing REM is positively associated with both current and future audit fees because managers pursue REM activities to influence reported earnings. As a consequence, altered cash flows, sacrificed firm value, and REM are considered in auditors' assessments of engagement risk related to the client's economic condition and result in higher audit fees. Irani and Oesch (2016) found that managers respond to the coverage loss by decreasing REM while increasing accrual manipulation. These effects are significantly stronger among firms with less coverage and for firms close to the zero-earnings threshold; they also suggest that managers use REM to enhance short-term performance in response to analyst pressure.

Machdar et al. (2017) suggested that REM negatively affects company performance, and information asymmetry exacerbates this effect. Leggett et al. (2016) found that REM is negatively related to subsequent period returns on assets and cash flows from operations. Tabassum et al. (2013) reported that the impact of REM (proxied by abnormal discretionary expenses, abnormal production costs, and abnormal operating cash flows) on financial performance (proxied by return on assets, return on equity, earnings per share, and the price to earnings ratio) is negative. Hashemi and Rabiee (2011) found that the relations between REM activities (proxied by abnormal production and operating costs) are sequential, and managers use earnings management to ensure a smooth income. Meini and Siregar (2014) found that earnings management through real activity manipulation has a negative effect on the cost of equity because investors are still not aware of the negative impact of earnings management through real activity manipulation.

2.2. Effect of fuel price on airline stock returns

Carter et al. (2003) found that in the absence of hedging, airline stocks are negatively affected when the oil price increases because the airline industry provides a homogenous environment where all airline firms experience similar risk exposure or because the airline industry is so sensitive to changes in expected cash flows due to a decrease in the available cash flows, which directly results from increasing jet fuel prices; thus, airline stock returns provide a sufficient variable to test against oil returns. Kristjanpoller and Concha (2016) <mailto:diego.concha@alumnos.usm.cl> analyzed the impact of changes in fuel price on the equity returns of airlines associated with IATA, as listed on the stock market, and forecasted price returns and the price variations of West Texas Intermediate crude oil and jet fuel by using GARCH models. They demonstrated a strong positive effect of fuel price fluctuation on stock prices because of the paradigm that oil price increases reflect improved economic growth (i.e., market inertia theory). Yashodha et al. (2016) indicated that fuel price fluctuations have a relatively significant negative effect in the short term. Because high and volatile jet fuel prices can have significant adverse effects on airline stock price, government intervention is required to reduce volatility. To cope with international jet fuel price upsurges and supply shortages, governments should consider oil-saving measures such as policies to improve energy efficiency, as well as promoting energy conservation and the use of alternative jet fuels (i.e., renewable energy). The airline industry faces substantial financial risk exposure that affects the vulnerability of stock returns, which increases the volatility of fuel price movements.

2.3. Effect of fuel price on airlines' operating decisions

Lozano and Gutiérrez (2011) showed that reducing fuel costs has been the major impetus for designing new, more efficient aircraft. Jet fuel costs are a growing part of airline expenditures, and the jet fuel price fluctuates considerably; airlines executives may adopt strategic flight planning (i.e., the optimal offered flights) to minimize jet fuel costs and counteract fuel price uncertainty because this highly determines the jet fuel consumption of an airline (Naumann & Suhl, 2013). According to Hsu and Eie (2013), commercial airline networks must enhance their designs in response to jet fuel price uncertainty; not only do routes with low load factors show a low probability that the proposed flight frequencies will operate in at least break-even conditions under future fuel price fluctuations, but also long-distance routes with high load factors exhibit similar situations during periods with high fuel prices. Adrangi et al. (2014) showed that the positive shocks to fuel prices trigger a substantially higher reaction on revenue passenger miles. Zou et al. (2014) described that to ease the financial burden of rising fuel prices, airlines should

improve fuel efficiency in their flight operations by implementing measures such as grounding; retire older, less fuel-efficient aircraft; upgrade their fleets with more fuel-efficient models; and adjust operating practices (i.e., using single-engine taxi procedures to reduce fuel consumption). Zarb (2016) found that as fuel prices declined, airlines trimmed their expenses and used the opportunity to add new flights and expand their networks.

2.4. Effect of fuel price volatility on airlines' earnings management

The airline industry is fuel-intensive; fuel costs account for the majority of airlines' operating costs, and earnings volatility rises in response to fuel prices. Hedging is a common risk management practice, in which the future cash flows required to purchase fuel are locked in at the present time (Berk and DeMarzo,2007). Fuel hedging is thus a risk management tool that is used by the airline industry (Lim & Hong,2014) to maintain operating costs despite oil price volatility (Turner & Lim,2015;Zarb,2016). By hedging the cost of fuel, air carriers can reduce financial costs (Froot et al.,1993) and operating costs (Lim & Hong,2014) and prevent large swings in operating expenses and bottom line profitability (Ndung& Mouni,2016) can thus successfully and effectively control the fuel price risk (Carter et al.,2006).

Earnings management encompasses the methods used by business executives to manipulate earnings through flexible accounting rules or by structuring transactions(Healy &Wahlen, 1999). It involves adjusting the timing record and scale of operating decisions to distort earnings through measures such as sales manipulation, overproduction, and discretionary expenses(Gunny, 2010; Cohen et al., 2008; Roychowdhury, 2006). However, to survive in the highly competitive market place, air carriers may hedge fuel costs to cope with the impact of fuel price volatility, thereby remaining profitable despite increased fuel prices. Therefore, a significant relationship may not exist between fuel price volatility and earnings management.

Nevertheless, if airlines executives do not perform fuel hedging, they may be motivated to manipulate earnings to cope with the effect of fuel price volatility on profitability, resulting in a significant relationship between fuel price volatility and earnings management. Therefore, we propose the following hypotheses:

H1: Fuel price volatility is not significantly related to manipulating cash flow from operations when fuel hedging is conducted.

H2: Fuel price volatility is significantly related to manipulating cash flow from operations in the absence of fuel hedging.

H3: Fuel price volatility is not significantly related to manipulating product costs when fuel hedging is conducted.

H4: Fuel price volatility is significantly related to manipulating product costs when fuel hedging is conducted.

H5: Fuel price volatility is not significantly related to manipulating discretionary expenses when fuel hedging is conducted.

H6: Fuel price volatility is significantly related to manipulating discretionary expenses in the absence of fuel hedging.

Methodology

In this study, we collected data for the period from 2007 to 2015 from the COMPUSTAT database. A regression model was adopted to analyze the data. The sample was separated based on whether airlines conduct fuel price hedging to reflect fuel price volatility. Furthermore, data of hedging by airlines were derived from their financial statements.

3.1 Dependent variables: real activities earnings management

Roychowdhury (2006) demonstrated that real activities earnings management can be measured by cash flows from operations, production costs, and discretionary expenses and developed the following regression models to estimate the typical levels of real business activities. The absolute value of ε originates from the following model that measures real activities earnings management (i.e., the abnormal level). In addition, we used the absolute value of ε multiplied by the assets for the year $t-1$ to reflect the real numbers.

$$\frac{CFO_{it}}{TA_{it-1}} = \alpha_1 + \alpha_2 \frac{1}{TA_{it-1}} + \alpha_3 \frac{SALES_{it}}{TA_{it-1}} + \alpha_4 \frac{\Delta SALES_t}{TA_{it-1}} + \varepsilon_{it} \quad (1)$$

$$\frac{PRDO_{it}}{TA_{it-1}} = \alpha_1 + \alpha_2 \frac{1}{TA_{it-1}} + \alpha_3 \frac{SALES_{it}}{TA_{it-1}} + \alpha_4 \frac{\Delta SALES_{it}}{TA_{it-1}} + \alpha_5 \frac{\Delta SALES_{it-1}}{TA_{it-1}} + \varepsilon_{it} \quad (2)$$

$$\frac{DISP_{it}}{TA_{it-1}} = \alpha_1 + \alpha_2 \frac{1}{TA_{it-1}} + \alpha_3 \frac{SALES_{it-1}}{TA_{it-1}} + \varepsilon_{it} \quad (3)$$

where CFO_{it} is the cash flow form operations for year t ; $PRDO_{it}$ is the sum of the cost of goods for sales and the change in inventory for year t ; $DISP_{it}$ represents discretionary expenses according to the sum of advertising, R&D, general and administrative expenses for year t ; $SALES_{it}$ is the sales for year t ; $\Delta SALES_t$ is the change in sales for year t ; $\Delta SALES_{it-1}$ is the change in sales for year $t-1$; TA_{it-1} is the assets for year $t-1$

3.2 Independent variables: fuel price volatility

Mohanty and Nandha (2011) demonstrated that fuel price shocks are measurements constructed using spot prices. However, many fuel price standards are available worldwide. In this study, we used the Platts index for the fuel price (measured by ton in USD) as an appropriate proxy for the cost of fuel. We also followed Treanor et al. (2014) to indicate the change in the fuel price, and the standard deviation of fuel price changes accurately captures airlines' exposure to fuel price volatility.

3.3 Control variables

Ge and Kim (2014) revealed that among firms, growth firms are less likely to engage in sales manipulation and overproduction. Franz et al. (2014) also indicated that these firms are less likely to engage in the manipulation of discretionary expenses. Furthermore, Dhole et al. (2016) reported that larger firms are less likely to manipulate cash flow for operating and discretionary expenses in response to greater regulatory/political scrutiny. According to Ge and Kim (2014), larger firms are generally less likely to manipulate product costs. Finally, Zamri et al. (2013) showed that leverage is negatively associated with the manipulation of cash flow for operating; their results are consistent with the control hypothesis for debt creation, because debt can be used to reduce agency costs when managers control a firm's cash flow at their own discretion. The control role begins when managers have an obligation to make interest and principal payments that, if left unpaid, may send the firm to bankruptcy court. Dhole et al. (2016) indicated that high leverage is indicative of a firm that is closer to debt covenant restrictions; however, to avoid possible covenant violations, managers are not likely to manipulate product costs and discretionary expenses. Following Ge and Kim (2014), we used the market-to-book ratio to measure firm growth; following Zamri et al. (2013), we used the logarithm of assets to measure the firm size and the total debts scaled by total assets to measure firm leverage.

3.4. Empirical model

$$ABCFO_{it} = \alpha_0 + \alpha_1 CFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (4)$$

$$ABCFO_{it} = \alpha_0 + \alpha_1 SCFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (5)$$

$$ABPC_{it} = \alpha_0 + \alpha_1 CFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (6)$$

$$ABPC_{it} = \alpha_0 + \alpha_1 SCFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (7)$$

$$ABDE_{it} = \alpha_0 + \alpha_1 CFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (8)$$

$$ABDE_{it} = \alpha_0 + \alpha_1 SCFP_{it} + \alpha_2 MB_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \varepsilon_{it} \quad (9)$$

$ABCFO_{it}$ represents the abnormal level of cash flow from operations for year t (model 1); $ABPC_{it}$ denotes the abnormal level of production costs for year t (model 2); $ABDE_{it}$ is the abnormal level of discretionary expenditures for year t (model 3); CFP_{it} is the change in the fuel price for year t (the value is 1 if the fuel price for year t is above that for year $t - 1$, or 0 otherwise); $SCFP_{it}$ is the standard deviation of fuel price changes for year t ; MB_{it} is the market-to-book ratio for year t ; $SIZE_{it}$ denotes the logarithm of assets for year t ; and LEV_{it} represents debts divided by assets for year t .

4. Results

4.1 Descriptive statistics

According to the descriptive statistics in Table 1, the mean real activities earnings management (i.e., the abnormal levels of cash flow from operations, production costs, and discretionary expenditures) are positive. This finding indicates that airlines have adopted real activities for managing earnings and increasing their adjusted income. Furthermore, because the market-to-book ratio exceeds 100%, it is likely that airlines are growth firms; however, outside investor overvaluation is possible. Moreover, the debt ratio of 57.47% (debt divided by assets) indicates that airlines may be less financially conservative.

Table no. 1 - Descriptive statistics (all samples)

	Max	Min	Avg
$ABCFO_{it}$ (million / US dollars)	29.62	0.93	16.71
$ABPC_{it}$ (million / US dollars)	35.71	7.40	12.43
$ABDE_{it}$ (million / US dollars)	20.66	15.65	17.59
MB_{it} (%)	14.79	1.71	7.22
$SIZE_{it}$	19.07	12.26	15.62
LEV_{it} (%)	62.54%	45.62%	57.47%
Sample	155		

$ABCFO_{it}$ represents the abnormal level of cash flow from operations for year t (model 1); $ABPC_{it}$ denotes the abnormal level of production costs for year t (model 2); $ABDE_{it}$ is the abnormal level of discretionary expenditures for year t (model 3); CFP_{it} is the change in the fuel price for year t , if the fuel price for year t above year $t-1$, the value is

1 or 0 otherwise; $SCFP_{it}$ is the standard deviation of fuel price changes for year t ; MB_{it} is the market-to-book ratio for year t ; $SIZE_{it}$ denotes the logarithm of assets for year t ; LEV_{it} represents debts divided into assets for year t .

4.2 Empirical test

The empirical results in Table 2 indicate that fuel price volatility (defined as the change in the fuel price) is not significantly related to the abnormal level of cash flow from operations when airlines conduct fuel hedging. It is consistent with H1 and indicates that airlines do not manipulate earnings through cash flow from operations when they conduct fuel hedging, because fuel hedging activities must efficiently control cash flow from operations to reflect the effect of changing fuel prices on operating costs. However, fuel price volatility (i.e., the standard deviation of fuel price changes) is significantly positively related to the abnormal level of cash flow from operations. It is inconsistent with H1. It is likely that when the standard deviation of fuel price changes is higher, airlines conduct fuel hedging to avoid higher fuel price volatility and to maintain profitability. However, to compensate for their investment risks, outside investors are more concerned about the effect of fuel price volatility on cash flow from operations; therefore, airline executives manipulate cash flow from operations to satisfy these investors and generate a favorable business image. Consequently, investors may be willing to provide additional funds to enterprises. In addition, fuel price volatility (including the change in the fuel price and the standard deviation of fuel price changes) is not significantly related to the abnormal level of cash flow from operations when airlines do not conduct fuel hedging. This is inconsistent with H2 and indicates that when they do not conduct fuel hedging, airlines do not manipulate earnings through operations cash flow to reflect the effect of fuel price volatility on operating costs. Outside investors may not focus on the effect of fuel price volatility on operations cash flow when airlines do not conduct fuel hedging, or airlines may adopt other methods to lower the effect of fuel price volatility on operating costs when they do not conduct fuel hedging.

The empirical results in Table 3 indicate that fuel price volatility (including the change in the fuel price and the standard deviation of fuel price changes) is not significantly related to the abnormal level of production costs, regardless of whether airlines conduct fuel hedging. This is consistent with H3, but not H4, revealing that airlines may not manipulate earnings through production costs whether or not they conduct fuel hedging. Fuel hedging activities likely involve efficiently controlling funds distribution, in line with airline operating strategies such as calculating the cost of goods or perfecting inventory policy. Thus, by compensating for the effect of fuel price volatility on operating costs,

airlines do not focus on manipulate earnings through production costs; moreover, outside investors may not focus on the effect of fuel price volatility on product costs when airlines do not conduct fuel hedging.

The empirical results in Table 4 reveal that fuel price volatility (including fuel price change and the standard deviation of fuel price changes) is not significantly (negatively) related to the abnormal level of discretionary expenditures, regardless of whether airlines conduct fuel hedging. This is consistent with H5, but not H6, and indicates that airlines may not manipulate earnings through discretionary expenditures, regardless of whether they conduct fuel hedging. It is likely that fuel hedging activities efficiently control a firm's fuel expenditure; thus, they may have a lower motivation to manipulate discretionary expenses to compensate for the effect of fuel price volatility on operating costs, or they may compensate for the effect by manipulating earnings other than discretionary expenses (e.g., advertising, R&D, and general and administrative expenses) when not conducting fuel hedge. Outside investors may also not focus on the effect of fuel price effect volatility on discretionary expenses when airlines do not conduct fuel hedging.

Concerning the control variables, the market-to-book ratio is not significantly related to REM in terms of cash flow from operations (see Table 2), production costs (see Table 3), or discretionary expenditures (see Table 4) when airlines conduct fuel hedging. This result suggests that fuel price volatility has little effect on operating costs, and that the higher market-to-book ratio represents that investors think airlines have lower operating risks in these situations, and the investors have a favorable image of airline businesses; therefore, airline executives are less motivated to manipulate earnings through real activities. However, in the absence of fuel hedging, the market-to-book ratio has a significant positive relationship with the abnormal cash flow from operations (see Table 2), a nonsignificant relationship with abnormal production costs (see Table 3), and a significant negative relationship with abnormal discretionary expenditures (see Table 4). This suggests that fuel price volatility has a considerable effect on operating costs; in this scenario, the higher market-to-book ratio represents that investors think that airlines have higher operating risks, but are willing to tolerate them and continue to invest funds in them. Airline executives who want to generate a favorable image for their businesses may have increased motivation to manipulate earnings through cash flow from operations, but not discretionary expenditures, because this can be detected by investors and result in an unfavorable image of the business, making investors unwilling to invest more funds in their businesses.

Size also has a significant positive relationship with REM such as cash flow from operations (see Table 2), production costs (see Table 3), and discretionary expenditures

(see Table 4), regardless of whether airlines conduct fuel hedging. Under normal circumstances, the airline industry is regulated; thus, larger airlines may manipulate earnings through cash flow from operations, production costs, and discretionary expenditures in response to greater regulatory or political scrutiny, regardless of whether they conduct fuel hedging. Furthermore, leverage (the debt ratio) is not significantly related to REM such as cash flow from operations (see Table 2), production costs (see Table 3), or discretionary expenditures (see Table 4). Airlines may control cash flow from operations, production costs, and discretionary expenditures at their own discretion, because managers that have higher leverage are obligated to make interest and principal payments or else risk bringing the firm into bankruptcy court, regardless of whether airlines conduct fuel hedging.

Overall, the results from variance inflation factors explain 15 variables for correlation; the results lie between 1.007 and 1.236, indicating no correlation problems. To avoid possible bias from extreme values, those samples, only including all the sample data, were adopted as measures for a robustness test. Most of the results are consistent with Table 5. For example, fuel price volatility (including the fuel price change and the standard deviation of fuel price changes) is not significantly related to REM (including cash flow from operations, production costs, and discretionary expenditures), regardless of whether airlines conduct fuel hedging. Furthermore, if the market-to-book ratio is not significant, size and leverage are significantly positively related to REM.

Table no. 2 - Regressions of fuel price volatility with real activities earnings management (the abnormal level of cash flow from operations)

	Dependent variable: $ABCFO_{it}$			
	Hedge		Non- hedge	
intercept	226.604***	117.340	142.979	424.888***
CFP_{it}	-59.452		194.357	
$SCFP_{it}$		6.866*		-16.798
MB_{it}	-0.102	-0.087	0.389*	-0.444
$SIZE_{it}$	47.685**	60.007***	145.154***	162.794***
LEV_{it}	375.193	493.526**	1017.272***	1141.760***
R^2	0.086	0.094	0.167	0.198
F-value	3.898**	3.520**	3.549**	4.518***
sample	97		58	

$ABCFO_{it}$ represents the abnormal level of cash flow from operations for year t (model 1); CFP_{it} is the change in the fuel price for year t , if the fuel price for year t above year $t-1$, the value is 1 or 0 otherwise; $SCFP_{it}$ is the standard deviation of fuel price changes for year t ; MB_{it} is the market-to-book ratio for year t ; $SIZE_{it}$ denotes the logarithm of assets for year t ; LEV_{it} represents debts divided into assets for year t . *:p<0.1、 **: p<0.05、 ***: P<0.01

Table no.3 - Regressions of volatility of the fuel price with real activities earnings management (the abnormal level of production costs)

	Dependent variable: $ABPC_{it}$			
	hedge		Non-hedge	
intercept	1910.061	2485.205	3894.858**	5289.937**
CFP_{it}	-503.822		-362.227	
$SCFP_{it}$		-60.737		-150.917
MB_{it}	-1.921	-1.898	-5.152	-5.566
$SIZE_{it}$	1411.993***	1386.353***	2736.529***	2725.933***
LEV_{it}	-8662.745	8538.866*	18951.782***	18995.672***
R^2	0.138	0.153	0.256	0.271
F-value	4.412***	5.347***	5.380***	6.284***
sample	97		58	

$ABPC_{it}$ denotes the abnormal level of production costs for year t (model 2); CFP_{it} is the change in the fuel price for year t , if the fuel price for year t above year $t-1$, the value is 1 or 0 otherwise; $SCFP_{it}$ is the standard deviation of fuel price changes for year t ; MB_{it} is the market-to-book ratio for year t ; $SIZE_{it}$ denotes the logarithm of assets for year t ; LEV_{it} represents debts divided into assets for year t . *:p<0.1、 **: p<0.05、 ***: P<0.01

Table no. 4 - Regressions of volatility of the fuel price with real activities earnings management (the abnormal level of discretionary expenditures)

	Dependence variable: $ABDE_{it}$			
	Hedge		Non- hedge	
Intercept	172.461	193.146	745.559***	899.399***
CFP_{it}	-137.336		-119.819	
$SCFP_{it}$		-4.502		-18.333
MB_{it}	-0.254	-0.206	-0.710*	-0.794**
$SIZE_{it}$	217.758***	213.589***	315.542***	318.534***
LEV_{it}	1388.662**	1374.229**	2279.611***	2321.810***
R^2	0.251	0.241	0.283	0.289
F-value	8.124***	8.702***	6.026***	6.780***
sample	97		58	

$ABDE_{it}$ is the abnormal level of discretionary expenditures for year t (model 3); CFP_{it} is the change in the fuel price for year t, if the fuel price for year t above year t-1, the value is 1 or 0 otherwise; $SCFP_{it}$ is the standard deviation of fuel price changes for year t; MB_{it} is the market-to-book ratio for year t; $SIZE_{it}$ denotes the logarithm of assets for year t; LEV_{it} represents debts divided into assets for year t. *:p<0.1、 **: p<0.05、 ***: P<0.01

Table no. 5 - Regressions of volatility of the fuel price with real activities earnings management (all samples)

Dependent variable	$ABCFO_{it}$		$ABPC_{it}$		$ABDE_{it}$	
intercept	242.990***	269.906***	3682.701***	4316.089***	557.373***	600.071***
CFP_{it}	-13.193		-1163.774		-231.286	
$SCFP_{it}$		-1.714		-109.960		-12.648
MB_{it}	-0.146	-0.191	-2.405	-2.778	-0.343	-0.388
$SIZE_{it}$	55.009***	70.303***	1572.144***	1636.729***	203.454***	212.663***
LEV_{it}	422.011***	542.912***	11006.709***	11523.039***	1462.577***	1542.214***
R^2	0.055	0.071	0.152	0.167	0.193	0.190
F-value	2.974**	3.930***	7.107***	8.715***	9.108***	10.028***
sample	155					

$ABCFO_{it}$ represents the abnormal level of cash flow from operations for year t (model 1); $ABPC_{it}$ denotes the abnormal level of production costs for year t (model 2); $ABDE_{it}$ is the abnormal level of discretionary expenditures for year t (model 3); CFP_{it} is the change in the fuel price for year t , if the fuel price for year t above year $t-1$, the value is 1 or 0 otherwise; $SCFP_{it}$ is the standard deviation of fuel price changes for year t ; MB_{it} is the market-to-book ratio for year t ; $SIZE_{it}$ denotes the logarithm of assets for year t ; LEV_{it} represents debts divided into assets for year t . *: $p < 0.1$, **: $p < 0.05$, ***: $P < 0.01$

5. Solutions

The airline industry is fuel-intensive, and high and volatile fuel prices can significantly impact airline operations such as managing fuel expenditure or profit margins or losses. Most airlines searching for efficient fuel cost reduction measures may opt for hedging strategies to cope with fuel price volatility. We collected airline data for the period from 2007 to 2015 from the COMPUSTAT database to examine the association between fuel price volatility and earnings management and to determine whether airline executives hedge fuel prices.

The results indicate that fuel price volatility is not significantly related to REM (cash flow from operations, production costs, and discretionary expenditures), regardless of whether airlines conduct fuel hedging; however, fuel price volatility (i.e., the standard deviation of fuel price changes) is significantly positively related to manipulating cash flow from operations.

The results provide critical implications for managers, researchers, investors, and regulators. Airline managers should focus more on risk management related to fuel price volatility. For researchers, the empirical findings indicate the relationship between fuel price volatility and REM when airlines decide whether to fuel hedge or not, and investors can analyze the true value of enterprises, regardless of whether they have adopted earnings management or fuel hedging. Regulators (e.g., governments or international organizations such as the IASC) may attempt to harmonize accounting within an industry instead of formulating standards or subverting various national accounting practices away from the optimal ones for domestic purposes to improve comparability between companies for facilitating optimal allocation of resources across airlines worldwide.

However, this research has also limitations. Many mainline, established low-cost carriers have been created, which focus on maintaining lower operating costs; they may increase seating capacity, fly smaller aircraft, or increase the use of their regional jets, because a diverse fleet reduces exposure to fuel price volatility. However, most of these

firms are nonlisted; therefore, this study may not reflect airlines worldwide. Furthermore, this study only used the Platts index to measure the fuel price, which may not reflect overall fuel price volatility to measure the cost of airline fuel.

This study only examined the effect of fuel hedging, rather than the gains and losses from fuel hedging strategies. The accounting implications of fuel hedging on airline financial performance pose another empirical question that should be addressed in future research. Different hedging tools, such as futures and forward contracts, should be adopted to examine the effect of fuel price volatility on real activities earnings management.

However, this study's focus on fuel hedging relates to operational hedging strategies that are relevant across a wide variety of industries and should be considered a valuable component of a firm's overall risk management program. Airlines have different proxies for operational hedging, such as alliances, route networks, or flight procedures; operational hedges and financial hedges are both effective at reducing airlines' exposure to fuel price volatility. To maintain their profit margins despite high fuel price volatility, carriers have been forced to adopt strategies such as increasing ticket prices, diversifying revenue, and reducing the share of fixed costs by using part-time labor, outsourcing work, leasing aircraft, obtaining shorter-term leases for real estate, and adding fuel oil surcharges. Further research should examine the relationship between fuel price volatility and REM in the presence of these tools.

Finally, airlines operate in different countries with various strategies, financial situations, internal controls, governing practices, leader style, cultures, systems, and environments; hence, they cannot be considered equivalent. Further research should examine the relationship between fuel price volatility and REM given these differences.

REFERENCES

- Adrangi, B., Gritta, R. D. & Raffiee, K. (2014). Dynamic Interdependence in Jet Fuel Prices and Air Carrier Revenues. *Atlantic Economic Journal*,42:473-474.
- Alhadab, M., Clacher, I. & Keasey, K. (2016) A comparative analysis of real and accrual earnings management around initial public offerings under different regulatory environments. *Journal of Business Finance & Accounting*, 43(7) & (8): 849-871.
- Artikis,G., Eleftheriou,S., & Sorros, J. (2010). Accounting Information and the Cost of Capital: The Effect on Excess Stock Returns-Evidence from Panel Data. *Journal of Business and Economics*,1(1):54-66
- Arya, A., Glover, J., & Sunder, S. (2003). Are unmanaged earnings always better for shareholders? *Accounting Horizons*, 111-116 (supplement).
- Badertscher, B. A. (2011). Overvaluation and the choice of alternative earnings management mechanisms. *The Accounting Review*, 86(5):1491-1518.

- Berk, J. & Peter, D. (2007). Corporate Finance. Pearson International Edition, Pearson Addison Wesley.
- Braam, G., Nandy, M., Weitzel, U. & Lodh S. (2015) Accrual-based and real earnings management and political connections. *The International Journal of Accounting*, 50(2):111-141.
- Carter, D., Rogers, D.A. & Simkins, B.J. (2006). Does hedging affect firm value? Evidence from the US airline industry, *Financial Management*,35:53-86.
- Carter, D., Rogers, D. & Simkins, B. (2003). Does fuel hedging make economic sense? The case of the airline industry. *Financial Management*, 35(1):53-86.
- Cheng, Q., Lee, J. & Shevlin, T. (2016). Internal governance and real earnings management. *The Accounting Review*, 91(4):1051-1085.
- Cohen, D. A., Dey, A. & Lys, T.Z. (2008). Real and Accrual-Based Earnings Management in the Pre- and Post-Sarbanes-Oxley Periods. *The Accounting Review*, 83(3):757-787.
- Dewi, T. P. & Ahmar, N. (2015). Real earnings management of operation before and after the implementation of IFRS using cash flow measurement approach. *The Indonesian Accounting Review*,5(1):55-62.
- Demski, J. (1998). Performance measure manipulation. *Contemporary Accounting Research*, 15:261-285.
- Dhole, S., Manchiraju, H. & Suk, I. (2016). CEO Inside Debt and Earnings Management. *Journal of Accounting, Auditing & Finance*,31(4):515-550.
- Fabrizi, M. & Parbonetti, A. (2016). CEO risk incentives and real earnings management. *International Journal of Business and Management*, 11(3):37-51.
- Franz, D. R., Hassabeelnaby, H. R. & Lobo, G. J. (2014). Impact of proximity to debt covenant violation on earnings management. *Review of Accounting Studies*, 19:473-505.
- Froot, K., David, A., Scharfstein, S. & Stein, J.C.. (1993). Risk management: Coordinating corporate investment and financing policies, *Journal of Finance*,48: 1629-1658.
- Ge, W. X & Kim, J. B. (2014). Boards, takeover protection, and real earnings management. *Review of Quantitative Finance and Accounting*,43:651-682.
- Ghanbari, A., Askarian, H. & Matinfar, M. (2014). The effect of real earnings management on audit fees in listed companies in Tehran Stock Exchange. *Management Science Letters*,4: 2251-2260.
- Goh, J., Lee, H. Y. & Lee, J. W. (2013). Majority Shareholder Ownership and Real Earnings Management: Evidence from Korea. *Journal of International Financial Management & Accounting*, 24(1):26-61.
- Greiner, A., Kohlbeck, M. J. & Smith, T. J. (2017). The relationship between aggressive real earnings management and current and future audit fees. *Auditing: A Journal Of Practice & Theory*, 36(1): 85-107.
- Gunny, K. A. (2010). The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary Accounting Research*,27(3):855-888.

- Hashemi, S. A. & Rabiee, H. (2011). The relation between real earnings management and accounting earnings management: Evidence from Iran. *Business and Management Review*,1(8):25-33.
- Hastuti, T. D., Ghozali, I. & Yuyetta, E. N. (2016). The effect of international financial reporting standars on the real earnings management and internal control structure as a moderating variable. *International Journal of Economics and Financial Issues*, 6(4):1807-1814.
- Healy, P. M. & Wahlen, J. M. (1999). A Review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4):365-383.
- Hsieh, T. S., Bedard, J. C. & Johnstone, K. M. (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting*, 41(9) & (10), 1243-1268.
- Hsu, C. I. & Eie, W. Y. (2013). Airline network design and adjustment in response to fluctuation in jet fuel prices. *Mathematical and Computer Modelling*,58:1791-1803.
- Ifada, L. M., & Wulandari, N. (2015). The Effect of Deferred Tax and Tax Planning Toward Earnings Management Practice: An Empirical Study on Non Manufacturing Companies Listed In Indonesia Stock Exchange In The Period of 2008-2012. *The International Journal of Organizational Innovation*, 8(1): 155-170
- Irani, R. M. & David, O. (2016). Analyst Coverage and Real Earnings Management: Quasi-Experimental Evidence. *Journal Of financial and Qantitative Ananlysis*,51(2): 589-627.
- Jārvinen, T. & Riiikka Myllymāki, E. (2016). Real earnings management before and after reporting SOX 404 material weaknesses. *Accounting Horizons*, 30(1):119-141.
- Kang, S. A. & Kim, Y. S. (2012). Effect of corporate governance on real activity-based earnings management: Evidence form Korea. *Journal of Business Economics and Management*,13(1): 29-52.
- Kristjanpoller, W. D. & Concha, D. (2016). Impact of fuel price fluctuations on airline stock returns. *Applied Energy*,178:496-504.
- Leggett, D. M., Parsons, L. M. & Reitenga, A. L. (2016). Real Earnings Management and Subsequent Operating Performance. *The IUP Journal of Operations Management*, XV(4):7-32.
- Lim, S. H. & Hong, Y. T. (2014). Fuel hedging and airline operating costs. *Journal of Air Transport Management*,36:33–40.
- Lozano, S. & Gutiérrez, E. (2011). A multiobjective approach to fleet, fuel and operating cost efficiency of European airlines. *Computers & Industrial Engineering*,61:473-481.
- Machdar, N. M., Adler Haymans Manurung, D. R. M. & Murwaningsari, E. (2017). The effects of earnings quality, conservatism, and real earnings management on the company's performance and information asymmetry as a moderating variable. *International Journal of Economics and Financial Issues*, 7(2): 309-318.
- Malik, M. (2015). Corporate governance and real earnings management: The role of the board and institutional investors. *Journal of Knowledge Globalization*, 8(1):37-87.

- Meini, Z. & Siregar, S. V. (2014). The effect of accrual earnings management and real earnings management on earnings persistence and cost of equity. *Journal of Economics, Business, and Accountancy Ventura*,17(2):269-280.
- Mitra, S., Hossain, M., Jain ,P. (2013). Product market power and management's action to avoid earnings disappointment. *Review of Quantitative Finance and Accounting*,41(4):585-610.
- Mohanty, S. & Nandha M. (2011). Oil risk exposure: the case of the U.S. oil and gas sector. *Financial Review*,46:165-191.
- Nabar, S. & Son, X. (2017). Growth firms' real earnings management practices. *Journal of Forensic & Investigative Accounting*, 9(1):606-620.
- Namazi M (1985). Theoretical developments of principal-agent employment contract in accounting: the state of the art. *Journal of Accounting Literature*, 4:113-163.
- Naumann, M.& Suhl, L. (2013). How does fuel price uncertainty affect strategic airline planning? *Operational Research*,13(3):343-362.
- Ndung'u, L.W. & Mouni, G. G. (2016). Effect of fuel hedging on the profitability of the airline industry in Kenya. *International Academic Journal of Economics and Finance*, 2(1):16-30.
- Pae, S. & Quinn, T. (2011). Do firms manipulate earnings when entering the bond market? *Academy of Accounting and Financial Studies Journal*, 15(1):99-115.
- Quinn, L. (1996). Balancing act. *Airfinance Journal*, 18-21.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3): 335-370.
- Tabassum, N., Kaleem, A. & Nazir, M. S. (2013). Impact of Real Earnings Management on Subsequent Financial Performance. *Middle-East Journal of Scientific Research*,17(4):551-560.
- Taj, S.A. (2016). Application of signaling theory in management research: Addressing major gaps in theory *European Management Journal*,34:338-348.
- Treanor, S.D., Simkins, B.J., Rogers, D.A. & Carter, D.A. (2014). Does Operational and Financial Hedging Reduce Exposure? Evidence from the U.S. Airline Industry. *The Financial Review*, 49: 149-172.
- Turner, P.A.& Lim, S.H. (2015). Hedging jet fuel price risk: the case of US passenger airlines. *Journal of Air Transport Management*,44:54-64.
- Vakilifard, H.& Mortazavi, M.S. (2016). The impact of financial leverage on accrual-based and real earnings anagement. *International Journal of Academic Research in Accounting, Finance and Management Sciences*,6(2):53-60.
- Visvanathan. G. (2008). Corporate governance and real earnings management. *Academy of Accounting and Financial Studies Journal*, 12(1):9-22.
- Yashodha, Y., Hamid, B.A. & Habibullah, M.S. (2016). Financial risk exposures of the airlines industry: Evidence from Cathay Pacific Airways and China Airlines. *International Journal of Business and Society*, 17(2): 221-244.
- Zamri, N., Rahman, R.A. & Isa, N.S.M. (2013). The Impact of Leverage on Real Earnings Management. *Procedia Economics and Finance*,7: 86-95.

- Zarb, B. J. (2016). Have earning power and financial health in the airline industry improved since the 2008-2009 recession. *International Journal of Business, Accounting, and Finance*, 10(2):56-70.
- Zou, B., Elke, M., Hansen, M. & Kafle, N. (2014). Evaluating air carrier fuel efficiency in the US airline industry. *Transportation Research Part A* ,59:306-330.

YOUTH UNEMPLOYMENT IN BULGARIA AND THE PATH FORWARD

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Abstract

Purpose: The article aims to identify the barriers before market inclusion for young people and the inertia of status while analysing the employers' need of workforce. It also points out some of the factors which influence the youth labour market in Bulgaria in the strongest way and see how they affect young people on the one hand.

Methodology: The study applies special approach and analyses the issue in two satellite contexts – state-of-the-art national environment and its strengths, parallel with individual specificities leading to readiness to enter the labour market and internal bindings. It includes descriptive research approach based on literature review. Statistical information from Eurostat and forecasts and analysis provided by the Ministry of Labour and Social Policy in Bulgaria were used to analyse the youth labour market in the country. Other analytical documents prepared by various experts' groups have been considered as well.

Findings: General factors predetermining the youth labour market are pointed out with special focus on the situation in Bulgaria. The analysis reflects not only the environment where young people start their professional life, but also the most common skills they need to improve in order to meet employers' expectations.

Practical implications: The paper might help different stakeholders bettering perspective on how youth labour market changes and how to support young people entering the workforce in a more effective way, removing part of the barriers.

Originality/value: The article outlines the main current barriers before young people entering the labour market in Bulgaria and general trends, influencing youth labour market domestically and in other European countries as well. The analysis takes into account the fast, dynamic and unexpected changes in overall economic situation and the need for the youth labour market to adapt to the requirements of digital economy.

Keywords: Youth unemployment; labour market; required skills; employers' needs

JEL Codes: J13, J24, J64

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Introduction

Youth unemployment is becoming increasingly pressing issue at European, national and regional level. According to Dietrich and Möller (2016) it is menace for the stability of democratic societies in the medium and long run. Youth unemployment depends on numerous variables as business cycles, country specificities, as well as personal qualities of individuals and it is important to look at the problem in perspective. For example, Pastore (2018) believes that countries differ dramatically in the level and quality of preparation for work life they provide to young people. He claims that youth in Southern and Eastern Europe were one of the groups who suffered the most after the global financial crisis and unemployment among them was one of the worst in Europe. Many authors discuss the scarring effect of youth unemployment – whether the long-term effects are limited (Mroz, 2006) or more serious (Eurofound, 2018; Scarpetta, et. al. 2010).

That is why youth unemployment should be carefully investigated in order to understand the underlying reasons for it and realize what the best measures would include as more and more young people are attaining schools and universities, but the employment, income and participation rates for this group are lower and lower (Pastore, 2018). Moreover, the pandemic increases these risks and younger generations face harsher labour market conditions (Grzegorzcyk, Wolff, 2020).

The aim of the article is to identify the most exposed factors influencing youth unemployment in Bulgaria and outline common characteristics of the current situation of the labour market. To achieve this the work explores the barriers to employment for young people in Bulgaria and what are scopes of skills, which they should acquire in order to be adequately prepare for the labour market.

Methodology

What differentiates this study is the special approach to analyse youth unemployment in Bulgaria in two satellite contexts – the recent national environment on the one hand, the readiness of young people to enter the labour market and their internal binding. The first part of the study includes descriptive research approach based on literature review of authors researching the topic. Aspects determining youth unemployment in Europe are synthesised, describing common trends.

To further understand the situation particularly in Bulgaria, the labour market in the country is investigated, based on statistical information from Eurostat and forecasts and analysis provided by the Ministry of Labour and Social Policy in the country. Other analytical documents prepared by various experts' groups have been considered as well.

As a following step, analysing secondary data was performed to outline the factors for young people who are related to their readiness to enter the labour market. The source of information are several studies researching the necessary skills for young people to be successful on the labour market. They are prepared by agency for social analyses and employers' association in Bulgaria. On the one hand they convey the reasons why youths have difficulties to enter the labour force, and on the other focus on the specific skills which should be improved. Survey on employers' needs additionally clarifies what needs to be built on in young people's preparation for employment.

General findings and conclusions for the labour market situation in Bulgaria, applicable to other European countries, with regard to youth's labour force are outlined.

Theoretical background - Determinants of youth unemployment

Unemployment has costs to society – human resources are wasted and wellbeing is decreased.

Naturally, the overall economic situation in a country affects youth unemployment. Needless to say, when the gross domestic product (GDP) is higher, it is expected that this would lead to decrease in unemployment overall. However, the rate for youth would be influenced in a stronger way, because it is procyclical (Tomic, 2018, Hutengs and Stadtmann, 2014). Tomic (2018) also argues that the real GDP growth rate and the share of construction in gross value added (GVA) determines low youth unemployment, while the share of public debt in GDP is related to its high levels.

Other study also claim that the unemployment rate is more sensitive to business cycles (Dunsch, 2017). In addition, the European Commission (2013) states that under harsh economic conditions young people are presented with less work opportunities, often are employed under temporary contracts and are more easily dismissed as having less experience in a company. The figure below represents the complex processes and factors, which influence the labour market and its competitiveness.

The expenses related to unemployment benefits and less income from payroll taxes add to the economic challenges. For economies with accumulated debt, it is additional burden for providing better social conditions. Moreover, such countries might already lack investments in new industries and proper preparation for young people to enter the labour market (Cvecic, Sokoloc, 2018).

In addition, usually the larger part of temporarily employed workers are youths and have less employment protection compared to adults with regular permanent contracts and react more quickly to changes in the macro environment. According to Scarpetta, Sonnet and Manfredi (2010) this is the main reason why young people's employment is more sensitive to business cycles. A research by Ayllon and Ramos proves the concept using Okun's law. Their analysis

shows that young people, regardless of gender, are the one most affected by business cycles variations (Ayllon, Ramos, 2019).

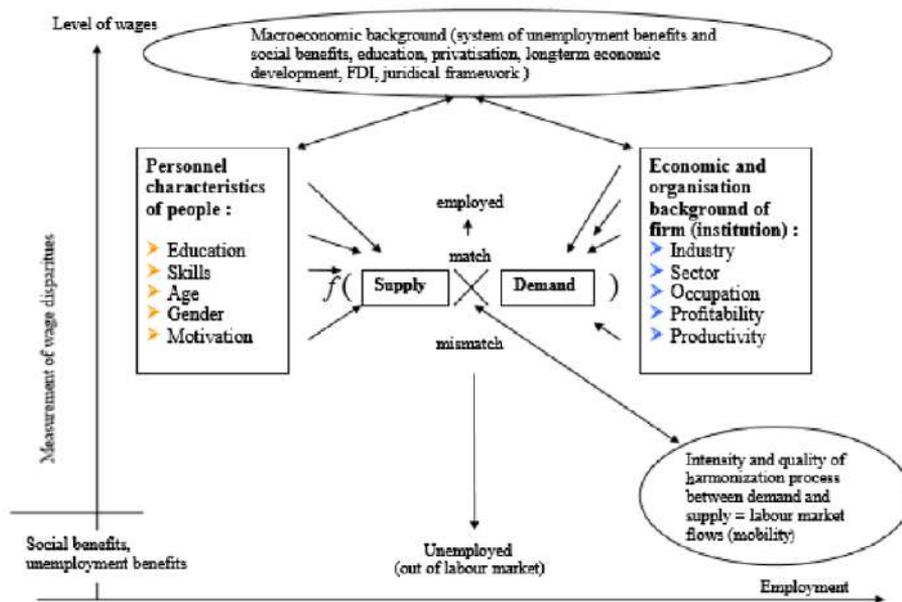
Scarpetta, Sonnet and Manfredi (2010) as well as other researchers (Bell and Blanchflower, 2011; Eichhorst, Hinte and Rinne, 2013) believe that there are several main factors determining youth unemployment – less work experience, incomplete education or one which do not prepare them for entering labour market, working under less stable contractual agreements, less contacts to benefit from during employment search and difficult transition largely due to skills mismatch. All of the above is considered as prerequisites for “scarring effect”. The German Institute for the Study of Labour defines this effect as “the negative long-term effect that unemployment has on future labour market possibilities in itself”, meaning that an unemployed individual is more likely to face negative aspects of the labour market, compared to the same individual, who has not experienced unemployment (Nielsen, Reiso, 2011). Such circumstances are negative not only for the individual, but for society as a whole, they may lead to less investments in education and training, less tax revenues and “brain drain”, when capable young people leave the country to seek work opportunities abroad. These factors turn youth unemployment in one of the most serious problems in Europe (Ayllon, Ramos, 2019). The situation is even worsened by the pandemic. The crisis highlights the need of urgent measures against unemployment and especially youth unemployment as young women were one of the most likely groups to lose their job and the least likely to have permanent contracts (Eurofound, 2020).

An important point to take in consideration is that youth unemployment is linked with migration within the EU and usually young people are driven to immigrate in countries with increasing GDP per capita (Franc, S. et al., 2019). The research shows that the emigration rate responses quickly to changes in GDP, which means that youngsters would be among the first to emigrate in order to find a better job. Typically, countries in Southeast Europe, including Bulgaria, show steady high levels of emigration of youths and brain drain (Gjorgjievska, 2020).

The last EC review shows decreasing unemployment for young people (15-24) - September 2020 compared to September 2019 with 2.1%, while for the age group (24-54) – 1.2% according to Ministry of Labour and Social Policy.

The behaviour of young people entering the labour market is affected by all types of components of macroeconomic background, including the system of unemployment and social benefits, which may have serious impact on their decisions to be part of the work force or not to. The other important aspect for realization on the labour market are the personal characteristics of young people. Apart from the education and motivation, the skills the individual possesses are also becoming more important and determinant for their career. Inadequate workers’ skills are seen as one of the causes of unemployment.

Figure no. 1 Processes and factors influencing the labour market competitiveness



Source: Filipova, L., Gottvald, J., Simek, M., 2005

At the same time there are much more determinants of youth unemployment than economic factors. O'Reilly et al. (2015) discusses the difference between the current phase of youth unemployment compared to earlier periods. The authors identify several main factors as most significant in determining youth unemployment:

- labour market flexibility, due to temporary and part time work, which leads to less stable employment for young people.
- skills mismatch, as the education and skills level of an individual do not meet the requirements of companies.
- youth migration within the EU, which has increased and while it may have positive effects at macro/European level leading to lower unemployment rate, at the same time it could come at a high price for the individuals with very short and temporary contracts.
- family legacies, as children of long-term unemployed parents are more likely to have the same experience.
- higher priority received at EU level.

Current situation shows that unpredictable events, like Covid-19 pandemic, aggravates the whole environment in respect of youth unemployment level and labour market as a whole.

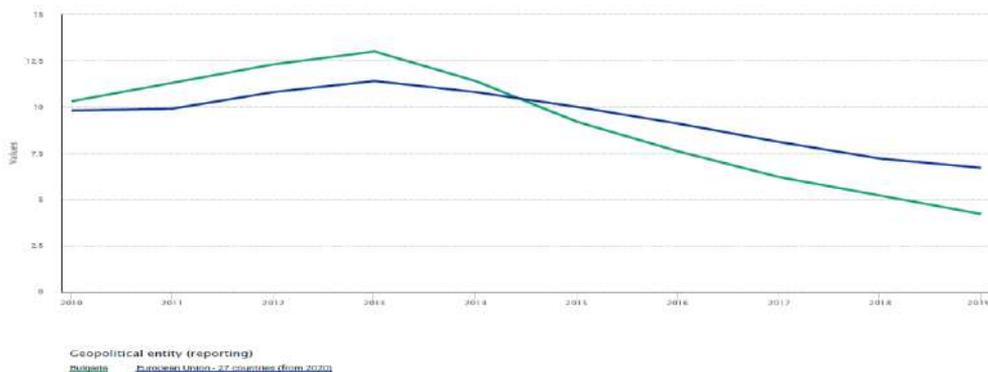
Labour market in Bulgaria

Various institutions in Bulgaria are dealing with stimulation and protect youth with a little experience to tackle the labour market realization. They are working as well on the introduction of measures and the implementation of projects that will contribute to overcoming them. One of the areas in which special efforts are envisaged are the youth organizations and formations. This emphasizes the capacity and opportunities of young people, and their willingness to be involved and involved in the field of youth work.

At national level, youth unemployment policies and the career opportunities of young people are implemented through specially designed measures and interventions managed by The Ministry of youth and sports, Ministry of Labour and Social Policy (through the Employment Agency), The Ministry of Education and Science, and other institutions, such as the Ministry of Health, the Agency for Social Assistance, the Agency for Persons with Disabilities, which also have some responsibilities in formulating and implementing policies.

General trend of unemployment until 2019 is to slowly decrease. For Bulgaria this percentage is even lower than the average for the European Union since 2015.

Figure no. 2 Total unemployment rate as percentage of the population

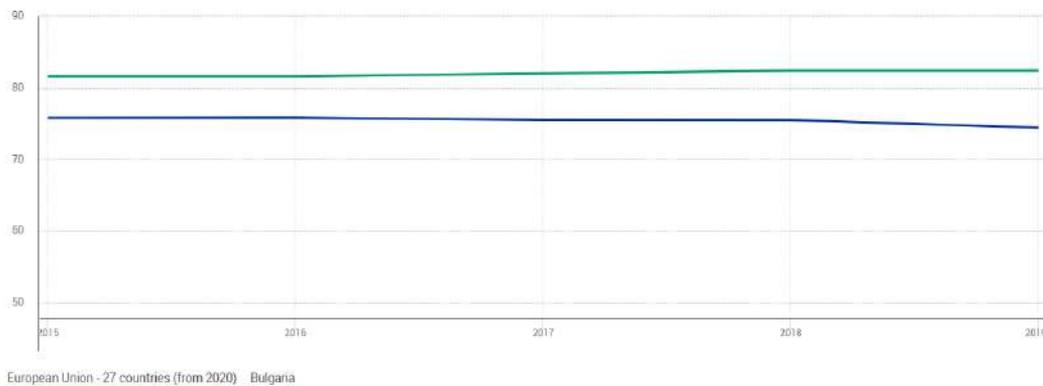


Source: Eurostat

At the same time the unemployment trap upholds high values. The unemployment trap shows what the financial incentives are for an unemployed person who provides unemployment benefits to start working again (National Statistical Institute, Bulgaria). The higher the unemployment trap rate, the lower the unemployment incentive for starting work. It is seen that this rate for Bulgaria was and continues to be considerably higher than the average for the EU. Moreover, while for the EU this level drops a bit during the last years, for Bulgaria they have slightly increased. In 2019, the unemployment trap for Bulgaria was 82.4. This means that if the only unemployed person returns to employment, his net income will increase by only 17.6% compared to what was promised, without assessing additional costs and efforts, refer to the work itself. Despite the fact that the period in which the benefit is received in Bulgaria is limited,

a high level of unemployment capacity does not stimulate job demand and the trend since 2009 there is a sharp increase and the rate stays high (NSI Bulgaria).

Figure no. 3 Unemployment trap

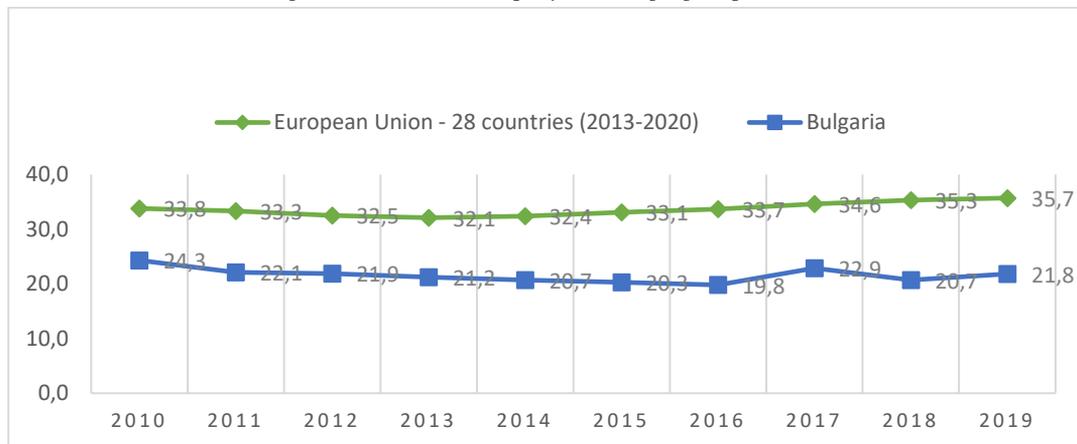


Source: Eurostat

The employment rate of persons aged 15-24 in 2019 is 21.8%. In the period 2010-2016 there is a decrease in the employment rate of this age group. The employment rate reaches the highest value in 2017 – 22.9%.

Bulgaria has lower employment rate of young people in the age group 15-24 compared to EU as seen on the figure below.

Figure no. 4 Youth employment, age group 15-24



Source: Eurostat

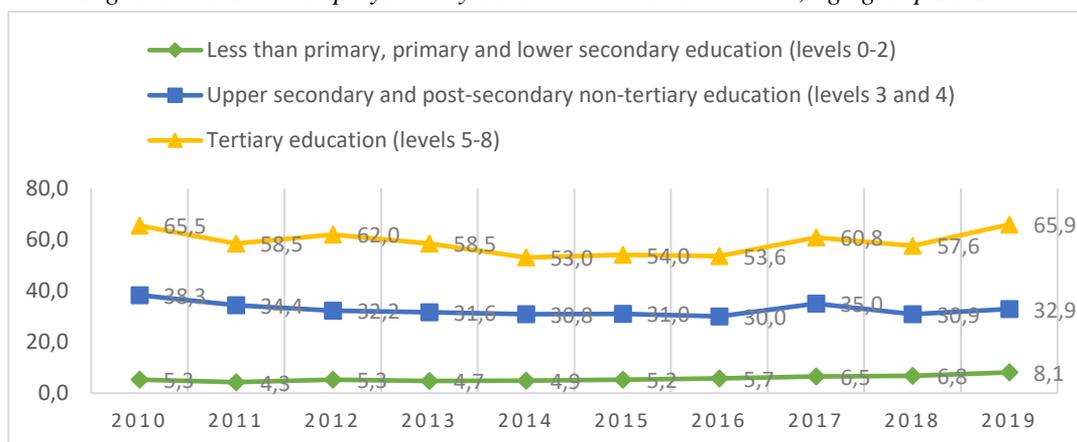
It's evident that Bulgaria is behind EU trends. The gap of nearly 14 points requires a lot of actions at national level in this direction. The Bulgarian trend of youth employment is

relatively flat. An exception is seen in 2020 when during the pandemic the youth unemployment drastically increased (8 %, NSI Bulgaria).

Young people in the age group 15-24 with tertiary education have the highest employment rate. In 2019 the employment rate in this group is 65.9%. Although there are some periods of decrease in the employment rate of this group, in 2019 it has almost the same value as in 2010. The high share of the employed in this group can be explained by the fact that the longer time spent in education develops more the qualities and skills of young people, which in turn allows them to make a smoother transition to employment (Center for Research and Analysis, 2020).

The data for youth unemployment by educational attainment level shows that the young people with less than primary, primary and lower secondary education are the most vulnerable group.

Figure no. 5 Youth employment by educational attainment level, age group 15-24

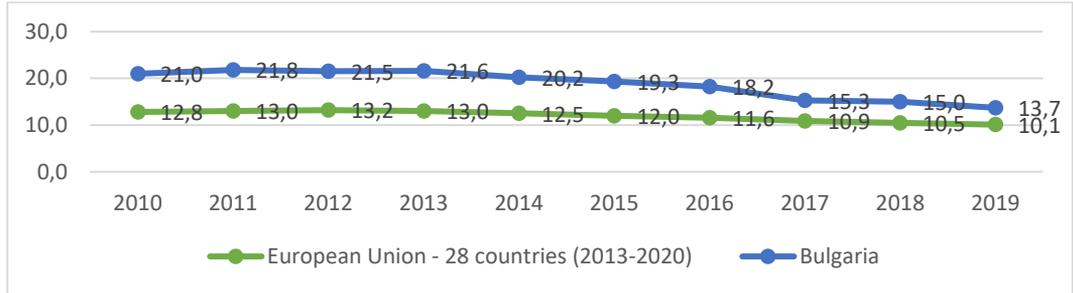


Source: Eurostat

Young people neither in employment nor in education and training (NEETs) are defined as young people who do not work, do not participate in the formal education system, and are not included in training. This definition includes: unemployed persons not participating in any education and training, as well as inactive persons not participating in education and training.

These people experience the so-called voluntary unemployment and might also be affected by the unemployment trap. After 2013 there is decrease in the share of young people in Bulgaria neither in employment nor in education and training. The share of NEETs aged 15-24 in 2019 is 13.7%, which is 7.3 p.p. lower compared to 2010. Despite the positive trend in the long run these share for Bulgaria is considerably higher than the average for the EU.

Figure no. 6: Young people aged 15-24 neither in employment nor in education and training (NEET)

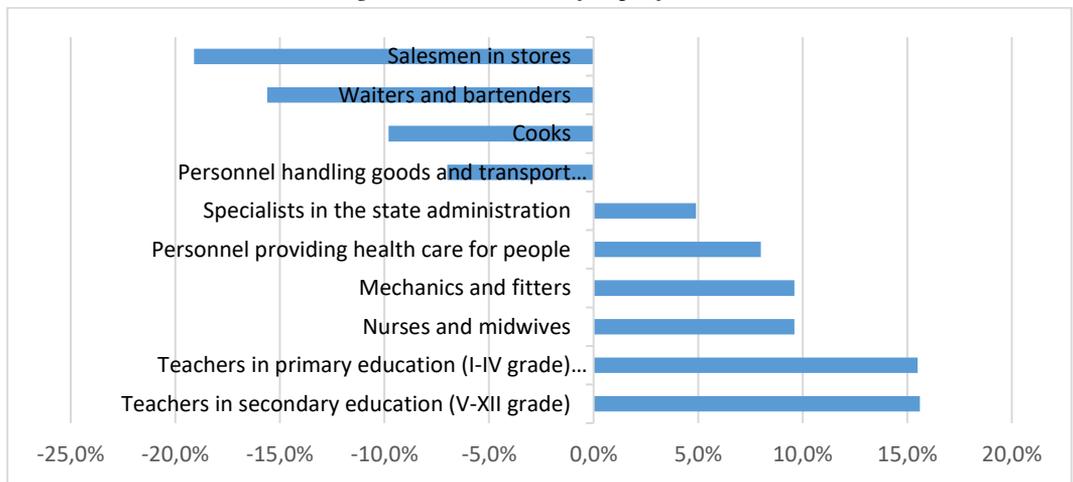


Source: Eurostat

Global trends in the supply and demand of labour by profession in the coming years will be strongly influenced by the development of new technologies that will gradually displace the human factor from activities characterized by routine and repeatability. At the same time, this will increasingly require lifelong learning as a prerequisite for successful employment and requirement for the workforce of the next decade. The trends on the labour market in Bulgaria, however, are determined by the economic development of the economy in recent decades, which is characterized by continuing technological backwardness compared to developed countries and other EU member states. Therefore, over the forecast horizon, despite the accepted assumption of convergence, the impact of new technologies and digitalisation on the occupations in demand in the labour market will be somewhat limited (Ministry of Labour and Social Policy, 2019).

Below the relative change in demand for different professions is presented.

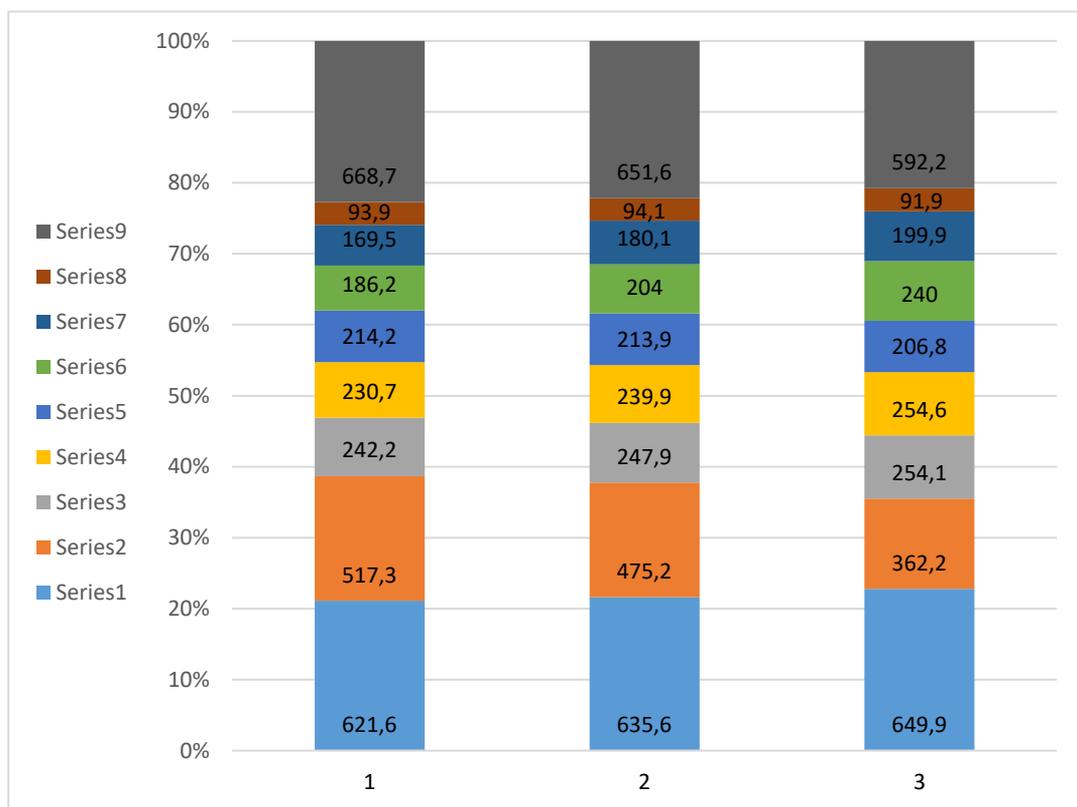
Figure no. 7 Demand for professions



Source: Ministry of Labour and Social Policy, 2019

The long-term forecast prepared by the Ministry of Labour and Social Policy (2019) states the following change in employment by economic sectors for the period between 2020 - 2034.

Figure no. 8 Employment by economic sectors for the period between 2020 -2034



Source: Ministry of Labour and Social Policy, 2019

The consequences of the pandemic should be also taken in consideration in relation to the prognosis although the forecast is for the long term and it is not clear whether the disruption of the labour market during the Covid-19 crisis will have lasting effect. In the short-term employees whose professions require travel and direct contact will experience the effects of the pandemic most severely. Sectors where such effects will be evident are tourism and catering, transport, entertainment, childcare, mass event organizers and many other professions (Innovative Sofia, 2020).

Barriers before labour market inclusion

In order to analyse youth unemployment in depth, the perspective of employers and what they expect from young people as well as their level of preparation when entering the labour market are considered. Taking into account the key trends in the labour market participation of young people up to 24 years of age, a thorough research amongst Bulgarian employers was conducted (Global metrics, 2020). The survey was conducted among employers and companies for human resources. In the course of the survey, employers were asked to assess/rate, on the one hand, certain qualities/ skills of the workforce / candidates and, on the other hand, to indicate to what extent each of these qualities/ skills is important to them. The qualities/ skills assessed by the employers are divided into three categories: preparation for work, basic professional skills and soft skills.

When it comes to preparation for work the five most important skills for employers are ability to master knowledge and skills, work discipline / work habits, practical preparation of the workforce, preliminary preparation for the work tasks and ability to apply theoretical knowledge in practice.

The following factors, which adversely affect the ability of young people to enter the labour market, were identified.

- *Lack of experience*

The first cause of unemployment that can be identified is lack of experience. It is often related to lack of established work habits and basic professional skills, which can result in inability to perform everyday work tasks.

- *Lack of qualifications*

Lack of specific qualifications needed by employers is another obstacle that young people can face in their transition from education to employment. Many job positions require specific qualification on the part of the employees, which are crucial in performing everyday work tasks. Employers may not be willing to hire young people without experience or qualifications because it will mean that they will have to devote certain time and resources to train them.

- *Educational attainment level*

One of the main factors that influence the realization of young people in the labour market is the degree of education completed. In 2019 only 8.1% of young people with less than primary, primary and lower secondary education aged 15-24 are employed. At the same time, the share of unemployed young people in this group is highest - 15.7%. In 2019, the percentage of NEETs for young people aged 15-29 is 16.7% among people with low educational attainment. These data indicate a greater vulnerability of young people with lower education.

When talking about the impact of education on the transition of young people to the labour market is important to point out that the different types of secondary education may have different outcomes. Young people who have completed secondary general education (without continuing to higher education) can be in more vulnerable position compared to those who have completed secondary vocational education. Unlike students enrolled in vocational programs who receive training in specific professions, secondary general school graduates are less preferred by employers, precisely because of the lack of more specific specialization and professional skills.

- *Lack of information about vacancies*

Having information about various opportunities for employment is of crucial importance. Some young people may not be able to access such information (either of lack of necessary skills to look for such opportunities online or because of lack of knowledge about where to search for such information), while others may simply refuse to do so.

- *Unrealistic expectations*

Some young people can have unrealistic expectations regarding their employment opportunities after graduation. These unrealistic expectations can be concerning the job position or the remuneration. Often after graduating young people would want to start working at higher positions and with higher salaries, thus they are prone to refusing jobs they think are not “suitable” or “good enough” for them.

- *Constrained opportunities due to location*

Another factor that can influence the realization of young people in the labour market is the place of living - urban or rural areas. People living in villages or remote areas are more vulnerable in the labour market than people living in larger cities. The main reason for this is the lack or limited choice of job opportunities in villages and remote areas.

- *Constrained opportunities due to disability*

Young people with disabilities may also be in a less privileged position in the labour market than other young people. One of the obstacles to including this group in the labour market is the lack of an environment tailored to their needs. Another obstacle can be employers' attitudes towards hiring people with disabilities.

- *Discrimination due to ethnicity*

Young people from marginalized groups (e.g. minorities) are also one of the more vulnerable groups in the labour market. The main obstacle to this group is the prejudices and attitudes of the general public (including employers) towards them.

- *Overall state of economy*

The overall state of economy and lack of demand/vacancies can have serious impact on youth unemployment. All of the above-mentioned circumstances make young people

one of the most vulnerable groups on the labour market. If the economy is in bad state employers may not be willing to hire young people but rather more experienced ones.

Required skills of young people for sustainable employment opportunities considering innovation and digital society, review on gap of policies and capacity building of youth organizations

Having the necessary skills and qualities is of crucial importance for smooth transition from education into labour market and sustainable employment. With the spread of internet and information and communication technologies, there are changes in the work tasks and the specific skills required by the labour market.

The topic of the new skills needed in the digital society is has been studied by different organizations.

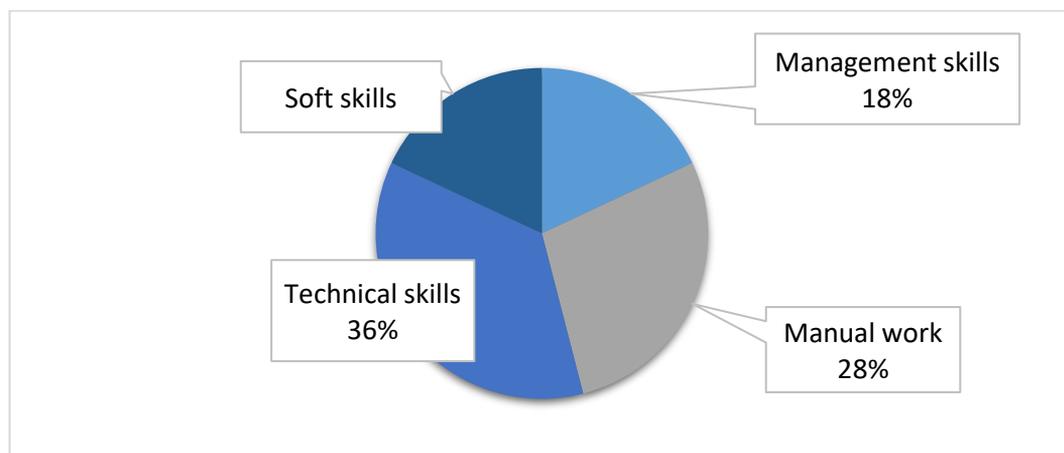
In their report “How to develop the skills of 21st century in class?”, Teach for Bulgaria presents 13 skills that should be developed in the school curriculum and that can help students achieve better results both in school and later on in life (reading, mathematic, scientific, digital and financial literacy; personal skills; critical thinking; communication activities, etc.)

Part of the skills discussed in this article are related to a survey among employers conducted in 2019. One of the purposes of this survey is to evaluate which of the skills are important for the employers and how do they assess this skill in the workforce (Global Research, 2020).

Employers’ needs of workforce

Other studies have also looked at the basic skills which employers seek.

Figure no. 9 Basic skills, required by employers

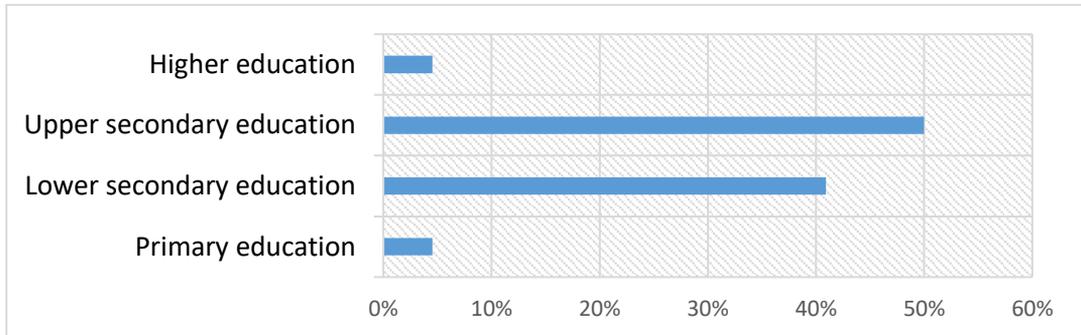


Source: CATRO Bulgaria, 2018

As it is visible from the figure in greatest demanded is the personnel with technical skill. Management and soft skills could be seen as additive.

The same research shows the minimum education level, required by the employers.

Figure no. 10 Minimum education level, required by employers

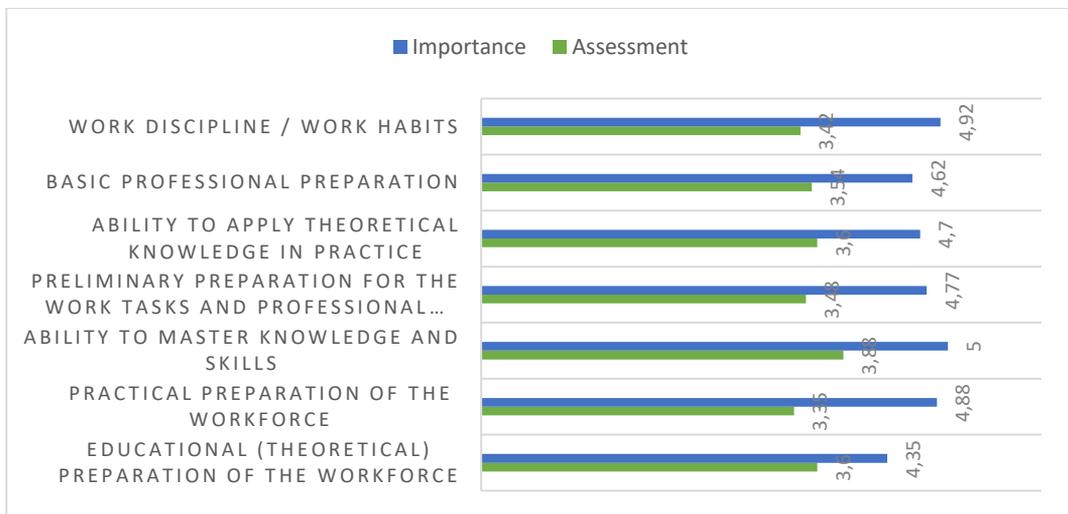


Source: CATRO Bulgaria, 2018

The demand for personnel with secondary and/or vocational secondary education is highest. This trend is consistently visible in employers' research as well as in the forecasts of the Ministry of Labour and Social Policy.

The expectations of employers from labour force towards the knowledge and skills of employees are represented below. The figure shows the importance of certain competences versus their average assessment in the employees.

Figure no. 11 Employers' expectations



Source: CRA, 2020

Discussion

The study conveys that the factors influencing European labour market impact the Bulgarian as well. In some cases, they are more exposed. Youth unemployment was and continues to be a serious challenge before national and European economies. It is key to analyse the issue in perspective. On the one hand youth labour market in Bulgaria, and other European countries, is subjected to international trends and is interrelated with the local economic development. On the other hand, it also reflects the skills and readiness of youths starting their professional life.

In Bulgaria fewer young people are employed compared to the average of the EU. Although there is a positive trend and less youngsters are neither in employment nor in education during the last several years, and despite targeted measures undertaken by government, their percentage is still higher than the mean level for the EU.

Besides the restricted migration and the overall economic state of the country, an issue for young people is the skill mismatch between what employers expect and how they are prepared. Barrier are related to lack of qualifications; also, less educated youths find jobs more difficultly and often youngsters fail to obtain a job due to unrealistic expectations.

What young people should pay attention to so as to improve their competitiveness at the labour market has to do with technical and manual skills, as well as soft skills. In addition, employers expect them to have better professional preparation, both in terms of practical habits and ability to acquire and apply knowledge.

Conclusion

In conclusion, there are several main points which stand out significantly important in relation to labour market and youth unemployment. Bulgaria is a typical representative of East European countries. The insights into which are the most influential factors to youth labour market would be very much alike for some of its neighbouring countries. Moreover, there are few big trends typical for whole Europe, namely the decreased youth and labour migration due to Covid-19 pandemic, as well as the expectation that most states will suffer economic crisis, which inevitably would have impact on the most vulnerable to unemployment group – the youths. That is why the following points which stand out significantly important in relation to labour market and youth unemployment in Bulgaria, could be applicable in other European countries:

- Dynamic labour market. Two main periods may be outlined in recent decades – one until 2009, when the unemployment rates raised, especially youth unemployment, and until 2020. We are at a moment where it is not possible to foresee what would be the future

dynamics of labour market because of the uncertainty due to pandemics and transformation of economic sectors as the intensity of the economic effects highly depend on the individual country (Fana et al, 2020). There are some expectations about raising of overall productivity in labour market, but for some countries Poland, Estonia, Slovakia, Bulgaria, Czech Republic and Denmark the intensity is higher (EC COM, 2020).

- The problem with youth unemployment is a serious issue in Europe and Bulgaria and most probably would aggravate. In addition, the pandemic is significantly impacting youth in three main directions: difficulties to enter the labour market or find a new job; disturbance of education, training and work-learning; economic effects and income losses (Lee et al., 2020).

- Until now the migration processes have had a positive influence balancing the labour market (O'Reilly et al, 2015). However, at the moment this becomes extremely difficult and migration is being minimized to an absolute minimum due to the COVID-19 situation setting trends for further periods.

- In terms of demand for labour and requirements of the employers an accent should be put on people with secondary and/or vocational secondary education, with focus on soft skills.

- During the last year it became evident that a new approach towards education and training is vital in order to address the needs of national labour markets. The sound impetus should be put upon digital transforming processes.

Similar trends are typical for all countries in Europe. Strong economic sectors would probably have to re-evaluate their development and this will require a change on the labour market, especially for young people.

REFERENCES

- Ayllon, S., Ramos, X. (2019). Youth earnings and labour market volatility in Europe, *International Labour Review*, 158, 1., p. 83-113, <https://doi.org/10.1111/ilr.12131>
- CATRO Bulgaria, (2018). *Нуждите на българския пазар на труда като ключ към заетостта на бежанците* [Nuzhdite na balgarskia pazar na truda kato klyuch kam zaetostta na bezhantsite]. CATRO Bulgaria, Sofia. <https://www.unhcr.org/bg/wp-content/uploads/sites/18/2019/03/CATRO-Employment-Report-BG-FINAL.pdf>
- Center for Research and Analysis (2020). Skill gap analysis on capacity of youth organizations and identifying knowledge required for youth professional realization: Country analysis – Bulgaria, Employing Innovative tools for raising YOUTH organizations' CAPacity and youth carrier development project, *Center for Research and Analysis*, Sofia
- Dietrich, H., Möller, J. (2016). Youth unemployment in Europe – business cycle and institutional effects. *Int Econ Econ Policy* 13, 5–25. <https://doi.org/10.1007/s10368-015-0331-1>

- Eurofound (2018). Long-term unemployed youth: The legacy of the crisis, eurofound.link/ef18079
- Eurofound (2020)., Living, working and COVID-19, COVID-19 series, Publications Office of the European Union, Luxembourg, https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef20059en.pdf
- European Commission, EC (2013). Labour Market Developments in Europe. Brussels, Belgium: European Commission, http://ec.europa.eu/economy_finance/publications/european_economy/2013/pdf/ee6_en.pdf
- European Commission, Commission Staff Working Document: Accompanying the document communication from the commission to the European parliament, the European council, the council, the European central bank and the Eurogroup, 26.2.2020, SWD, 2020. 503 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020SC0503&rid=4>
- Fana, M., Torrejón Pérez, S., Fernández-Macías, E., (2020).. Employment impact of Covid-19 crisis: from short term effects to long terms prospects. *J. Ind. Bus. Econ.* 47, 391–410. <https://doi.org/10.1007/s40812-020-00168-5>
- Franc, S., Časni, A. Č., & Barišić, A. (2019). Determinants of Migration Following the EU Enlargement: A Panel Data Analysis. *South East European Journal of Economics and Business*, 14(2), 13–22. <https://doi.org/10.2478/jeb-2019-0010>
- Gjorgjievska, E. T. (2020). The Throughput to Economic Growth in the South Eastern European Region. In *Journal of Economic Boundaries and Transformation*, 1(1), 54–68. <https://jebtonline.com/en/article/9hv8UxwdOGzu4oyDZ1wL>
- Global Research Ltd (2018). *Изследване на потребностите относно необходимостта от кадри за бизнеса* [Izledvane na potrebnostite otnosno neobhodimostta ot kadri za biznesa]. Improving the Mechanism of Civil Participation in the Process of Formulation and Implementation of the Higher Education Policy in Bulgaria project. Sofia. http://cra-bg.org/sites/default/files/uploads/files/opdu/otchet_deynost1_globulirisurch_03_04_2019.pdf
- Grzegorzczak, M., Wolff, G. (2020). The scarring effect of COVID-19: youth unemployment in Europe’ Bruegel Blog, <https://www.bruegel.org/2020/11/the-scarring-effect-of-covid-19-youth-unemployment-in-europe/>
- Igor Cvecic & Danijela Sokolic (2018). Impact of public expenditure in labour market policies and other selected factors on youth unemployment, *Economic Research Ekonomska Istraživanja*, <https://doi.org/10.1080/1331677X.2018.1480970>
- Innovative Sofia (2020). Assessment report on the impact of COVID-19 on Sofia’s economy. *Innovative Sofia*, https://innovativesofia.bg/wp-content/uploads/2020/07/COVID-19-ENGLISH_24.03.2020.pdf
- Lee, S., Schmidt-Klau, D., Verick, S. (2020). The Labour Market Impacts of the COVID-19: A Global Perspective. *Ind. J. Labour Econ.* 63, 11–15. <https://doi.org/10.1007/s41027-020-00249-y>
- Ministry of Labour and Social Policy (2019). *Средносрочни и дългосрочни прогнози за развитието на пазара на труда в България: заетост и дисбаланси на пазара на труда, фактори на предлагането на труд, 2008–2034.* [Srednosrochni i dalgosrochni prognozi za

- razvitiето na pazara na truda v Bulgaria: zaetost i disbalansi na pazara na truda, faktori na predlaganeto na trud, 2008–2034.]. Increasing the effectiveness of the implemented employment policy project, Ministry of Labour and Social Policy, Sofia, [https://old.mlsp.government.bg/ckfinder/userfiles/files/politiki/zaetost/informaciq%20za%20pazara%20na%20truda%20tekusto%20systoqnie%20i%20prognози/ LMforecasts Analysis2_BG\(1..pdf](https://old.mlsp.government.bg/ckfinder/userfiles/files/politiki/zaetost/informaciq%20za%20pazara%20na%20truda%20tekusto%20systoqnie%20i%20prognози/ LMforecasts Analysis2_BG(1..pdf)
- Mroz, T. (2006). The Long-Term Effects of Youth Unemployment, *The Journal of Human Resources* 41(2., DOI: [10.2307/40057276](https://doi.org/10.2307/40057276)
- National Statistical Institute, Bulgaria, <https://www.nsi.bg/en>
- Nielsen, O. A., Reiso, K. H. (2011). Scarring effects of unemployment, Discussion Paper No. 6198, Institute for the Study of Labor, Bonn, <http://ftp.iza.org/dp6198.pdf>
- O'Reilly, J., Eichhorst, W., Gábos, A., Hadjivassiliou, K., Lain, D., Leschke, J., McGuinness, S., Kureková, L. M., Nazio, T., Ortlieb, R., Russell, H., & Villa, P. (2015). Five Characteristics of Youth Unemployment in Europe: Flexibility, Education, Migration, Family Legacies, and EU Policy. *SAGE Open*. <https://doi.org/10.1177/2158244015574962>
- Pastore, F. (2018). Why is youth unemployment so high and different across countries?. IZA World of Labor 2018: 420, doi: 10.15185/izawol.420, <https://wol.iza.org/articles/why-is-youth-unemployment-so-high-and-different-across-countries/long>
- Scarpetta, S., A. Sonnet and T. Manfredi (2010). Rising Youth Unemployment During The Crisis: How to Prevent Negative Long-term Consequences on a Generation? *OECD Social, Employment and Migration Working Papers*, No. 106, OECD Publishing, Paris, <https://doi.org/10.1787/5kmh79zb2mmv-en>
- Sophie Dunsch (2017). Age- and Gender-Specific Unemployment and Okun's Law in CEE Countries, *Eastern European Economics*, 55:4, 377-393, <http://dx.doi.org/10.1080/00128775.2017.1338962>
- Stadtman, G., & Hutengs, O. (2014). Don't trust anybody over 30: youth unemployment and Okun's law in CEE countries. *Bank i Kredyt*, 45, 1., 1-16. http://bankandcredit.nbp.pl/content/2014/01/bik_01_2014_01_art.pdf
- Teach for Bulgaria (2016). How to develop the skills of 21st century in class? Teach for Bulgaria. Sofia. <https://prepodavame.bg/wp-content/uploads/2020/01/narachnik-za-umenia-na-21-vev.pdf>
- Tomic, I (2018). What drives youth unemployment in Europe? Economic vs non-economic determinants. *International Labour Review*, 157, 3., p. 379-408, <https://doi.org/10.1111/ilr.12113>

COMMUNICATION AS A FACTOR OF LEADERSHIP STYLE

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Abstract

Effective communication establishes good interpersonal and work relationships and facilitates cooperation. What are the effective styles of leadership behavior and how communication affects employee motivation and satisfaction? The article examines the influence of the way leaders communicate with their subordinates on their behavior and the formation of attitudes towards the performance of tasks and the attitude towards the whole company.

Keywords: communication; leadership; relationships; efficiency; motivation;

JEL Codes: M10, M12, M14, M16

Introduction

Developing technologies, remote work and modern resources of communication are changing the way that companies manage their employees, and the approach to control and giving orders is increasingly losing its effectiveness. Is it time for mentoring to give way to a new model of leadership communication through dialogue to better deal with the huge flow of information and turn leaders into good communicators?

The article examines the necessary personal qualities for successful leadership through the prism of communication. A literature review of scholars who have studied the problem of communication and leadership and their results is presented, as well as a study of some of the most successful leaders of today. The main problem discussed in the article is the influence of communication on the chosen leadership style through the internal communication of the organization and employee satisfaction.

The methodology used to develop this article is a combination of literature analysis and research done through articles, journals, reports and other studies by some of today's most successful leaders.

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Leadership

Leadership is the ability to motivate a group of people to achieve a common goal. A successful leader must have a combination of personal and leadership skills that will make others follow him. The question has been asked many times - are you born a leader or become one? There are people who are naturally gifted with certain leadership qualities, more than others, who need to improve certain skills to be leaders.

Often the best expert in a field rises to a leadership position, believing that once he is successful in his field, he will be a perfect leader. This is very misleading, because the expert achieves success with his own knowledge and skills, but to be successful as a leader he must organize and motivate others in such a way that they apply their best knowledge and skills. And this from a psychological point of view is the ability to work and communicate with people, which not everyone has or can develop (Todorova, 2016).

However, what are the qualities needed to be a leader?

One of the first theories of leadership considers it through the presence of certain innate characteristics in leaders, ie. leaders are born as such, assuming that these are personal characteristics that distinguish leaders from their followers (Stoitsova, 2015). Years later, one of the most famous researchers in theories of leadership – Ralph Stogdill derives five leadership characteristics: intelligence, dominance, self-confidence, activity and knowledge (Stogdill & Bass, 1990).

Fiedler was one of the first scientists to introduce the influence of the situation in determining the success of leadership in his book „Theory of leadership effectiveness“. According to his theory, task-oriented leaders are focused on getting the job done and tend to be authoritarian. Relationship-oriented leaders put people first and use creativity and teamwork to complete the project. According to Fiedler, situational favorableness depends on three factors: the relationship between leaders and members, the structure of tasks and the position and power of the leader. Leader-member relationships refer to the level of trust team members give their leader (Verkerk, 1990).

D. Helrigel, S. Jackson and J. Slocum grouped the various studies in the field of leadership into four categories: theories of leadership traits (qualities); behavioral theories; situational theories; theories of transformational leadership (Petkova-Gurbalova, 2019).

The behavioral approach to leadership styles became known in the 1950s for its focus on the behavior of leaders rather than their characteristics. Analyzing the behavior of leaders to their subordinates, three main leadership styles stand out (Raichev, 2017):

- Authoritarian – characterized by a strong focus on tasks, impatience and quick decisions. The leader does not allow discussion of his decisions gives tasks and controls their implementation.

- Democratic – a collective style of management in which the leader manages together with his employees. The leader delegates power to individuals and offers cooperation in decision-making.

- Liberal – minimum power of the leader and maximum freedom of subordinates.

The „Full-range leadership model“ of Bass and Avolio is one of the most studied models of leadership behavior, which describes two types of leadership styles - transactional and transformational. Transactional leaders make decisions based on the rules of the organizational culture and provide feedback to followers for successful enactment of an agreed-upon role. Transforming leaders change their co-workers' perceptions of significant things and encourage them to look at themselves, the opportunities and challenges of their environment in a new way. This style of leadership is based on the leader's behavior, not his communication skills (Allen, 1984).

A new theory of leadership is presented by Russian professor Anatoly Zankovsky of the Russian Academy of Sciences, according to whom the main thing a leader must have is the ability to resolve conflicts in a constructive way. Leadership is a modern ideal of behavior based not on one's background and status, but on one's personal and professional values (Zankovsky, 2014).

Communication and leadership

One of the first theories analyzing leadership – Fiedler puts communication and the relationship between leaders and members of the structure as extremely decisive for the effectiveness of leadership.

Zankowski's theory of conflict resolution in a constructive way involves the use of a type of communication in which the leader is able to increase organizational effectiveness even in conflict situations by using psychological factors for communication.

Effective organizational leadership is described by the professor with the help of a three-factor model, which considers this phenomenon in the space of corporate culture and includes value, active and relational components. The components of activity and attitude correlate with the factors „results orientation“ and „people orientation“, traditionally emphasized in leadership research and demonstrating their validity at the group level.

According to his theory, effective communication can ensure overcoming the negative trends, at the level of „people orientation“ observed in the management of various companies, to update and use personal resources and potential of both the leader and the staff of the organization to achieve socially significant corporate and individual (personal, professional, social) goals (Zankovsky, 2014).

The democratic style of leadership is characterized by the discussion of problems and decision-making together by all while ensuring sufficient freedom and initiative of members, encouraging mutual exchange of information and cooperation, control is joint.

In the liberal style, employees have the opportunity to choose their roles in the group and to determine the requirements and criteria for performing tasks. Everyone gets the necessary information on their own, there is no strict control and general decisions are more difficult to make. This style stimulates creative activity.

Professor Rita Linjuan Men of the Department of Public Relations at the University of Florida explores the relationship between transformational leadership, communication channels and employee satisfaction. Through a web survey of 400 employees working in medium and large companies in the United States, she concluded that transformational leadership has a positive effect on the organization's internal communication and employee satisfaction in relationships. Transformational leaders most often use information-rich channels to communicate with followers.

The use of personal channel leaders is positively related to employee satisfaction. Employees mostly prefer emails to receive information from the organization about new decisions, policies, events or changes, followed by general meetings of employees and interpersonal communication with managers (Men, 2014).

The communication competence, styles and channels used for communication by the leader also influence the attitude and behavioral results of employees. Leadership communication shapes employees' perceptions because leaders who communicate clearly and convincingly about goals and objectives gain the trust of followers, and the two-way nature of interpersonal communication channels, such as team meetings, group problem-solving sessions, improves the relationship between employees and managers better and promotes a sense of community and belonging among employees to the team and the company as a whole (Cameron & McCollum, 1993).

Leadership is the ability of the individual to influence, motivate and enable others to contribute to the effectiveness and success of the organization, using communication that helps to change aggressive leadership through control into leadership and symmetrical communication that promotes understanding, cooperation, responsiveness and the creation of long-term and mutually beneficial relationships.

Research on transformational leadership in recent years has gained increasing popularity in various fields due to its success in analyzing the effectiveness of leadership. Transformational leadership places a strong emphasis on relationships, individual consideration, meaning, and empowerment, and thus has specific implications for communication and relationship management.

In contrast to traditional approaches to how to develop messages to change attitudes or behavior, various studies have shown that the basic premise of a symmetrical model of communication is how people and leaders use communication to correct their thinking and behavior instead of controlling or manipulate how the other party thinks or behaves. In this way, symmetrical communication promotes understanding, cooperation, responsiveness and the creation of long-term and mutually beneficial relationships.

When managers and employees engage in dialogue and are heard, it is easier to disseminate company information needed by employees to promote mutual understanding and role-setting. In this way, symmetrical communication stimulates organizational culture and persuades or controls employee behavior for management purposes, building quality relationships between employees and the organization, and encouraging employees to be most effective (Men, 2014).

Influence of communication as a factor in the leadership style of some of the most successful managers

For many modern leaders, showing concern for employees and spending more time communicating with them may sound like a lack of managerial skills and a weak character.

However, a large-scale study of google refutes this stereotype of leadership behavior. Google's so-called „Oxygen“ project is trying to prove that the qualities of the manager do not hire a group of statisticians to assess the differences between the managers with the highest and lowest ratings. The data for analysis are collected with the help of evaluations from employee surveys, interviews and other sources of staff feedback. Instead, however, they prove that good governance actually matters.

Google's director of human resources, who led the study, Laszlo Bock, concluded that to be a manager, particularly in engineering, he thought you had to be a better technical expert than the people who work for you. After the study, this quality turned out to be the least important thing. The most important thing is the ability to communicate with people. The study identifies coaching skills, good communication, concern for team members and support for career and professional development as key to a successful leader (Kolar).

Another successful leader – Steve Jobs is not accidentally called the most exciting and talented communicator in the corporate world. His way of communicating is not just communication, he informs, trains and entertains his Apple employees (Gallo, 2011).

According to the Forbes ranking of the most successful leaders, it is impossible to become a great leader without being a great communicator. A survey of the American company The Hariss poll among 1,000 employees shows that a lack of emotional intelligence in the way business leaders and managers communicate leads to many problems in companies. According to the respondents, the communication problems that

violate effective leadership are the lack of clear instructions, refusal to talk to subordinates, lack of interest in the life of employees outside work, unwillingness to remember the names of employees, lack of time to meet with employees (Schwantes, 2017).

The leaders of some of the most successful companies in the world are defined as perfect communicators.

Elon Musk – founder and CEO of some of the largest companies (PayPal, SpaceX and Tesla Motors), he is a persuasive speaker who manages to make his employees believe that the future of the companies will be amazing and that they will all achieve their goals together.

Wall Street analyst creates a platform with which he measures and evaluates the impact of the presented speeches of famous people. He discussed Musk's communications style as a vision communicator. Better communicators use persuasion and action-oriented language, as does Musk (Schwartz, 2016). Musk's success was probably due to his effective interpersonal skills. Often quoted in various sources and an example of a good communicator, he has tact in communication, i.e. built interpersonal skills: to listen, to have manners, social skills and to really understand who you are talking to. In his communication he shows a combination of great interpersonal skills, being inspirational and exhibiting trustworthiness.

Elon Musk's interpersonal skills include the ability to listen to his colleagues, clients and audience. He is analyzed as always polite and attentive to the people he deals with.

He knows how to create relationships and connections in a business sense, as well as how to act in various often unique environments or situations. This is what makes him a good communicator and a successful leader (Sutter).

When presenting successful communicators, we can't help but mention Bill Gates, founder of Microsoft, the world's largest computer software company. He's known for using creative strategies to help people understand complicated, stubborn problems (Gallo). His famous speeches begin with the initial attention of the audience - foam flowing on stage, the sound of a flying helicopter and everything else that can be impactful. At the same time, he is not a supporter of modern technologies in communication and does not even use a Power Point to prepare presentations, he just talks.

In one of his most famous interviews related to climate change, he uses plush toys to present the release of steam gases from everything people do – agriculture, transport, manufacturing. Accumulating various plush toys, he illustrates the impact of building construction on the climate and the use of all the necessary amount of concrete, cement, wood - all that emit greenhouse gases. In most of his most impressive speeches, which have a huge impact on the audience, he does not use modern communication technologies, but only – plush toys.

Mary Barra is the chairman and CEO of General Motors Company. As the head of an automobile company, she illustrates that despite resistance to gender stereotypes, social concepts of effective leadership can be built. She has a tendency to be extremely candid and honest with her staff. In return for her candor, Bara expects to receive candor in return. She wants company employees to talk when something is wrong and to face problems directly. To help in this effort, she uses social media. She blogs monthly on Linked In's Pulse, uses Twitter regularly and posts on Facebook (Rosen, 2014).

Bob Iger is the CEO of The Walt Disney Company, identified as the most powerful man in entertainment. To be a successful leader, he says, is simple: As a leader, the success of your employees and ultimately your company depends on your commitment to yourself, your team and your brand: Ultimately, effective leadership means you go beyond what you set out to do. It presents 9 important key skills of every successful leader, with communication ranking second in importance after the ability to balance work and rest.

According to him, every leader should develop strong communication skills, because the better the leader can communicate his strategies orally and in clear language (that is, not by email, using corporate jargon), the more effectively they will be implemented. This also applies to non-verbal communication: body language plays a big role in establishing trust among your team.

Effective communication also requires clarity. The leader must be clear in the expectations and assessments of others, and only then should he expect them to be honest with him. Bold business leadership and power are not about good communication, protection according to him is to remove any connection of the leader's own identity with the company he manages, so that you can assess situations as objectively as possible.

Critical element of any good leadership strategy is open communication and feedback. Asking for feedback encourages the people who work, and also brings invaluable insight to every leader, to be aware of everything that happens in the company he runs. Iger gives some advice to leaders - sit down with your team members and direct reports during lunch to seek feedback and advice. This not only builds trust, but increases your own self-awareness when looking at another person's point of view in pursuit of common goals (Iger, 2020).

Conclusion

Based on the research, it can be summarized that effective leadership communication supports the formation of a system of individual values through the worldview of the employee, which acquire personal meaning and set a specific value attitude of employees to organizational life and achieving company goals.

Effective communication is an essential component of professional success, whether at the interpersonal, intergroup, intragroup, organizational or external level. Many organizational problems arise as a result of poor communication. It is this paradox that underscores the need for leaders to focus on becoming great communicators.

The acquired skills and / or acquired knowledge are valuable only insofar as they can be applied in practice when required. What the big number one communicators have in common is that they have a heightened sense of situational and contextual awareness. The best communicators are great listeners and perceptive in their observations.

The author's opinion is that every communication is of key importance for every leader, regardless of his chosen leadership style. Leadership will be much more successful through the use of effective communication:

- praise for a job well done through personal thanks;
- requesting opinions and ideas from employees;
- sharing information and providing feedback;
- getting to know the employees.

It does not matter the chosen leadership style for successful management, as well as the communication channels used, it is important to use a type of communication in which the leader can increase organizational efficiency even in conflict situations, to influence, motivate and enable all employees to express their opinion and offer their ideas, which will promote understanding, cooperation, responsiveness and the creation of long-term and mutually beneficial relationships.

REFERENCES

- Allen, L. (1984). Communication and the full range leadership model: a study of the relationship between leadership style and communication apprehension, communication competence and listening styles. Retrieved November 22, 2020 from <https://csus-dspace.calstate.edu>
- Cameron, G. McCollum, T. (1993). Competing corporate cultures: A multi-method, cultural analysis of the role of internal communication. Retrieved November 22, 2020 from www.aviation.vgtu.lt
- Gallo, K. (2011). Steve Jobs: The world's most inspiring communicator. Retrieved November 22, 2020 from <https://www.forbes.com>
- Gallo, C. Bill Gates used this brilliant communication strategy to quickly explain the world's toughest problem. Retrieved November 22, 2020 from <https://www.inc.com>
- Iger, B. (2020). 9 Leadership tips from Disney's Bob Iger. Retrieved November 22, 2020 from <https://www.masterclass.com/articles/leadership-tips-from-disneys-bob-iger#bob-igers-9-leadership-tips>

- Kolar, N. Project Oxygen – what makes google? Retrieved November 22, 2020 from <https://medium.com>
- Men, J. (2014). Strategic Internal Communication. Retrieved November 22, 2020 from <https://www.researchgate.net>
- Men, J. (2014). Why leadership matters to internal communication: linking transformational leadership, symmetrical communication, and employee. Retrieved November 22, 2020 from https://command.columbusstate.edu/docs/readingassignments/auxiliaryreadinglists/transformation_symmetrical_communication.pdf
- Petkova-Gurbalova, M. (2019). Communication as a factor for successful leadership. Retrieved November 22, 2020 from <http://rhetoric.bg>
- Raichev, J. (2017). Leadership – theoretical and methodological aspects. Retrieved November 22, 2020 from journals.uni-vt.bg
- Rosen, B. (2014). Leadership Journeys – Mary Barra. Retrieved November 22, 2020 from <https://www.iedp.com/articles/leadership-journeys-mary-barra/>
- Schwantes, M. (2017). Survey: 91 percent of 1,000 employees say their bosses lack this 1 critical skill. Retrieved November 22, 2020 from <https://www.inc.com/marcel-schwantes/survey-91-percent-of-1000-employees-say-their-boss.html>
- Schwartz, A. (2016). There's one simple reason why Elon Musk is so convincing. Retrieved November 22, 2020 from <https://www.businessinsider.com/why-elon-musk-is-such-a-great-communicator-2016-2>
- Stoitsova, T. (2015). The more theories about leadership – the less successful leaders in our country. Retrieved November 22, 2020 from <http://ebox.nbu.bg>
- Stogdill, R. Bass, B. (1990). Handbook of Leadership. 1990, p. 448. Retrieved November 22, 2020 from <https://gerarddemaret.blogspot.com/2018/12/download-bass-stogdill-handbook-of.html>
- Sutter, P. Elon Musk to win prestigious science communication prize, but is he a good science communicator? Retrieved November 22, 2020 from <https://www.forbes.com>
- Todorova, A. Psychology of leadership. Retrieved November 22, 2020 from <https://annatodorova.com/psihologiya-na-liderstvoto/>
- Verkerk, P. (1990). Fiedler's contingency model of leadership effectiveness: background and recent developments. Retrieved November 22, 2020 from <https://pure.tue.nl/ws/files/4271307/352989.pdf>
- Zankovsky, A. Organizational leadership in the space of corporate culture. Retrieved November 22, 2020 from <https://www.dissercat.com>
- Zankovsky, A. Psychology of leadership. From the behavioral model to cultural and value paradigms. Retrieved November 22, 2020 from <https://www.litres.ru>

DIGITALIZATION AND ITS IMPACT ON BUSINESS PROCESSES

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Abstract

Digitalization affects all activities in the companies, changes the business models, the way of production and the used channels for marketing and offering the products to the clients, the activity of the employees. The digital transformation requires companies to change their traditional business strategies to meet changes in market demand and remain competitive in large markets. However, there are still not enough studies to state categorically that all companies need to digitize their processes and change their business models.

Keywords: *Digitalization; innovation; benefit; business processes and models*

JEL Codes: *M10, M15, M16*

Introduction

In the last few years, globalization and changes in technology have led to new challenges for most companies, allowing them greater flexibility in terms of production and targeting products and services to customer needs by changing the established business processes.

Digitization is generally a process of converting analog to digital data that is used to restructure companies' activities and processes in order to optimize the resources used in order to reduce costs, improve customer service and increase efficiency of the activities performed by the employees (Rachinger et al., 2018).

Digitalization supports the restructuring of all processes in the company, which leads to new ways of offering products and services and reaching customers and new collaborations with other companies. In order to be competitive, companies should identify their new business opportunities offered by digital technologies and quickly adapt their

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business models to be able to create higher customer value while reducing their costs (Kiel, 2016).

The question is whether the growing number of opportunities provided by digitalization is forcing all companies to completely change their business strategies and processes, or whether this is an opportunity that every company must choose and follow or not. A study on digitalization concludes that companies must manage and implement digitalization in all company processes before the digital transformation itself can make their company less competitive (McKinsey, 2014). However, many companies face difficulties in organizing their processes, the lack of sufficiently trained employees and accountability to show the results of digitalization. The study of McKinsey also shows that according to company executives, they will have to allocate more and more funds to digitize their processes, which will help them change their business models or build completely new ones.

This shows that the introduction of digitalization is still happening without all companies being fully prepared for it.

Digitization in the company

The introduction of digital transformation is changing not only the company itself. The new internet technologies that are being created by the digital transformation are affecting the overall economy and changing the principles of product offering and customer reach. Society now has new expectations for companies to provide them with more and more convenience while shopping, to be available 24 hours a day, to always be "online" to answer their questions. All this requires companies, if they want to stay in the market and respond to these changes in customer expectations, to quickly change their business processes and models to be efficient and not "obsolete" to the technologies used.

Digital transformation is used by companies from different sectors of the economy, observing the application of different technologies in products from different industries. Therefore, there are three types of digitalization of products, depending on the field of activity of the company - physical products that are only offered digitally, digitally selected physical products and fully digitized products (Bican & Brem, 2020).

All these changes caused by digitalization completely change the business processes of companies, forcing some companies to close down due to the inability to respond to these changes. The dominant companies in the market face new competitors who quickly change their established business processes and replace them with new ones - digitalized. In the fast-growing global industry, more and more companies are competing to create a new business model, often using the same idea or technology from different companies, forcing them to constantly look for new business models that are most optimal for them of their products. An example of this is the development of companies offering mobile phones that are constantly evolving and digitizing to offer their customers everything they need.

At the same time, when one of these companies changes the way it offers its services and benefits to customers from using their products, very quickly the other competing companies also start offering similar products and services (such as A1 and Vivacom). Meanwhile, customers access information through the Internet and have multiple channels to choose between different companies. The competition between companies and attracting customers is growing and all companies either have to constantly change their business processes in order to succeed in the digital world and fierce competition or to give up (Verhoeven & Johnson, 2017).

A business model describes how a company creates and delivers value to its customers through all the mechanisms, procedures and activities it uses to create and add value, as digitalization leads to changes in this model and built processes, which requires completely new activities throughout the company – who will do what and how will do it in a new way.

In recent years, the business processes and activities of companies are increasingly becoming a source of innovation and competitive advantage. Digital technology is a process of developing a business process that can be new to a company if it is now being created or completely changing if it is already created and changing. This is the result of an innovative initiative that replaces or reworks the existing activities in the company, which can become a sustainable advantage for the company by creating a completely new system of activities used (Amit & Zott, 2017). Therefore, the degree of innovation determines the change in business processes in the company.

As a result of digitalization, companies are creating new activities and processes that did not exist before, affecting employees, communication and the whole business (Hausberg et al., 2019). This is confirmed by the availability of new large sources of data about the company (Hartmann, 2016), process automation, new marketing relationships with customers and the need to create digital customer service, which leads to the restructuring of individual departments in companies and the company as a whole.

There are different ways in which digitalization affects and changes companies and their business processes:

- change in the established business processes - digitalization of products and services provided to customers, analyzing large amounts of data for decision making;
- developing a new business process (creating new products/services) – the transformation of the overall business model.

The company's management will now be influenced in its chosen way of managing the new models and processes as a result of the digital transformation. Customer relationships will also be based on changes in business processes in the form of new proposals aimed at creating long-term relationships and meeting their needs. Digital transformation is often seen as a cultural change that must take place in the organization (Mege, et al. (2019).

New ways of offering products and services to customers require companies to implement new information technologies, ie. new hardware and software. Most companies do not have such technologies, as well as trained professionals to work with them. Therefore, they should seek a partnership with specialized companies, which, in addition to providing them with the necessary technologies, should teach them to work with them and maintain and develop them over time. If companies want to successfully digitize, they should keep abreast of all innovations related to the external environment in which they operate and the change and development of technology.

In order to successfully change the company's business processes and market influence, the company must analyze various alternatives, have a good understanding of customer requirements (Teece, 2018), an accurate understanding of the value chain, so as to deliver what customers need as much as possible profitable on time.

Therefore, the ability to adjust and improve business processes and activities can be seen as the dynamic ability of the company to change in accordance with market requirements and customer needs (Dottore, 2002).

The elements of the business model and its overall innovation must be internally coordinated and changed in a way that ensures a change in the company's business processes and provides the planned added value for the customer. In addition, the new business model due to digitalization must be in line with the internal structure, the overall management model of the company and the changes in the external environment (Birkinshaw & Ansari, 2015).

Changes in business processes allow for the introduction of new technologies and production of new products with better qualities than those of competitors, and may completely change the industry and the field of activity in which the company usually operates.

Through innovative activities, the digital transformation can respond to changes in the market in terms of the way products are offered and the change in customer needs. Responding to customer needs is an important part of the company's development and in particular its digitalization, because every change is made in response to customer demand.

Companies are increasingly adding services to physical products or offering complete solutions for their customers in all levels of communication with customers - before the purchase (during the search for information, review and evaluation of various products), the purchase stage (selection, order, payment), and the stage after purchase – consumption of the product and evaluation of its qualities (Werner R. et al., 2019).

The ability of companies to quickly understand the need to digitize part or all of their processes is extremely important for corporate governance and the ability to analyze and evaluate the necessary changes.

Effects of changing business processes due to digitalization

An example of a digital transformation with a complete change in the business model can be given with two companies Apple and HTC (Taiwanese manufacturer of mobile devices). Since its inception, Apple has offered sales of hardware and software. As she developed her products, she created the iPod, and subsequently offered to download music to be used on the new device as an added value for her customers. In this way, the company, in addition to creating a new product, changes its activity into an entirely new field of activity, which it has not developed so far, thus transforming the business processes and the overall business model of the company. Apple continues to develop this activity as the product develops as a portable media player, but at the same time the company creates new products in the field of personal computers, ie. the company has not completely changed its field of activity due to digitalization but is creating new processes (Gupta et al., 2013).

Another such company that is changing its business model through digitalization is HtC, offering mobile phones. HtC initially produced mobile phones, but in 2006, in response to changes in market demand, customer needs and the development of competitors, it began manufacturing its own smartphones, offering them to customers through its already established distribution networks. Thus, due to changes in the offered competitive products, the company changes not only its processes but also its overall business model by expanding its product portfolio.

If we compare the effectiveness of the change in business processes due to the digitalization of HtC and Apple, we will find that the rapid development and penetration of technology into business processes may not always provide a sufficient competitive advantage for companies. HtC has not been involved in the creation or delivery of mobile content or services, ie. only adds a new product that produces and generates revenue only from hardware sales, which is different compared to Apple.

The impact of digitalization on various aspects of value creation is perceived as a dominant theme in the industry (Dijkman, 2015). For example, In the automotive industry, the complexity of corporate relationships caused by digitalization between suppliers, customers and competitors is growing, as the business model is completely changed by expanding, reviewing, discontinuing and creating new products and services. Examples of expanding the business model are increasing of communication with customers through social networks and offering virtual showrooms for viewing products, etc. (Risanow, 2017).

In the media industry, digitalization has been influenced by changes in the way social media is used. Increased use of social networks (such as Facebook and Twitter) is becoming a news platform for disseminating information and news to users. as a source of new information, it forces newspaper publishers to rethink their overall strategy for offering

news to their customers. This has forced more and more publishers to offer online versions of their paper editions, which are less and less used. At the same time, traditional business models have not been completely replaced by new ones, but have only been changed to meet customer demand (Praprotnik, 2012).

As a result, it can be said that the impact of digitalization on the elements of business processes and therefore the potential optimization depends largely on the field of activity in which the company operates.

Not to mention the challenge in the field of recruitment and qualification of employees, which is faced by all companies wishing to change their business processes. This also determines the need to build and create the know-how needed to complement the digitization opportunities provided, which is considered to be extremely appropriate.

It is extremely important for every business to have additional competencies and know-how in order to be able to offer new services or solutions. Therefore, companies need to develop dynamic capabilities to be prepared for changes in their business processes. The readiness for change of each company is its ability to change its business model in response to changes in the environment in which it operates (Saebi, 2015).

Conclusion

Every change in customer expectations, the way products and services are offered by competing companies and the introduction of new technologies requires companies to quickly adapt to change if they want to stay in the market. The entry and use of more and more digital technologies implies a rapid change of existing business models and processes. A competitive advantage for each company is its ability to quickly adapt to technological change, to create additional added value for its customers and something extremely important - to do it before all other companies have done so. The only way for companies to be competitive is to be able to adapt and completely change their business models and processes.

To be successful change business processes and models should:

- initial research of customer needs and expectations;
- assessment of the extent to which the company can meet these needs and whether it has the available human and technical resources for this;
- preparation of a long-term strategy for the development of the company and setting clear and measurable goals
- change in the business model in order to adapt it to the new requirements of customers and the competitive market
- change of the established business processes and activities depending on the new business model

Any change in the market and customer requirements is an opportunity for the company to change its business model and processes to become an organizational transformation and even to create completely new products or offer new services that have not been in the product portfolio so far. This requires excellent management skills and teamwork to reliably evaluate current business processes and effectively create new ones.

The findings of the article contribute to the analysis of the impact of digitalization on the company and its business processes, as well as on the need for continuous change in relation to the environment. It is indisputable how many challenges and at the same time opportunities for development digitalization offers for each company, regardless of its size and field of activity. Based on the given examples of digitalization of existing companies, the impact of digitalization on business processes is strengthened (in some cases successfully, in others - not).

As with any study, this study may have some limitations. The main limitation is the lack of sufficient information about the effect of changing the business models of existing companies, as this effect is observed years after the introduction of digital transformation, and currently this process is relatively new, so the topic requires further study over time.

REFERENCES

- Amit, R. Zott, C. (2012). Creating value through business model innovation. MIT Sloan management review. Vol. 53, № 3, pp. 42. Retrieved November 22, 2020, from <http://aproaingenieria.com/intranet/uploads/creating-value-through-business-model-innovation.pdf>
- Bican, P. Brem, A. (2020). Digital Business Model, Digital Transformation, Digital Entrepreneurship: Is There A Sustainable „Digital“? MDPI. pp. 2. Retrieved November 22, 2020, from <https://www.mdpi.com/2071-1050/12/13/5239>
- Birkinshaw, J., Ansari, S. (2015). Understanding management models: going beyond „what“ and „why“ to „how“ work gets done in organizations. pp. 5. Retrieved November 22, 2020, from https://www.researchgate.net/publication/268577855_Understanding_Management_Models_Going_Beyond_What_and_Why_to_How_Work_Gets_Done_in_Organizations/link/5709765f08ae8883a1fa53ea/download
- Dijkman, R. (2015). Business models for the Internet of things. *International journal of information management*. Retrieved November 22, 2020, from <https://www.sciencedirect.com>
- Dottore, A. (2002). Business model adaption as a dynamic capability: a theoretical lens for observing practitioner behavior. 22nd Bled eConference. Facilitating an Open, Effective and Representative eSociety. pp. 9. Retrieved November 22, 2020, from https://www.researchgate.net/publication/228635069_Business_model_adaptation_as_a_dynamic_capability_A_theoretical_lens_for_observing_practitioner_behaviour
- Gupta, A. et al. (2013). Apple, Inc.: Where Is It Going From Here? *Journal of Business Case Studies*, Volume 9, № 3, Pp. 215. Retrieved November 22, 2020, from clutejournals.com

- Hartmann, P. et al. (2016). Capturing value from big data – a taxonomy of data-driven business models used by start-up firms. *International journal of operations & production management*. pp. 3. Retrieved November 22, 2020, from <https://www.repository.cam.ac.uk/handle/1810/260819>
- Hausberg, P. Liere-Netheler, K. Packmohr, S. Pakura, S. Vogelsang, K. (2019). Research streams on digital transformation from a holistic business perspective: a systematic literature review and citation network analysis. *Journal of Business Economics*. pp. 933 Retrieved November 22, 2020, from <https://www.ibm.com/downloads/cas/B6Y8LY4Z>
- Kiel, D. (2016). The impact of the industrial internet of things on established business models. *International Association for Management of Technology*. pp. 675. Retrieved November 22, 2020, from https://www.researchgate.net/publication/304495085_The_Impact_of_the_Industrial_Internet_of_Things_on_Established_Business_Models
- McKinsey Global Survey (2014). The digital tipping point: McKinsey Global Survey result. Retrieved November 22, 2020, from <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/the-digital-tipping-point-mckinsey-global-survey-results>
- Mege, I., et al. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*. Volume 36, Issue 4, pp. 3. Retrieved November 22, 2020, from <https://www.sciencedirect.com/science/article/pii/S0740624X18304131>
- Praprotnik, T. (2012). Digitalization and new media landscape. *Innovative Issues and Approaches in Social Sciences*. Vol. 9, № 2, pp. 85 Retrieved November 22, 2020, from https://www.researchgate.net/publication/303696314_DIGITALIZATION_AND_NEW_MEDIA_LANDSCAPE
- Rachinger, M. Rauter, R. Müller, C. Vorraber, W. Schirgi, E. (2018). Digitalization and its influence on business model innovation. *Journal of Manufacturing Technology Management*. Volume 30, Issue 8, pp. 1144. Retrieved November 22, 2020, from <https://www.emerald.com/insight/content/doi/10.1108/JMTM-01-2018-0020/full/pdf?title=digitalization-and-its-influence-on-business-model-innovation>
- Risanow, T. (2017). Digital Transformation in the Automotive Industry: Towards a Generic Value Network. *Association for Information Systems AIS Electronic Library (AISeL)*. Pp. 3193. Retrieved November 22, 2020, from https://www.researchgate.net/publication/319007756_Digital_Transformation_in_the_Automotive_Industry_Towards_a_Generic_Value_Network/link/5aa68e6eaca27291845fe2da/download
- Saebi, T. (2015). Business model evolution, adaption or innovation? A contingency framework of business model dynamics; environmental change and dynamic capability. *Business Model Innovation: The organizational dimension*. pp. 148. Retrieved November 22, 2020, from https://www.researchgate.net/publication/299877552_Evolution_Adaptation_or_Innovation
- Verhoeven, B. Johnson, L. (2017). Business Model Innovation Portfolio Strategy for Growth Under Product-Market Configurations. *Journal of business models*. Vol. 5, No. 1, pp. 36. Retrieved November 22, 2020, from <https://journals.aau.dk/index.php/JOBM/article/view/1924>

- Teece, D. (2018). Business models and dynamic capabilities. Long range planning. pp. 42. Retrieved November 22, 2020, from <https://www.sciencedirect.com/science/article/pii/S0024630117302868>
- Werner R. et al. (2019). The impact of digital transformation on the retailing value chain. *International Journal of Research in Marketing*. Volume 36, Issue 3, pp. 355. Retrieved November 22, 2020, from <https://www.sciencedirect.com/science/article/pii/S0167811618300739>

IDENTIFYING SURROGATION USING BUSINESS ANALYSIS

Galina Manahilova¹

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Abstract

Surrogation is a term used to describe the human phenomenon of confusing or replacing what is being measured with the metric being used. It is very important for high and middle level management to be familiar with this definition. Best practices require surrogation to be avoided by properly choosing the necessary metric to measure the strategy goals. It is also impertinent to include the roles executing the strategy in defining the metrics. Trained Business Analyst are able to quickly identify if there is surrogation within the organization and quantify the impact. The current article will define surrogation, provide real life example of surrogation identification and calculate the impact of it.

Keywords: *surrogation; strategy goals; key performance indicators (KPI's); business analytics*

JEL Codes: *C55*

Introduction

The term surrogation was first used in the publication “Lost in translation: The effects of incentive compensation on strategy surrogation” by Jongwoon (Willie) Choi; Gary W. Hecht; William B. Tayler (2012). The experiment was designed to review the dynamics between strategic goals and any performance management system (PMS). The three factors needed to create PMS include: 1) translating strategy into a set of measures facilitates communication of strategy throughout the firm; 2) aligning strategy with performance measures enables evaluation of strategy; and 3) tying measures to strategy facilitates the development of new strategies. There are many benefits of linking strategy and measures; however, the processes involved can cause the people who are responsible for this metric to lose sight of the strategy involved.

Companies have strategies that are more visionary and the method to interpret the expectations is usually by using specific metrics. An example of this would-be Apple’s

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“Think different” in which the Ford Motor Company “Quality is job 1” Harris and Tayler (2019) are comparing the strategy to the blueprint of the building, while the metric is the “concrete, wood, drywall, and bricks”. They explain that it is easy for company to “lose sight of the strategy and instead focus strictly on metrics that are meant to represent it”. Another, and perhaps the most famous, example is Wells Fargo. Their strategy was to grow business through cross-selling and the employees opened 3.5M accounts without consent.

As with any study, this study may have some limitations. The main limitation is the lack of sufficient information about the effect of changing the business models of existing companies, as this effect is observed years after the introduction of digital transformation, and currently this process is relatively new, so the topic requires further study over time.

How to avoid surrogation

There are three underling conditions that have to be met to create base for surrogation as defined by Nobel prize winner Daniel Kahneman and Yale professor Shane Frederick (Kahneman, D., Frederick, S. 2002).

First. The objective or strategy is fairly abstract

Second. The metric of the strategy is concrete and conspicuous

Third. The employee accepts, at least subconsciously, the substitution of the metric for the strategy

Eliminating one or more of those prerequisites will reduce the occurrence of surrogation. Most importantly. managers and analysts must be knowledgeable about this phenomenon. Furthermore, the must be able to recognize the prerequisites and the symptoms. The main technique to avoid surrogation is to include the “people responsible for implementing strategy to help formulate it”. Another recommendation is to “loosen the link between metric and incentives”. And the third method is to “use multiple metrics” (Harris, M., Taylor, B, 2019)

Identifying surrogation

Plato in his “Allegory of the Cave” argues that our perceptions are merely shadows, cast by a reality we can never see directly. Performance is what counts, but the measure of performance—a mere shadow of performance—is what gets counted (Plato, 520 a.)

Bloomfield in his book “What counts and what gets counted” is defining the Management reporting system and one of the roles of such a system is the decision-influencing function: changing the behavior of a person who is attempting to garner rewards or avoid punishment. Explicit incentives include pay-for-performance contracts; implicit incentives include possibilities for promotion, raises and dismissal based on subjective evaluations (Bloomfield, R. 2014). Reviewing the numbers on regular basis and

making decisions based on them is possible to have not only positive, but sometimes negative impact on employee’s behavior.

The practical example which is presented in this paper is from one of the top 100 US companies.

The business case scenario is as follows:

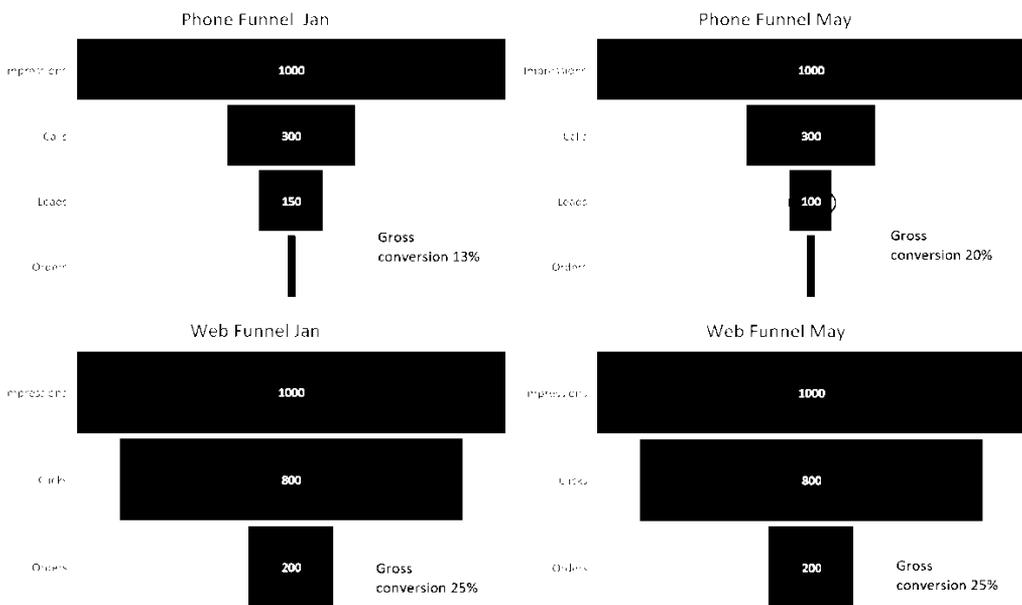
The company is selling services online and via phone. The sales are initiated by 90% digital advertisement. The company strategy is business growth.

The marketing team has weekly reports to monitor marketing performance and sales. The reports follow the customer journey from the first interaction until the completion of the service order.

Unexpectedly starting in May, the gross conversion for phone services have increased, while the web conversion remains the same.

The example of the metrics results can be seen on Figure 1.

Figure no. 1 Marketing Funnel Report



Source: Author

The marketing spend is the same and nothing has changed from campaign or content perspective.

A good practice for the analyst is to know that consumers do not suddenly change behavior, and if something like this happens, there are a few things need to be further evaluated.

The first step is to check the accuracy of the data. Once that is ruled out the next thing to consider is a change in the behavior of the employees. The described situation is complicated, because the servicing team is outsourced which means there is limited communication and lack of control in their processes.

The gross conversion has increased because the leads count has declined, while the service orders are similar to previous counts. Such a number change prompted the marketing team to investigate the decline. Since the marketing spend is the same and content of the advertisement is the same, the subsequent step is to understand what is the reason for the decline.

The thought process is as follows - the gross conversion is a formula calculated by dividing sales and leads. Sales is a number that is clearly identified, so the problem must be in the leads count. Additional research indicated that leads are marked as “leads” based on the judgement of the phone sales agent. The sales agent must physically check a box if a call is a lead or regular service call. The hypothesis suggested by the analyst is that the phone agents might be untruthful when they mark the calls. Therefore, evidence is necessary to prove the null hypothesis.

The following methodology was suggested to prove or disprove the null hypothesis. For the purpose of this analytical project two weeks of all recorded calls starting in May when the data has changed will be required.

Then the voice recordings are transcribed to text. Once transcribed n-grams is used to identify calls that are sales vs service conversation. To convert voice recordings to text, Google cloud speech API can be used. There are also other tools that have the same feature. These various tools can be evaluated by a quality and cost to help in the selection of the proper tool. For the n-grams analysis, vocabulary is created with the help of the business to identify which words are associated with sales call, and which words are associated with service calls. Sales wwords are price, zip code, time available, etc, service calls are change time, cancel, etc. There are also some negative words in both cases that have to be considered while building the algorithm.

The lexical engine build using those words can mark each call as either service or lead. Then the calls reported by the servicing organization are compared to the calls that are marked by the lexical engine. The variance count will prove or disprove the hypothesis.

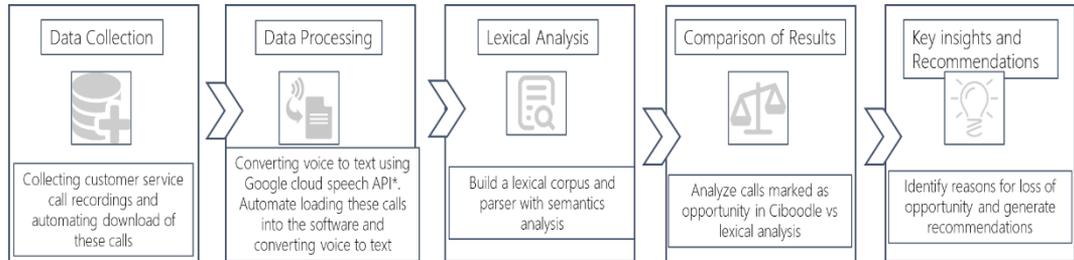
The results from the actual project estimated that 17% of the calls were wrongfully marked as service calls. Therefore, that was the reason behind the reduced leads count and improved gross conversion.

This project helped the servicing organization understand the challenges of selecting gross conversionas metrics as performance indicator used to pay commissions.

The compensation structure was changed and reverted back to using the absolute numbers of repairs sold.

The process is graphically described on Figure 2.

Figure no. 2 Solution Approach



Source: Author

The process is very complex as it requires the data transition from one type of data substance (voice) to another (text), and in those transitions there is continuously a concern that the quality of the data can be reduced as the machine learning models have some percent of error. The same concern is valid for n-grams modeling technique used in the lexical analysis step.

Conclusion

While it is impossible to manage a business without measuring it, there must be extreme caution when selecting metrics. Close attention must be paid to any changes in data patterns and trends. Human tendency to lean towards increased benefits can lead to very creative ways of receiving said reward without doing the required effort. One of the biggest surrogation was the Wells Fargo case in which thousands of new accounts were opened without customer consent. This occurred because the bank employees were compensated based on the metric: number of new accounts opened. This metric was meant to support business growth strategy.

In order to avoid surrogation, each metric has to be evaluated as if it is already prone to surrogation. It should be checked against the “guardians against surrogation” proposed by Kahneman, D., Frederick, S. (2002). the objective or strategy is fairly abstract; the metric of the strategy is concrete and conspicuous, and the employees accept at least subconsciously the substitution of the metrics for the strategy.

REFERENCES

- Choi, W., Hecht, G., Tayler, W. (2012). Lost in translation: The effects of incentive compensation on strategy surrogation. *Journal of Accounting Research*, Vol. 51, pp. 105–133
- Harris, M., Taylor, B. (2019). Don't let Metrics Undermine Your Business, *Harvard Business review*, Vol.97, pp. 62-69.
- Plato, "Allegory of the cave", 520 a. Available at: [faculty.knox.edu/ fmcandre/ allegory_cave.pdf](http://faculty.knox.edu/fmcandre/allegory_cave.pdf) (2/21/2021)
- Kahneman, D., Frederick, S. (2002). Representativeness Revisited: Attribute Substitution in Intuitive Judgment, Available at: researchgate.net/publication/229071271_Representativeness_Revisited_Attribute_Substitution_in_Intuitive_Judgment
- Bloomfield, R. (2014). What Counts and What Gets Counted Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2427106(2/21/2021)

INFLUENCE OF THE HIERARHY POSITON AND EDUCATION DEGREE ON THE PREFERENCES OF MOTIVATORS IN THE MODERN ENTERPRISE

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Abstract

The theory of motivation provides numerous of examples of various of influences upon the motivating aspects of worker's life. Among them are age, gender, social aspects, caring of children and many more. Authors have tried to examine every possible link of motivation and different aspects of the working life in the modern society. Therefore, our main goal in the following research paper is to examine the possible influence of educational degree and the position of workers in organizational hierarchy upon their motivational preferences. For doing so, we conducted a study upon 595 workers from various kinds of industries in Bulgaria. The study was in the form of a survey, asking people which the most important aspects of possible gains in the workplace are. Firstly, we will examine the theoretical aspects of motivation, providing examples of various empirical studies examining motivation on the workplace. Afterwards, we will examine the results, and make conclusions upon them. We expect to prove the influence of the two examined variables on motivation of employees.

Keywords: *motivation; workplace motivation; motivators*

JEL Codes: *M12; M54*

1. Introduction

Ever since the work of Henry Murray, scholars have been interested in the influences on motivation on the workplace. This interest ascends even back to the Roman-Greek culture, where many philosophers pointed different aspects of the directed behavior of people, proof of which we can find in the different philosophy tendencies true out the ages, which are characterized with a certain behavior in society. The reasons for the chosen

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behavior are, somewhat, crucial for understanding the human nature. When it comes to workplace motivation, influences of various aspects of both social and work life, affect the behavior in work. As we mentioned, numerous of categories of factors are examined from scholars all over the world. Despite this, scholars have put a lot of interest in many other aspects of employees' motivation – from traits in the character of employees, to aspects from the environment. Our main goal in the current paper is to examine the link between the position in the hierarchy in the company, educational degree and the most and least preferred motivators. For the purposes of the study we gathered various aspects of the motivation, divided them into six modules, and based on this, conducted the survey, asking the respondents to evaluate their preferences regarding the different aspects of motivation. Based on the subjective assessments of our respondents, we calculate the mean average value for each module. Afterwards, we examined the results in the divided section given from the perspective of the position in the organization and degree of education. Firstly, we will examine the theory aspects of human motivation, provide some examples of empirical research for linkages between motivation and other aspects from the environment and behavior of people. Secondly, we will examine the results from the study. Lastly, we will make conclusions based on the results.

Our main hypothesis is that the position in the hierarchy of the organization and educational degree will affect workers, mostly in the aspects of self-development, self-determination, intrinsic motivation and higher identification with the organization. For testing the hypothesis, we will conduct a correlation analysis between the assessments of the preference of the motivators, educational degree and the position in the hierarchy.

2. Defining motivation

The most widely spread view for motivation is within his characteristics as a process. Or as Deckers (2010) describes it, a process initiating, directing and maintaining goal-directed behavior (p. 6). When it comes to the motivation to work, motivation can be described as a set of energetically powers, initiating the work behavior and determining its power, direction, intensity and duration (Pinder 2008, p.13). Corporate culture has a great influence on motivation. (Filipova 2021, p. 129) Therefore, motivation can be defined as a complex process, within the person's behavior, which affects the direction, duration and persistency of the chosen behavior. Yaneva claims that an integral part of the strategic decision-making process in the organization is the study of the indicators related to the employees' development and motivation (2021, p.170). Therefore, to achieve higher efficiency should be know the factors that determine human behavior in the labor process and find ways for impact on the individual or the group in this process (Yaneva, 2006, p.57). This process is highly affected by the environment, therefore Latham and Pinder

(2005), conclude that motivation is a psychological process, resultant by the interaction of the human with the environment (p.486). Besides, we can complete the author's thoughts and state that the motivation is often a physiological process. Individuals can be highly motivated from their physiological necessities. Therefore, in certain occasions, motivation can take place in within the physiology of the human, without ignoring the psychological processes involved in the behavior. Almost in every occasion, motivation is identified to the future behavior of the individual. The goal of the manager is to motivate the employees so that they perform the work in the best way in order to achieve the goals of the company. (Filipova 2011, p. 137) Alternatively, as stated by Prichard and Payne (2003) – motivation is directed to the future concept within people are expecting the level of satisfaction of their needs, once the results of the chosen behavior are available (p.224). Therefore, individuals act upon their expectations for the future self-being. Although, there are exceptions (for which we will talk later in the paper), normally people tend to direct their behavior based on the future gains they expect. One makes his choice in a clear, internally consistent value system, which presupposes individual benefit. (Zlateva, 2019, p.70)

Consequently, based on the given views on motivation, we can define it as – directing psychological process, built by various energetical powers, having the goal to affect behavior in a way, determining the direction, intensity and persistence of individual's behavior.

Needs on one hand are described stated of irritation and psychological deficiency. Numerous of authors examine various kinds of needs in their work. For example, Maslow (1954), describes 5 – psychological, safety, social, respect and self-actualization (p. 77-97). On the other hand, based on his work, Alderfer (1969) proposes only tree – existence, relentless, growth (p. 144). Hogan and Waremfelts (2003), described – biological, needs for acceptance and approval, status, power and control over resources, predictability and order (p. 77). On the other hand, Deci and Ryan (2000) describe the needs for competence, relatedness and autonomy (p.231). Herzberg (1968) describes 2 groups – motivational and hygiene factors, which within them have certain set of needs (p. 56-57) Outthought, Deci and Ryan reject the concept of gains within the motivation process, they state that only with fulfilling these needs, individuals tend to motivate themselves. We can list more and more classifications of needs, but the common upon them all is that the need is described as a state of irritation. Therefore, once the need is realized, the individual will direct his behavior in the direction, which he believes that will help him fulfil it. Needs are the route of the so called “Needs theories of motivation”. In these theories, people are described as constantly needing individuals. Examples are the work for – Murray; Maslow; Herzberg; MacClelland and many more. The common upon them all is defining of given sets of needs,

which motivate people to direct their behavior. In addition, in almost every need theory, the process of motivation is starting with the consciously realization of the unfulfillment of the need.

On the other hand, various theories of motivation partly or fully reject the needs within the process of motivating workers. These theories of motivation are called process theories, and the main postulate within them is for the motivation as a complex process of constant interaction between the individual and the environment, not an act of direct behavior towards a given lack of a need. Some examples for process theories are – Expectancy theory of Vroom and later of Porter and Lower (1967) , they state that motivation is not only a process of fulfilling the needs, but also the hope of acquiring the certain gain, in other words, the expectancy of success in a given task (p.23). Another example is equity theory formulated of Adams (1965), he states that all individuals tend to reach for equity in their jobs, he formulates this in a simple equation where inputs of the persons, has to equal their outcomes (p. 280). There are more process theories of motivation, but within the goals of our research, we will not examine in more details. The common upon all process theories is that they postulate from the point of interaction of the individual with the environment.

More important within our research is to define and give examples of what influence motivation on the workplace, which we will examine in the second part of the paper.

3. Influences on motivation

Motivation is the basis of employee behavior and performance. (Filipova, 2016, p. 80) As we mentioned, numerous factors and aspects influence motivation on the workplace. Except the described by process and need theories, motivation can be influences by a wide variety of different kind of aspects of life. In this section, we will examine some of them and give empirical examples for such influences.

In a study, based on the work of Deci and Rayan (Self-determination theory), Gillet at all (2017) concluded, that autonomy of the individual on the workplace, influences the necessity of organizational support within the organization (p. 1167). Therefore, imposed decision will negatively influence the motivation for fulfilling the task if the autonomy demands are high. Imposed decision are appropriate only if the tasks are simple. Nonetheless, it is crucial to involve people in taking the decision if they will be the ones fulfilling the task.

The basis for the motives of employee behavior is the need for both psychological and physiological sense of lack of something in the individual. (Filipova, 2015, p. 73) As mentioned above, process theories consider motivation as a constant process of interaction between the individual and the environment. Indisputably, within the workplace, part of

this interaction is the interaction with the leaders in the organization. Based on this view, Keating, Harper and David (2013) state that the emotional intelligence of leaders, described as a certain set of emotional traits, can highly influence the motivation of workers (p. 34-35). Therefore, the interaction between the leaders and the workers is crucial in the aspect of workplace motivation. Leaders have the power to empower or to debar worker's development. An interesting research states that empowering leadership in the form of emotional and social support from the leader can highly contribute creativity of workers, mostly within the aspects of intrinsic motivation (Zhang, Bartol, 2010, p. 117). When the intrinsic motivation is highly decreased, the spiritual satisfaction and the feeling of being important and valued disappears. Workers turn into immediate performers of a given set of functions (Angelova, 2019, p. 20). The qualities of the leader are important in this process. (Filipova, 2015, p. 3)

Feedback is also an important aspect of the interaction between the leaders and the workers. Belschak and Hartog (2009) found out that positive feedback, given publicly or privately, positively influences the emotional state of the individuals. Respectively, once the feedback is negative, the effects are negative and stronger if the feedback is given publicly (p. 286). Therefore, once a person has made a mistake in the workplace, feedback should be given, but if possible, privately. Respectively, the positive feedback should be given publicly, in order to enforce the positive emotional state of the individual, which often predisposes high levels of motivation on the workplace.

As we stated, culture has a very strong influence on motivation. Moreover, knowing the factors that have a significant impact on the relationships and motivation could contribute to the formation of a correct view on the innovation culture in organizations (Kyurova, Koyundzhiyska-Davidkova, p. 130). The factors, which are rooted within the national culture and subculture are various and crucial once it comes to motivating the employees. A study conducted among Bulgarian, Hungarian and Netherlandish workers, proved difference between the countries when it comes to antecedents and consequences of job enrolment and organizational commitment, with a given motivational aspects applied to the their jobs. Moreover, authors were able to build different motivational models within the groups from each country (Roe, Zinovieva, Dienes, Horn, 2000, p. 675-677). Therefore, the authors proved the influence of culture on motivation.

Beside the above-mentioned influences, researches have proven a high influence of the personality traits. Bipp (2010) was able to link neuroticism, extraversion, openness to experience, agreeableness and conscientiousness and motivation (p. 29). Based on the certain levels of the mentioned traits, preferred motivational aspect can differ. Personality traits are one of the behavioral aspects that can influence motivation in the strongest aspect.

Undisputedly, they can form the behavior in a way that can cause a high influence upon the motivation to work. Therefore, same motivational techniques can have different influence on people in the same organization.

With the given examples of different influences on motivation, we wanted to emphasize the complex process of motivating people within the modern working environment. Motivating the staff in the workplace can be crucial to the success of every organization, no matter of the economic sector. Motivation can be directly linked to creativity, initiative, satisfaction, propensity of leaving the company, commitment, identification with the organization and many more. Therefore, understanding the complexity of this process is crucial for every organization.

4. Methodology

The research was conducted in the form of an online survey in the period between June 2020 and August 2020. The bigger part of the response group is part of a governmentally owned railway company in Bulgaria (n= 448), the other part of the response group is from a wide variety of economic sectors in Bulgaria (n=138), in total respondents n.586. We believe that the number of respondents is enough to let us make conclusions on the researched aspect of human motivation.

In order to examine the workplace motivators, we gathered 38 examples from different theoretical authors and practice examples. The motivators were formulated into corresponding questions, using a 5-point Likert scale in order to examine the strength for each motivator, subjectively for each respondent. Then we divided the motivators into 6 modules as follows: 1. Work Environment (WE) ; 2. Remuneration (R); 3. Safety (S); 4. Personal development (PD) ; 5. Affiliation and social aspects (ASP); 6. Respect and self-respect. Interest and challenge, autonomy and leadership (RS; IC; AL).

The **first** module had the goal to describe motivators linked with the environment to work, such as good working time, confirmable workplace, interior, ergonomics etc. The **second** module was linked to every material compensation which people can gain in their workplace. **Third** module had the goal to describe aspects of motivation, linked to the safety at work and safety which work provides in the life of individuals. The **fourth** module was designed to describe the necessity for people to improve and develop themselves. This module, described the higher set of needs and intrinsic motivation to work. **Affiliation and social aspects**, described the necessity of human contact in work. **The last** module was the most complex one. Our main goal was to describe intrinsic motivation and higher level needs. Therefore, the higher the personal attestation of the module, the higher the necessity for the motivators within it. For the attestation of modules, we calculated the mean average of the rating for each motivator and for each respondent. Hierarchy position and education was a part of the examination and was part of the demographic profile of the respondents. We evaluated the most and least important motivators, by calculating the mean value for each motivator and for the modules overall. On

this foundation, we examined the most and least preferred motivators, compared the results and made conclusions.

5. Results

We will examine the results for the 2 groups, divided by hierarchy position and education degree. As we mentioned, the examining of the motivation was defined fully on the subjective evaluation of the respondents. Dividing them into categories on the given demographic trait enabled us to make some conclusions on their influence on motivation. Firstly, we will examine the influence of education.

Education is undisputable influencer on human behavior. It can provide a various points of view on various aspects of life. In our opinion, highly educated people tend to want more from their jobs, mostly because they can better understand the process behind motivation in the workplace. We present the results of our study in Table 1

Table no. 1 – Module attestation and correlation with education

Education degree	WE	R	S	PD	ASP	RS; IC; AL
Secondary	3,49	3,11	3,45	3,19	3,97	3,55
Bachelor	3,58	3,49	3,61	3,55	3,88	3,59
Master	3,75	3,35	3,68	3,71	3,88	3,70
Correlation	0,99	0,64	0,98	0,98	-0,85	0,96

Source: Own research

As we can see on the table, education is highly influencing motivation in our group. Within each module the influence is significant. For more clarity, we will examine the modules separately.

Work environment, is influenced very strongly by the education degree. As we can see, the tendency is progressively increasing and the coefficient of correlation is close to one. Therefore, as the level of education rises, preference for this module rises with the almost same degree. This can be the effect of a better understanding on the environment, higher demands based on the higher education, or simply the higher knowledge leads to higher demands on the work environment, based on education.

Remuneration is again highly influenced by the degree of education but to a lesser extent. As we can see in Table 1, preference for this module raises in the bachelor degree but again lowers in the masters. Nonetheless, we can state that education also influence the preference for this module in a significant way and with the higher levels of education, the significance of this module rises.

The tendency within **safety** module is again progressively increasing. Correlation coefficient is close to one. Therefore, there is a high positive influence of education on the

significance of this this module. People tend to seek more safety within their work when they have higher education. This can be caused by an aspiration for integrity and stability in both work and social life of our respondents.

As educational degree rises, preference for the motivators in **personal development**, raise as well. As we can see, the correlation coefficient is positive and close to one. Therefore, there is a strong connection of education and seeking personal development within the workplace. This is completely confirmed by the work of Maslow, who stated that the higher education normally leads to the striving for higher set of needs, of which personal development is a part. As we mentioned, this module is partly linked to intrinsic motivation to work. Therefore, as the education rises, the tendency for inner motivation raises as well.

Affiliation and social aspects is the only module with a negative correlation with education. As we can see on Table 1, education negatively and strongly influences the preference for this module. This can be caused by several aspects, in our opinion this can be the effect of the strongly expressed goals within the rest of the modules. Therefore, the modules, which described the social contact within the work place, are not so significant with people with higher education.

The **most complex module** within the six is again highly influenced by the educational degree of our respondents. As we stated above, this module had the goal to describe the higher set of needs within the workplace and inner motivation. The correlation coefficient is again close to one and positively affecting the respondents. Results can be explained by the higher levels of mastery, caused by the higher education, which leads to higher levels of autonomy and mostly higher levels of respect upon the colleagues.

Next, we will examine the results within the separated group respondents based of their position in the hierarchy. Again, we will show the results in a table, as follows:

Table no. 2– Module attestation and correlation with position in the hierarchy

Position	WE	R	S	PD	ASP	RS; IC; AL
Non-guiding	3,60	3,31	3,58	3,32	3,84	3,48
Group manager	3,67	3,61	3,65	3,83	3,86	3,73
Intermediate level	3,74	3,48	3,64	3,75	3,95	3,73
Senior management	3,83	3,43	3,53	4,03	3,85	3,93
Correlation	1,00	0,26	-0,33	0,89	0,28	0,95

Source: Own research

As we can see on Table 2, the strongest correlation between the position of the individual and the preferred modules is for **work environment**. Rounded to the second digit after the decimal number, the correlation coefficient is one. Therefore, once the hierarchy position changes, the importance of this module changes almost in the same way. Our results show that higher-level employees tend to be motivated from the work environment in a higher level.

Remuneration is also affected by the hierarchy position, although in a much less significant way. The weak correlation between this module and the position in the company could be explained by the higher level of presents of the intrinsic motivation, caused by the higher levels of mastery, autonomy and in often cases, relatedness. Therefore, the material stimulation will not affect the motivation of executive staff in a significant way. Nonetheless, we can examine an increase in the average attestation for this module within the group managers. Nevertheless, the attestation again drops when it comes to examining intermediate and senior managers.

The only negatively correlated module is **safety**. This can be the result of a higher level of safety in work, once the person is “climbing” the corporate ladder. For example, a blue-collar worker, often can be working in an endangering environment, despite the good condition in the workplace, work can be threatening to the workers well-being. Once he is a group manager or an intermediate manager, he does not have to perform the same tasks, therefore, he is not feeling threatened in his job any more. The need for safety is fulfilled and the employee does not give the importance as at the beginning. Another reason for the negative correlation, could be the higher level of work knowledge and management skills. In these conditions, the employee becomes more valuable for the company, therefore, the company tend to try to keep him. On this foundation, the employee feels more secure, when it comes to keeping his work. Therefore, the need for safety and security in the work is fulfilled and no more motivates the employee.

One of the highly interacting module with the hierarchy position is **personal development**. The tendency on the average attestation is increasing. Therefore, the correlation coefficient is close to one. Consequently, we can conclude that the interaction between the two variables is strong. This may be the cause of the higher levels of strive of the people in higher position for personal development. As we described above, often people in the higher levels in the organization, tend to motivate themselves with inner motivation. Consequently, personal development as a part of the mastery in work, can highly effect people, once they obtain higher-level position.

Affiliation and social aspects is again not influenced in much significant way by the hierarchy position. This can be the cause of traits describing the higher-level positions.

Often, people that were colleagues in the past, now are in a relationship of a manager and a subordinate. Therefore, the necessity of human interaction on the workplace may be suppressed.

Our **most complex module** is again highly influenced by the position in the organization. As we mentioned, this module was designed to describe the higher-level need and the intrinsic motivation for work. Therefore, once the position is higher, the motivating aspect of this module rises. The strive for a higher position is often linked with seeking of challenge and higher level of interest in the job, which are related to the necessity of mastery in work. The autonomy and leadership are again bounded with the intrinsic motivation for work. In addition, the motivators, linked with respect, are the reflection of the higher-level needs in the workplace environment. Therefore, employees in higher position in the hierarchy of the organization can be motivated by higher-level needs in a more significant way. Furthermore, the managers tend to self-motivate themselves and identify with the organization at a higher level.

6. Concluding remarks and discussion

Motivation is a very complexed process within human psychology, which highly effects the behavior of the employees on the workplace. The huge interest in motivation after the evolution of human management theory, indicate the high importance of the problematic on the theory of managing people. Motivation can effect at significant levels the work results throughout many indirect canals of influence. The importance in this theory is constantly growing, especially within the global crisis we are in at the current time. Motivating people have become a very difficult task. Many of the employers have realized that the safety of the workers is often the most important aspect of their motivation. Therefore, the effect of the global pandemic on motivation can be traced mostly within the increasing levels of safety necessity within the work place. Although our study was conducted before the worsening of the crisis, we can conclude that the pandemic can influence the motivation on the workplace in a much significant way.

Despite the temporarily influencing factors, motivation can be highly affected by decision-making, leadership, feedback, culture, personality traits and many others, as well as education of employees and their hierarchy position as it was proved by the conducted research.

Our study conducted a survey research to prove the influence of the two examined variables within the workplace. We achieved this by examining the preference for certain motivators within our respondents work. As we concluded, the motivation of workers is affected by the education and the position in the organization in a significant way. The

preference of certain modules can vary within the groups with different education and different position in the hierarchy of the organization.

As concluding remarks we lay emphasis on the following:

First, motivation is a very complexed process within the workplace. It can influence performance in the company in a highly significant way.

Secondly, within the theory of motivation there are two main groups of theories – need and process theories. Each providing valuable postulates for the managing of people in the modern enterprise.

Thirdly, various aspects of both social and work life can influence motivation. We examined just a brief few in the current paper.

Fourthly, the preference for work environment motivators is significantly influenced by educational degree. This can be stated for every of the sixed examined modules of motivators in the paper. Affiliation and social aspects are negatively correlated with the level of education of the employees.

Fifthly, work environment is with almost proportional correlation with the position in the hierarchy. Personal development, Respect, and self-respect. Interest and challenge, autonomy and leadership are again highly influenced by the position in the hierarchy. Remuneration, affiliation, and social aspects are in not so significant way influenced by the position in the organization. Safety on the other hand is negatively correlated with position in the company.

Therefore, based on the results of the research we can conclude that education and hierarchy position influence motivation in variety of occasions and can play a vital role within the process of staff motivation.

REFERENCES

- Adams S. (1969). Inequity in social exchange, *Advances In experimental social psychology*, Vol. 2, New York: Academic press, 1965, pp 267-299
- Alderfer, C. (1969). An empirical test of a new theory of human needs, *Organizational behavior & human performance*, May 1969, Vol. 4 issue 2, pp 142-175
- Angelova, G. (2019). Recruitment in Tourism Organisation Cadre Management. Blagoevgrad: SWU of Neofit Rilski
- Belschak F, D. Den Hartog (2009). Consequences of positive and negative feedback: The impact on emotions and extra-role behaviors, *Applied psychology: An international Review* Vol. 58 Issue 2, 2009, pp. 274-303
- Bipp T. (2010). What people want from their jobs? The big five, core self-evaluations and work motivation, *International journal of selection and assessment*, Vol. 18, 2010, pp. 28-39

- Deci E., R. Ryan (2000). The “What” and “Why” of goal pursuits: *Human needs and the self-determination of behavior, Psychological inquiry, vol. 11 No. 4, , publ. Taylor and Francis,* pp. 227-268
- Deckers, L. (2010). *Motivation: Biological, psychological, and environmental.* Boston, MA, Allyn & Bacon
- Gillet N., Fouquereau E., Vallerand R., Abraham J., Colombat P. (2017). The role of workers’ motivational profiles in affective and organizational factors, *Journal of happiness studies 19, March 2017,* pp. 1151-1174
- Hercberg F. (1968). One more time: How do we motivate employees?, *Harvard Business Review – January-February,* 53-62
- Hogan R, R. Warremfeltz (2003). Educating the modern manager, *Academy of management Journal 2,* 74-84
- Kyurova, V., Bl. Koyundzhiyska-Davidkova (2018). Organizational culture and innovations in the community reading centers, In: Development of the human potential for innovative socio-cultural environment, Blagoevgrad, Univ. publ. “Neofit Rilski”, pp. 120-141
- Keating R., S. Harper, David G.(2013). Emotional intelligence dilutes the toxins, *Industrial Engineer Vol. 68 No. 3,* pp 66-74,
- Latham, G., G. Pinder, (2005). Work motivation theory and research at the dawn of the Twenty-First Century, *Annual Review Psychology 56, ,* 485-516
- Lower E., L. Porter (1967). The Effect of performance on job satisfaction, *Industrial Relations Vol. 7 issue 1, October,* pp 20-28
- Maslow, A. (1954). *Motivation and personality,* Harper & Row publishers, London
- Pinder, C. C. (2008). *Work motivation in organizational behavior,* New York, Psychology press
- Prichard D., C. Payne (2003). *Motivation and performance management practices in the new workplace: People, technology and organization: A handbook and guide to the human impact of modern working practices,* John Wiley & Sons, New York
- Roe R., Zinovieva I., E. Dienes, Laurens A. Ten Horn (2000). A comparison of work motivation in Bulgaria, Hungary and the Netherlands: Test of a model, *Applied Psychology: An international review, vol. 49, pp. 658-687*
- Filipova, M. (2011). Functional Special Feature in Management of the Tourism Company, SWU Press, Blagoevgrad
- Filipova, M. (2015). Leadership and Leadership Competences in Tourism, SWU Press, Blagoevgrad
- Filipova, M. (2015). Analysis and selection of the manager’s leadership qualities, *Economics and management, Vol: XI, Issue 1, 2015,* pp. 2-12
- Filipova, M. (2016). Leadership in a changing world, College of tourism Press, Blagoevgrad
- Filipova, M. (2021), Corporate culture impact on the business of an enterprise, *Revista Inclusiones, Vol: 8 No Especial, 2021,* pp. 128-140.

- Yaneva, D. (2021). Strategic decisions in the management of the marketing activity of the enterprise, University Publishing House "N. Rilski", Blagoevgrad
- Yaneva, D. (2006). The wage - motivator of "complex person", Economics and Management", *University Publishing House "N. Rilski", Blagoevgrad, issue 3, pp. 57-63*
- Zhang X., K. Bartol. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement, *The academy of management review Vol. 53 No. 1, pp. 107-12*
- Zlateva, D. (2019). Digitization of Marketing Communications, University Publishing House "Neofit Rilski", Blagoevgrad

THE EFFECTIVENESS OF THE INFLUENCER MARKETING

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Abstract

According to the Influencer marketing statistics (Influencer Marketing Hub, 2021), 91% of marketers believed that influencer marketing can be an effective form of marketing. 89% of marketers said that influencer marketing ROI is as good or better than other marketing channels. 71% of marketers rate the quality of customers and traffic from Influencer marketing as better than other marketing sources. 76% of young people follow influencers, and 54% of them would like to become influencers if given the opportunity to do so. 49% of consumers today depend on influencer recommendations for their purchase decisions. 60% say they've been influenced by a recommendation when shopping in-store. Google searches for "Influencer marketing" grew 1500% in the last three years. In 2019, the term "Marketing influencer" was searched 70,000 times a month! More than 240 new influencer marketing-focused agencies and influencer platforms established in 2019! Influencer marketing industry is set to grow to approximately \$13.8 Billion in 2021. From these data it's obvious that Influencer marketing is widely popular and effective form of marketing. The popularity and use of Influencer marketing is due to the world massive spread of the pandemic and the change in consumer behavior last year, as well as the technological development and more intensive use of the Internet for the sale and promotion of products and services. This paper aims to analyze the use, effectiveness and future of the influencer marketing.

Keywords: Influencer marketing; Internet promotion; Influencer marketing effectiveness; marketers; recommendations; Influencer platforms

JEL Codes: M31, M37

Introduction

With the global pandemic, people are under pressure to change their behavior as consumers. Traditional shopping in some countries is limited and in some places impossible. **Consumers** from one side and **companies** from the other are looking for new ways to buy and sell products and services respectively. **Consumers** are increasingly

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buying from home or under influence to purchase what they have seen on various online social platforms, such as Instagram, YouTube, Facebook, Blogs, Twitter, LinkedIn, Pinterest, Twitch, Snapchat and others. On these platforms they follow the influencers, who attract their attention with their knowledge, skills, beauty, photos, pictures, videos, expertise in a particular field. Through regular following, they are building relationships based on trust, belief, liking. Most importantly, these influencers are not always celebrities, but ordinary people who have and share knowledge in a particular field. The possibilities are endless for influencers when it comes to finding creative ways to connect and share content with their audiences. Influencers give a glimpse into their everyday lives using a variety of mediums.

Adapt to the current conditions, it is necessary for **companies** to rethink and redesign their strategies, according to the new habits of consumers and their ability to make increasingly informed decisions. (Zlateva, 2020). Companies are looking for fast ways to adapt to new market conditions. On the one hand they are under pressure from the pandemic, and on the other hand they are under pressure from new technologies to offer the right products and services that consumers are looking for. As more companies begin to understand and see the potential for success with influencer marketing, they've shifted away from traditional marketing strategies such as radio, print, and TV ads. 89% of companies that have already implemented an influencer marketing program say it performs as good as, if not better than other marketing channels. (Influencer Marketing Hub, 2021).

The increased importance of the influencer marketing can be seen from the facts that well-known influencers earn up to \$ 1 million from a single post on social media, while lesser-known influencers earn "only" a few million a year. (Baker, 2021). This means that the impact of influencers on consumers and companies is recognized in this turbulent time. On the question whether this marketing tool would actually generate revenue for companies, the short answer is "Yes"! Studies show that "90% of people with access to the Internet trust recommendations from social media influencers.

Related to the effectiveness, 90% of marketers find Influencer marketing effective. (Influence Marketing Hub, 2021). Brands of all sorts are generating positive returns with Influencer marketing. The influencer marketing effectiveness is measured with ROI, and according to the surveys, a large portion (90%) of marketers find influencer marketing effective. Only a slim 5% reported influencer marketing to be ineffective and 0% of marketers said that influencer marketing was "very ineffective." (45% said it is very effective and 45% effective).

Influencer marketing effectiveness can be determined from **two main categories**: brand awareness and direct response. **Brand awareness** refers to social reach (number of

followers, subscribers, impressions), engagement (likes, comments, sentiment, shares, mentions) and press, media mentions and website traffic. **Direct Response** relates to sales/conversions, conversion value, leads, signups, downloads and click-through rate. A large majority (90%) of marketers find influencer marketing effective in achieving brand awareness and direct response goals.

Also, 89% of marketers who rate site traffic of influencers, qualified them better than those coming from other marketing sources, such as email, social media, SEO, PR, and paid search. Influencer marketing effectiveness is also determined by how well it reaches target audiences. One of influencer marketing's main benefits is the ability for brands to target both broad and niche audiences and demographics.

The facts prove that influencer marketing is a highly effective and viable marketing strategy.

Literature review

The rise of social media and especially the pandemic period that has started in the beginning of 2020, has opened up a new channel for companies to connect with consumers more directly and more originally. As media and technology have become more advanced, companies can choose from a range of options in outlets to market their products. These options have also led to the evolution of social media influencer marketing. According to Forbes, **influencer marketing** can be defined as “a form of marketing in which focus is placed on specific key individuals rather than the target market as a whole” (Forbes.com). **Influencer marketing** (Baker, 2021) “employs leading, niche content creators to improve brand awareness, increase traffic, and drive the brand's message to the target audience”.

Influencer is “someone who has the power to affect the purchasing decisions of others because of his or her authority, knowledge, position or relationship with his or her audience”. (Influencer Marketing Hub, 2021). Influencers are people who have gained recognition and fame due to their interest, knowledge or skills in a certain field and who through frequent posts on social networks create a wide circle of followers. What makes influencers influential is the large number of their followers on the web or social media. Influencers, (Talkwaker, 2020) “who are not necessarily celebrities, perceived by the public to be an average person turned social media superstar, are able to bridge the trust gap between company and consumer by creating authentic relationships with their followers”. Within any industry there are influential people. Every industry, no matter what the market, has a potential influencer that can share products and services with their followers.

The major types of brand influencers include micro-influencer, celebrity influencer, blog influencer, social media influencer, and key opinion leader. (Baker, 2021)

Micro influencers have a relatively modest following of thousands or tens of thousands of people within their niche. They create relevant content for their audience and communicate with them via social media platforms, blogs, other written publications, websites, and forums. Having a smaller audience allows micro-influencers to bond with the people who follow them more regularly via their channel. Micro-influencers can be established on a variety of channels. Companies who like to work with micro-influencers can ask them to write a post about their goods, share an online review, or post a picture of goods on Instagram. Micro influencers are the cheapest, while still can produce quality results. Average costs for micro-influencers are approximately \$80-500 per piece of content.

Celebrity influencers are famous people with large followings, typically in the millions, who are known across many industries. They're widely recognized and, therefore, have the potential to be very successful in influencing a target audience. Using celebrities for promotion and/or use of company's goods or services is a powerful form of social proof. Celebrity influencers will cost the most money to work with, however, they will have more reach than the other influencer types, usually having access to millions of followers all over the world. Costs for celebrity influencer engagement are from \$3,000-\$500,000+ per piece of content (Selena Gomez makes up to \$550,000 per Instagram post!). Companies who like to work with celebrities can ask them to pose for pictures promoting the products, explain why they love the products, provide coupons and discounts or write reviews about the products. The company may even sponsor an event the celebrity is hosting or attending.

A blog influencer is someone who writes for their established blog and has thousands, or millions, of subscribers and readers. In order companies to collaborate with a blog influencer, they may write a guest post for their blog, ask to be mentioned in one of their posts, or sponsor a post about one of their products or services. Blog influencer can cost from \$400-\$5,500 per blog post.

Social media influencers are well-recognized on social platforms, such as Instagram, YouTube, Facebook, or Twitter, and are followed by thousands or even millions of people. Social media influencers share content about a wide range of topics such as health, workouts, cars, diet, outdoor activities, travel, fashion, art, beauty, and interior design. Social media influencer can cost from \$100-\$550,000.

Key opinion leaders (KOLs) are high-level experts on a specialized topic within a particular field. For example, a KOL might specialize in makeup application, the Paleo lifestyle, or Bikram yoga. KOLs are trusted contributors in their industries and have followings of people who are also invested in those subjects. KOLS, like micro and celebrity influencers, are present on many channels, such as social media, blogs, other

written publications (like academic journals), and ads. KOL cost is between \$500-\$5,000+ per piece of content.

Influencers don't work for free. However, there are several ways an influencer can be rewarded. They can be rewarded with money (payment prior to or after the content is created and shared), swag (such as clothing, accessories, or product samples), free product, access to discount codes and coupons, promotion on the website, blog, and/or social media platforms.

The success of the Influencer marketing strategy is measured by: audience reach, impressions, engagement (comments, likes, shares), sentiment and high-quality content. Also, depending on the company's goals, the success can be measured by the growth of the followers, brand mentioning, traffic to specific website, signups to a newsletter, subscriptions, increased sales, etc.

Methodology

For the purpose of this paper, two sources of data were used:

A) Secondary sources: data from relevant literature on influencer marketing, like journals, statistical data, reviews, e-books, published presentations, blogs, FB statuses and YouTube vloggers. Secondary sources provide a lot of data from qualitative and quantitative research, historical reviews and comparisons.

B) Primary data: questionnaire that is divided in two sections: a) demographic data (gender, age, working status of respondents) and b) psychographic data on person's opinions, beliefs, attitudes, and preferences collected through open and closed questions. The questionnaire was randomly distributed to 125 individuals, in the period between 15th of September and 15th of October, 2020. Results were collected by e-mail and Facebook.

Analysis and discussion

For the purpose of this paper, the questionnaire with standardized questions was disseminated through Internet platforms. Out of 125 respondents, 93 (74%) fully answered the questionnaire and only their answers are taken into account for compiling the statistical data and results. The online survey was used for data collection because of the nature of the questions, as well as the characteristics of collection – very fast and easy way to get responses from a large number of respondents.

The first part of the questionnaire refers to the demographic characteristics of the respondents. Questions were asked about their age, gender and employment status. According to age, 13 respondents (14%) aged up to 17 years, 22 respondents (24%) aged 18 to 20 years, 28 respondents (30%) aged 21 to 29 years, 11 respondents (12%) aged 30 to 35 years, 19 respondents (20%) aged over 36 years participated in the survey. The

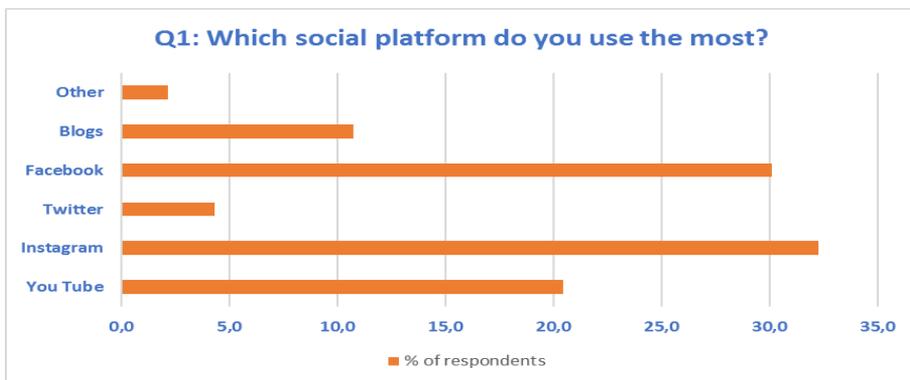
respondents between the ages of 21-29 has the largest participation. This is a good indicator of the reliability and accountability of the data given that this age group uses social networks and the Internet the most.

By gender, the participation of male respondents is 34%, and of female respondents is 66%.

According to the working status, 41 respondents are employed, 9 are unemployed, 32 students and 8 who did not comment on this issue, participated in the survey. Students have the largest share in the survey.

The second, essential part of the research refers to the collection of psychographic data from the respondents, regarding their opinions, attitudes, beliefs regarding the knowledge, followings and purchase of products from influencers. This part of the questionnaire contains 6 questions. The questions, their answers and analytics are given below:

Graph no. 1 Which social network do you use the most?

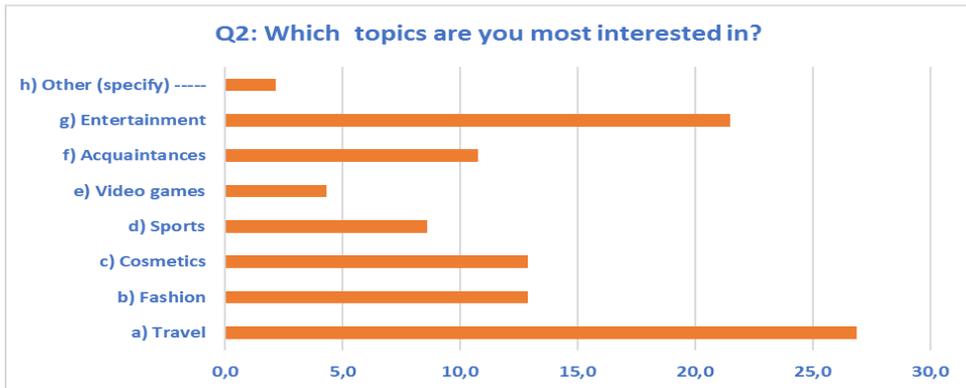


Source: Own research of the authors

According to the answers, almost all respondents use a social platform on the Internet. Most respondents use Facebook (30%) and Instagram (32%) or a combined 62%. The other respondents use Twitter, Blogs, You Tube, but also Snapchat, Pinterest and other networks.

Respondents on social networks mostly follow topics in the field of travel (27%) and entertainment (22%). After them, important topics for which there is interest among the respondents are fashion (13%) and cosmetics (13%), which is understandable considering that most respondents are female. The least interest exists for video games (4%). This data can help companies to decide in which areas to use influencers. Data, also, can help companies to know exactly where to focus their marketing activities - marketing programs and promotions.

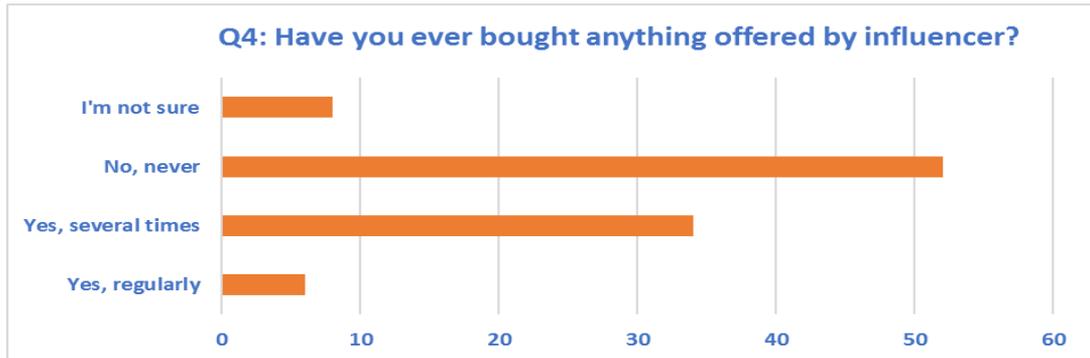
Graph no. 2 Which topics are you most interested on social networks?



Source: Own research of the authors

To the third question “Do you follow a person (influencer) on social networks who talks and knows the best about the topic of your interest?”, all respondents answered in the affirmative way, i.e. they like to follow the people who talk the most about certain topic or have the greatest knowledge about it.

Graph no. 3 Have you ever bought anything based on the recommendations of a social influencer?



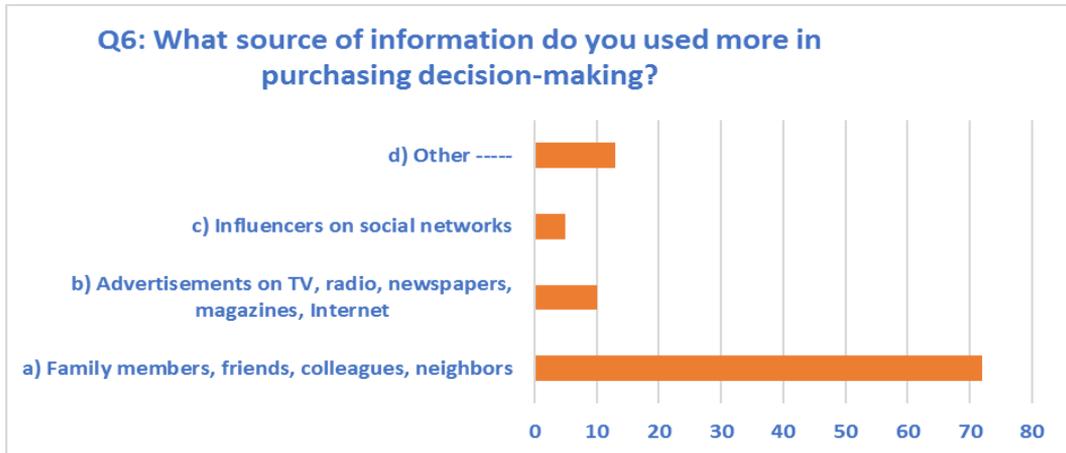
Source: Own research of the authors

According to the answers, most respondents (52%) have never bought products promoted or recommended by influencers. Only 6% of respondents bought a product or service influenced by a social influencer. This shows that in Macedonia, consumers follow what is happening, which is a trend on social networks, they follow the topics they are interested in, but do not buy under the influence of influencers.

On the fifth question: “Are you satisfied with the purchase under the influence of social influencers?”, only 23% of respondents are satisfied with the purchase of products

and services influenced by influencers. 39% of the respondents are not satisfied, i.e. what they bought online under the influence of influencers did not meet their expectations. And 38% answered this question with “I do not know”.

Graph no. 4 When making a decision to buy products or services, which source of recommendations do you trust the most?



Source: Own research of the authors

Most respondents (72%) consult with their closest friends, relatives, colleagues to buy products and services. This data shows how powerful “Word of mouth” marketing is still in Macedonia. Companies need to focus on this type of marketing the most. Influencers are watched and followed, they are interesting, they are fun, but they do not have the power, yet, to influence the purchasing decisions of the consumers.

This research is not representative of the entire population in Macedonia. The research was done in order to get an idea of whether the young population has any interest in buying products or services online, under the influence of influencers.

Conclusion

Seth Godin, the guru of Marketing is right when he says that “People don’t buy goods and services. They buy relations, stories and magic”. This logic goes in favor of using influencer marketing.

Influencer marketing is currently the most popular marketing technique that possesses an incredible ability to connect with highly relevant audiences as well as create authentic content. It has been found that influencer marketing can generate eleven times higher ROI than any other digital marketing technique. Innovative industries are continuously changing; influencer marketing is no different. Influencers and marketers

alike are finding new ways to reach audiences and promote products, so much so that the industry is projected to reach up to \$13.8 billion by 2021. The world data show that consumers believe to influencers and they buy products and services they promote and advertise. Research shows that influencer marketing is increasingly replacing traditional marketing. It represents the Word of mouth, which is the most powerful marketing tactic, now transmitted online.

However, the research conducted in this paper, shows that Macedonian consumers follow and are interested in stories of social influencers, but they don't make purchasing decisions based on them. Only 6% of respondents replied that they have bought products or services based on influencer's impact. This is a very small percentage. The most of respondents based their purchasing decisions on sources that come from their families, friends, colleagues or closest ones.

Worldwide, the following trends can be expected in future related to the Influencer marketing:

Micro-influencers will have a greater impact – even though it may seem like the smallest players in the influencer marketing game, they pack the biggest punch. In a recent study, 82% of respondents said they were "highly likely to follow a micro-influencer" recommendation.

Influencer activity will extend beyond Instagram - almost 90% of businesses cite Instagram as the most important channel for influencer marketing. In future it will be joined by a few up-and-coming influencer channels, especially those that prioritize video capabilities. (Instagram only allows one minute of video.) Influencer marketing will be intensified on YouTube, Tik Tok, Snapchat, and Pinterest, especially if the audience leans more towards Generation Z.

Employees and customers will become influencers - customers are people who already know about products; this makes for an easy transition from customer advocacy to customer influence. The same goes for the employees, people who've invested time and creativity into growing the business. This factor alone gives the staff genuine credibility. As people who are already engaged with the development of products or services, employees can be natural advocates. In future there will be rise of these two parties as brand influencers.

Businesses will invest in long-term relationships, not one-off campaigns - In the past, brands usually hired influencers for one-time campaigns. However, in future there will be more brands building long-term relationships. Long-term relationships with influencers also increase credibility for whatever product or service the influencer is marketing.

REFERENCES

- Baker Kristen, (2021). What will Influencer marketing look like in 2021? Retrieved from <https://blog.hubspot.com/marketing/how-to-work-with-influencers>
- Bakker Diederich (2018). Conceptualizing Influencer marketing, Journal of Emerging Trends in Marketing and Management, Vol I, No.1/2018, Retrieved from <https://econpapers.repec.org/scripts/search.pf?ft=influencer+marketing>
- Grin, (2020). A Complete Influencer Marketing Guide, Retrieved from https://grin.co/wp-content/uploads/2020/01/eBook_A-Complete-Influencer-Marketing-Guide.pdf
- Influencer Marketing Hub, (2021, 21 March). What is Influencer Marketing: An in Depth Look at Marketing's Next Big Thing, [blog post], Retrieved from <https://influencermarketinghub.com/what-is-influencer-marketing/>
- Influencers – The new marketing tools of the 20th century, [blog post], Retrieved from <https://stopdezinformacii.mk/2020/08/25/influenseri-marketing-alatki-na-21-vek/>
- Influencer marketing effectiveness: key survey, finds, facts and figures, Mediakix, [blog post], Retrieved from <https://mediakix.com/blog/influencer-marketing-effectiveness/>
- Yaneva Dilyana (2020). Strategic Marketing Planning in the present-day organization, Entrepreneurship, Issue 2, Retrieved from <http://ep.swu.bg/index.php/archive/2020/2020-issue-2/202-strategic-marketing-planning-in-the-present-day-organization>
- Mathew Joel (2018). Understanding Influencer marketing and why it is so effective, Forbes, Retrieved from <https://www.forbes.com/sites/theyec/2018/07/30/understanding-influencer-marketing-and-why-it-is-so-effective/?sh=1ccf431c71a9>
- Talkwaker (2020). “What is Influencer Marketing? -Your Ultimate Influencer Marketing Guide”, Talkwaker.com, Retrieved from <https://www.talkwalker.com/resource/ebook-influencer-marketing-guide.pdf>
- Zlateva Dinka, (2016). Online marketing and its role in promoting the use of banking services, Entrepreneurship, Vol. IV, Issue1, pp. 87-99, Retrieved from http://ep.swu.bg/images/pdfarticles/predpriemachestvocelibroeve/Entrepreneurshuip_br.2_2016.pdf
- Zlateva Dinka, (2020). Digital transformation of Marketing communications, Economics and Management, ISSN:2367-7600; 1312-594X Volume: XVII, Issue: 1, Year: 2020, pp. 171-181
- Zlateva Dinka (2020). Some aspects of Storytelling as a part of Content Marketing, Economics and Management, ISSN:2683-1325 Volume: XVII, Issue: 2, Year: 2020, pp. 117-123

BUILDING CONSUMER ENGAGEMENT THROUGH CONTENT MARKETING

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Abstract

Today, everything is content, and everything is connected to everything! Access to the audience is becoming more direct, but this is at the expense of increasing the efforts of companies to engage consumers. The digital environment has provided new business opportunities. The convergence of different industries forms a new type of market thinking based on the platform economy. Adapting business, especially in a pandemic, has emerged as a necessity for survival in a turbulent search for solutions to adapt to new realities. It is no coincidence that the marketing of content is gaining popularity, and this is evident from many published studies of institutions analyzing marketing trends. Shared content relevant to the interests of consumers and building relationships with them is an opportunity that should not be overlooked because anyone who underestimates the processes of digitalization is a thing of the past.

This article aims to present the benefits of content marketing that works in the service of the business. The search for a connection with the audience with the offered content is the basis of the gig economy and in response to the new market mechanisms, driven by the new habits of the consumers.

Keywords: *content marketing; circular thinking; engagement; brand value*

JEL Codes: *M31, M37*

Introduction

Content marketing is gaining an increasing role in encouraging consumers to like the brand by seeking greater engagement and building trust with consumers. Creating valuable content related to the brand allows the user to communicate with it. Thus companies build good relationships with their target audience, create meaning and identification by encouraging desired behavior. Content marketing has a holistic nature. Its manifestation is not expressed in a specific form but in a compilation of such. Its main purpose is to create value for the customer. Content marketing is an important tool for raising consumer

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awareness. The concept is defined as “a management process for identifying, anticipating and satisfying the customer through digital content”. (Rowley, 2008, p. 522) Content marketing focuses on raising the consumer rating of the brand by providing additional information that is relative to the interests of consumers. CM is considered a means of communication with consumers without a focus on sales. Its purpose is to attract attention, create commitment and, accordingly, create trust in customers.

Analysis and discussion

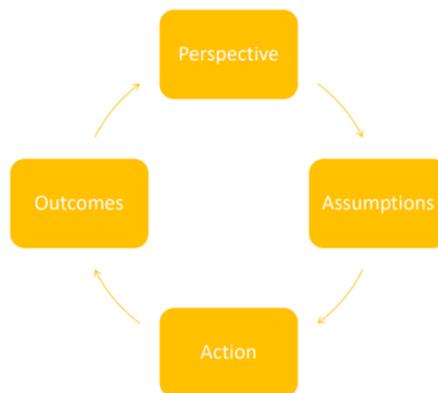
The IT sector has given a new direction for the development of the technology-oriented society that has a direct impact on every area of life. (Zlateva, Stavrova, & Vladov, 2017, p. 34) The new conditions require new approaches. It is no coincidence that as early as 1999, Kotler envisioned appealing to retailers that they needed to drastically rethink their strategies and create value for customers as a result of the process of digital business transformation. (Kotler, 1999, p. 206) „In order to make diversity and inclusion reality, companies must continue to adjust their marketing strategies to stay competitive and abreast of the latest trends and technologies.“ (Dimitrieska, Stamevska, & Stankovska, 2019, p. 118) Increasing importance is given to techniques that create value for the customer and the focus is not on sales themselves but on engaging the audience. Consumers like the brand only when they see the company's efforts subordinated to their interests. The energy of the brand shapes consumer preferences, but in order to generate this energy, the company must know its audience well in order to be able to channel its content properly. The buyer persona must be well profiled and this will help to optimize the company's resources. Working in this direction also requires distinguishing the content from that of competitors. It is important to prioritize topics that are relevant to both the company and its business goals. Therefore, it is necessary to find the painful points of the audience and which terms need to be used in the search. If in the beginning content marketing was understood as the approach applied by companies in creating and distributing educational and captivating content in various media formats in order to attract and retain customers, this definition has already been supplemented and emphasizes the strategic aspect of the concept. “Content marketing is a strategic marketing approach focused on creating and distributing valuable, relevant and consistent content to attract and retain a clearly defined audience – and, ultimately, to drive customer action.” (Pulizzi & Handley, 2015, p. 8)

The benefits of content marketing for creating brand value are undeniable. As such can be mentioned - increasing traffic to the company's web-based resources, using the

power of viral marketing and linking users to the brand, increasing consumer loyalty, improving site optimization and more. (OnliSeO, 2013)

The advantage of content marketing is that it creates a more engaged audience with minimal marketing costs. Creating content is a challenge. According to Dennis Shio, linear thinking when deciding on content is usually based on assumptions and often leads to negative results. It offers circular thinking as a more appropriate model that works better in content marketing. (Shiao, 2020) (See Figure no.1) The model describes a situation in which if the company is not satisfied with the results achieved, it is necessary to return to the appropriate category. Looking at the perspective, assumptions and actions, it is possible to achieve better results. It does not matter if the company has good intentions if they lead to a bad user experience. The solution to this problem lies in providing the consumer journey with the content offered. Yes, this is possible if the general image of users is clear, and they would quickly find a solution and answer in the proposed content. When the buyer persona is complex, it is necessary to offer a card to the users, which will take them to the right place for them. That is why it is necessary not only to make assumptions but also to look in perspective and on the basis of this to send correct content. Building content is not a one-time act but requires time and adaptation to the results obtained. If they do not satisfy the company, it is necessary to define a new action, implement and compare the performance with the previous measurements. Testing is done in real-time, and the most appropriate content design is sought.

Figure no.1 Circular thinking

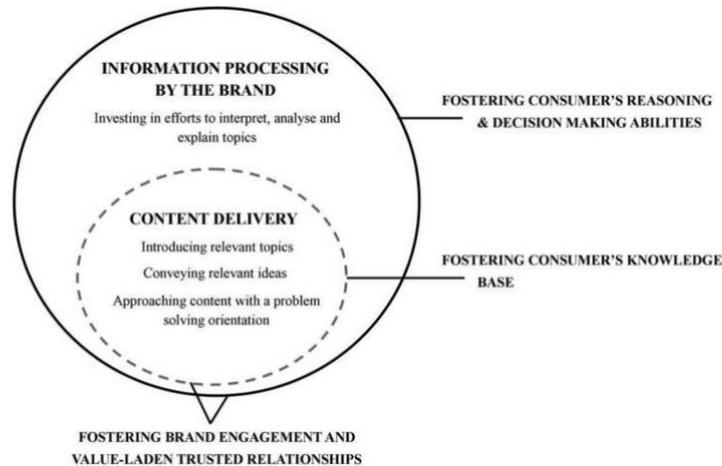


Source: Shiao, D. (2020) Why Circular Thinking Works Better in Content Marketing, <https://contentmarketinginstitute.com/2020/10/circular-thinking-content-marketing/>

Content marketing is based on a genuine desire to add value to the user, which makes it easier to attract and retain customers. (Taylor, 2012) CM can be used to increase brand awareness, commitment and trust, which will not only turn leads into customers but also turn them into brand ambassadors at a later stage. Ultimately, content is what has led the user of the site to read, learn, see ,or experience, thus the brand touches the heart and mind of prospectuses, leads and customers. (Wuebben, 2011, p. 5) Understanding the benefits of content marketing is a crucial step in building an approach to consumers. The focus is on three areas of application: 1) brand-related objectives, 2) goals related to consumers, and 3) goals related to communication. (Maintz & Zaumseil, 2019, p. 171) For the purposes of the article, attention is focused on the impact of content marketing on increasing the brand value as a result of creating value for consumers through communication. These goals are connected and help create a total value that will generate financial benefits to the company. Offering content in the form of text, images, infographics, brand storytelling, etc., the company aims to capture and retain the attention of its audience with the intention of long-term engagement, building trust and relationships. The importance of the content and the benefits that the user receives is the first reason for him to engage in content marketing. (Holliman & Rowley, 2014) The communication that takes place is understood as interaction with the brand as a result of interaction with the marketing of the content. The contact is the result of the client's psychological connections with the brand. Engagement is characterized by cognitive, emotional, and behavioral responses that trigger the consumer journey. According to van Doorn et al., the concept of engagement is often seen as engagement behavior, consumption of content or creation of online content by the customer. (Van Doorn, et al., 2010) Communication with the brand can also be done through invisible communicative elements, which are judged by the behavior of customers and their relationship with brands.

Achieving utility is the desired result of sharing knowledge and using it to solve problems. When building engagement, this content must include topics that trigger continuous information and customer search. Usually, users look for information outside the company's corporate website. They are informed about novelties, tendencies in the respective branch, I am looking for solutions to problems, etc. The modern consumer makes informed decisions. He usually looks for information on sites to compare the parameters of products and considers the feedback of users who already have experience with the product or participate in specialized forums concerning product groups. Creating brand value supports their choices and guides them in their consumer journey. (Figure no. 2)

Figure no. 2 Dual roles of a branding digital content marketing helpfulness



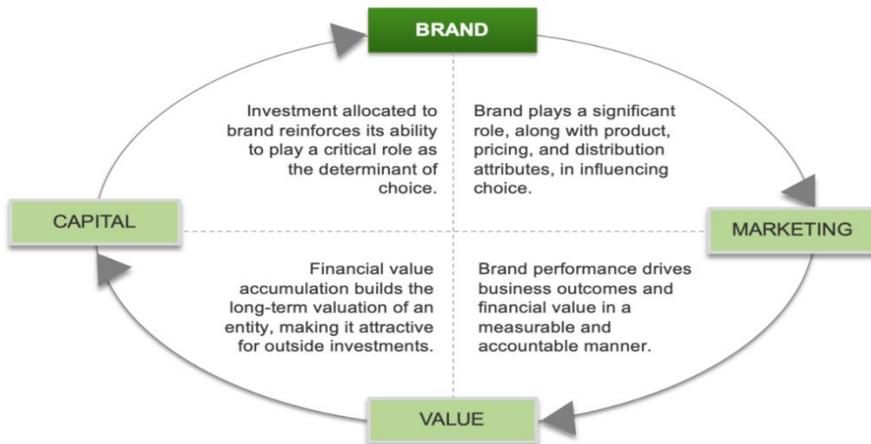
Source: Taiminen, K., Ranaweera, C. (2019). Fostering brand engagement and value-laden trusted B2B relationships through digital content marketing, *European Journal of Marketing*, Vol. 53 (9), pp. 1759-1781, <https://doi.org/10.1108/EJM-10-2017-0794>

Content marketing work involves a number of information processing costs - interpreting, analyzing and reviewing topics to determine the perceived usefulness of the content. Making good decisions about the content is directly related to customer feedback and seeking optimality in the process. Knowledge sharing is highly valued by consumers and reflects the company's efforts to deliver value to customers. The search for utility and the formation of a system that creates this utility is essential and lead to constant monitoring. The system monitors and predicts the dynamics of the total environment of the organization and its impact on relationships. It combines "rational response to problems, as well as strategic planning and programming." (Filipov, 2020, p. 6) (Pacheva, 2009, p. 25)

The creation of utility for the consumer is directly related to the creation of value for the brand due to content marketing. Product promotion is important and should be involved in building and enhancing brand value. That is the process of building a value chain. Technologies, including search engines with their algorithms, are constantly changing, which must be reflected in the digital strategies of companies. According to a study by the Content Marketing Institute, 89% of B2B and 86% of B2C use content marketing to improve the brand in an online environment. (DigitalMarketingGroup, 2018) Statistics show that content marketing is a mandatory element for brand promotion. Figure 3 shows the scheme for building brand value. It is obvious that the value of the brand affects the financial results of the company. (Chatterjee, 2019) The components, are tied and

companies need to reinvest further in brand promotion and value building, which will generate more revenue for the company.

Figure no. 3 The value of brand



Source: Chatterjee, D. (2019). A Pragmatic Guide To Brand Value. Retrieved 21 March, 2021, from <https://go.forrester.com/blogs/a-pragmatic-guide-to-brand-value/>

Brand value and brand equity are concepts that define the same problem. The value of the brand determines brand equity. Brand equity is everything that reflects the attitude of people to the company's products. The more they like the brand, the higher the brand equity, respectively its value. (Dholakiya, 2019) The concept is associated with others, such as consumer loyalty and consumer advocacy. Creating loyalty motivates consumers to recommend a particular brand. In order to engage consumers, compelling content is needed, which translates into increasing the experience with the brand and this helps the successful positioning of the product. It is no coincidence that the consumer is king, and this is because consumers build brands. And for this to happen, the content needs to be customer-oriented. Involving consumers in the company's strategy by offering content that is relevant to them makes them empathize with the history of the brand. Dholakiya offers three ways to build brand value: 1) share the brand history in an appropriate and creative way and share the company's mission and values; 2) gaining trust and building loyalty through content - here come to the aid of blogs, in which site owners must invest effort and time to provide free and useful information to users - video tutorials, infographics, provoking social media posts networks, etc. Creating content that benefits customers are important for creating sympathy for them. This step provides conditions for turning the relationship with the client into a long-term project. 3) Establishing in leadership the thought, building the publisher of

content in authority on relevant topics and areas concerning consumers. Originality and creativity support this process. It is not important to detect the pain of consumers, but also how they are offered solutions.

Content creation is about creating a company identity. To this end, it is necessary to know customers' problems well and create meaningful content that customers will recognize as valuable and compelling.

Conclusion

Content marketing is an effective technique for promoting and promoting products, services or ideas. The search for new approaches to accessing customers and offering relative content to their interests is an ongoing process. That is evident from the increasingly sophisticated web analytics tools that allow companies to measure the effectiveness of content marketing and its impact on increasing brand value. Engaging content is what people want to read and view. For this purpose, the company must look through the eyes of the consumer. Focusing the customer on the product is not a good strategy. The company should stop talking about its brand and start thinking about what it wants to hear and read its audience. Sponsored posts, branded content, and traditional forms of advertising are no longer effective. Offering free content relative to the audience's interests is a good way to attract and retain customers. This approach gains trust and gradually anticipates the consumer in his consumer journey, creating a pleasant and, why not an exciting user experience. And as Bill Gates wrote in 1996 in his essay "Content is King" "Content is where I expect a lot of real money will be made on the Internet, just as it was in broadcasting." (Evans, 2017)

REFERENCES

- Chatterjee, D. (2019). A Pragmatic Guide To Brand Value. Retrieved 21 March, 2021, from <https://go.forrester.com/blogs/a-pragmatic-guide-to-brand-value/>
- Dholakiya, P. (2019). How Great Content Contribute to building Brand Equity. Retrieved March 20, 2021, from <https://growfusely.com/blog/ways-great-content-contribute-building-brand-equity/>
- DigitalMarketingGroup. (2018). Content Marketing 2018 trends. Retrieved 2021, from <https://www.digital-marketing.bg/%D0%BD%D0%BE%D0%B2%D0%BE%D1%81%D1%82%D0%B8%D1%82%D0%B5-%D0%B2-%D0%BA%D0%BE%D0%BD%D1%82%D0%B5%D0%BD%D1%82->

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%D0%B0-%D0%BF%D1%80%D0%B5%D0%B7-2018/

- Dimitrieska, S., Stamevska, E., & Stankovska, A. (2019). Inclusive Marketing - Reality or Make Up. *Economics and Management*, XVI(2), 112-119. Retrieved from <http://em.swu.bg/images/SpisanieIkonomikaupload/Spisanieikonomika2019/INCLUSIVE%20MARKETING%20%20REALITY%20OR%20MAKE%20UP.pdf>
- Evans, H. (2017). "Content is King". Retrieved March 5, 2021, from <https://medium.com/@HeathEvans/content-is-king-essay-by-bill-gates-1996-df74552f80d9>
- Filipov, M. (2020). Strategic PR as a system for preemptive and defensive reputation communication. *Contemporary Humanitaristics*, 16(1).
- Holliman, G., & Rowley, J. (2014). Business to business digital content marketing: marketers' perceptions of best practice. *Journal of Research in Interactive Marketing*, 8(4), 269-293.
- Kotler, P. (1999). *Kotler on Marketing: How to Create, Win, and Dominate Markets*. New York: Free Press.
- Maintz, J., & Zaumseil, F. (2019). Tracking content marketing performance using web analytics: tools, metrics, and data privacy implications. *International Journal of Internet Marketing and Advertising*, 170-182. doi:10.1504/IJIMA.2019.099500
- OnliSeO. (2013). Kontent marketing – kak da pravim marketing chrez sadarzhanie. Retrieved from <https://www.onliseo.com/blog/content-marketing/>
- Pacheva, V. (2009). *Krizata pod kontrol*. Sofia: M-8M.
- Pulizzi, J., & Handley, A. (2015). B2C Content Marketing 2015: Benchmarks, Budgets and Trends - North America. Retrieved March 10, 2021, from https://contentmarketinginstitute.com/wp-content/uploads/2014/10/2015_B2B_Research.pdf
- Rowley, J. (2008). Understanding Digital Content Marketing. *Journal of Marketing Management*, 24(5-6), 517-540. doi:10.1362/026725708X325977
- Shiao, D. (2020). Why Circular Thinking Works Better in Content Marketing. Retrieved February 24, 2021, from <https://contentmarketinginstitute.com/2020/10/circular-thinking-content-marketing/>
- Taiminen, K., & Ranaweera, C. (2019). Fostering brand engagement and value-laden trusted B2B relationships through digital content marketing, *European Journal of Marketing*, 53 (9), pp. 1759-1781, <https://doi.org/10.1108/EJM-10-2017-0794>. *European Journal of Marketing*, 53(9), 1759-1781. doi:<https://doi.org/10.1108/EJM-10-2017-0794>
- Taylor, G. (2012). *Digital Content Marketing*. North Charleston, SC, United States: CreateSpace Independent Publishing Platform.

- Van Doorn, J., Lemon, K., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. (2010). Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253-266.
- Wuebben, J. (2011). *Content is Currency*. Boston: Nicholas Brealey Publishing.
- Zlateva, D., Stavrova, E., & Vladov, R. (2017). Digital Bank Marketing in the Context of the Circular Economy. *International Journal of Science and Art "IDEA"*, 31-38. Retrieved March 25, 2021, from http://www.eurm.edu.mk/publikacii/idea/Idea_International_Journal_Vol1No1_2017.pdf

THE DIGITAL TRANSFORMATION IN THE SERVICE OF BUSINESS

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Abstract

People, business and the world, are changing at a fast pace. Constantly evolving technologies and how people use them transform their habits of access to information, interaction, and communication. Digital technologies are no longer a reserved part of innovative companies, and ordinary people integrate them seamlessly into their daily lives. What makes the digital revolution exciting is that everything is happening right now, and we are witnessing a historical transition from the traditional to the digital. Consumers are tired of media marketing and are now part of the global world. They want more commitment and more interaction. They spend most of their free time in a digital environment, and creatively oriented digital marketing is the way business will reach them.

This article focuses on transforming entrepreneurial thinking by adapting the business to the new digital conditions and how the process of transforming supports business development.

Keywords: digital transformation; digital ecosystem; digital strategies

JEL Codes: L10, M31, M37

Introduction

The last three decades have marked a radical transformation in thinking, values and lifestyles in response to the growing digitalization of business and society as a whole. There is more and more talk about digital transformation and how it is changing the business landscape. In general, digital transformation is understood as the integration of new technologies in all areas of business, leading to a fundamental change in the way the organization works (Shopov, 2017). Digitalization creates a secondary economy that is

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huge, automatic and invisible, bringing the most significant cataclysms in business since the Industrial Revolution (Arthur, 2011). Digital transformation is an evolutionary process that uses digital capabilities and technologies to enable business models, operational processes, and customer relationships to create value (Stoyanova, 2019, p. 15).

Technology has changed people's lives. Today's consumers have technological knowledge. They demand and constantly look for new offers and innovative solutions. The advent of the digital market has shaken every business. Marketing faces the challenge of radically transforming its approaches to respond to changing consumer habits. It also finds creative ways to reach audiences and manage customer relationships. Marketing additionally exploits consumer potential for collaborative search and realization of solutions and sales automation. The new development of the business environment forms a new business landscape influenced by big data. It intensifies the consumers' demand toward traditional marketing techniques. The change in their information habits and the shift toward building relationships require marketers to learn on the go. It builds an environment that provides opportunities for a more precise definition of consumer needs and predictability in behavior (McKinsey & Company, 2014).

Analysis and discussion

Internet technologies have become an integral part of modern business. They have fundamentally transformed almost every aspect of it and have become the basis of every company's value chain (Evans N., 2017, p. 128). After all, these decades of investment in IT and improvements, the transformation of the business has accelerated. The role of information systems in globalization, improved cooperation and strategic importance for companies is growing. The large-scale change affects both large companies and small and medium-sized businesses, which are much more adaptable and flexible to the changing world. There is also a paradox that IT technologies, which are a factor for success and are crucial for business growth, can also have the opposite effect on conservative businesses or cumbersome and challenging to implement companies, given their complex organizational structure and existing barriers to business - adapting them to business transformation. This destructive innovation creates new markets, but in the long run, disrupts the existing status quo and displaces market leaders. Will this transformation lead to a redistribution of the market and the entry into narrower niches of small and medium-sized businesses, which would primarily meet market needs. Technological innovation holds great promise for the provision of financial services, with the potential to increase market access, the range of product offerings, and convenience while also lowering costs to clients. (Stankovska, Dimitrieska & Stamevska, 2019, p.53)

Digital transformation is more than digitalization. It concerns the overall company strategy and prepares the company for the future. Therefore, digital technology management will address the practices, processes and principles that underpin the effective organization of digital innovation. Digitalization covers entire ecosystems, their business models and the main business functions of the value chain of companies (Aagaard, 2019, p. 2). In this context, we can say that digitalization has affected every company regardless of its field of activity, leading to a review and adaptation of existing processes and company strategies. Strategic foresight and adequate solutions are the basis of a successful business, which is a crucial task for any manager (Filipova, 2010). Practice shows that the focus is increasingly shifting from traditional business models shifting to their digital counterparts. Not surprisingly, the interest in the online environment, given that it provides much more flexible and adequate solutions for companies in their efforts to interact with the audience and adapt their product range structures to customer requirements. Digitalization is forcing all companies to restructure their strategies and processes radically. According to a McKinsey study, companies need to manage and implement digitalization in all company processes because of the lack of such makes companies uncompetitive (McKinsey & Company, 2014). Today consumers are more and more involved in the production and distribution chains. The main effects of this transformation on the business environment are its impact on consumer expectations, product quality, the move toward collaborative innovation, and innovations in organizational forms (Dimitrieska, Stankovska & Efremova, 2018, p. 186).

When we talk about digital transformation, it is necessary to consider that the term "Internet of Things" (IoT) is becoming more critical. The main goal of IoT is to share information effectively in real-time (Yang, Yang & Plotnick, 2013). IoT can communicate over the Internet with a computer and other devices without the need for human intervention, which is even possible to control remotely. In this way, a person and a device can exchange information in real-time. IoT removes time and space constraints. People and devices are connected to everything, anytime, anywhere in the world. With the introduction of intelligent technologies, the technological revolution has seriously affected people's lives by integrating them into every social aspect. Hence the concerns about privacy and security. New economies, markets and business processes are developing. Companies' development of new strategies is inevitable to adequately adapt to new conditions and adequately cope with technological challenges. It is believed that IoT will convey a new meaning to the so-called. "Smart corporation" and "its value is in automating processes, responding to possible problems before they occur, improving asset utilization, optimizing the supply chain" (Geneva, 2017). A boost in IoT development is given by introducing cloud

technologies that offer functional and inexpensive space for data storage and calculations. As mentioned, there are barriers to adopting the IoT that relate to the confidentiality of information. They can be expressed in the following areas (Caron, Bosua, Maynard & Ahmad, 2016):

- Unauthorized monitoring, which collects enormous data on consumer behavior;
- Uncontrolled data generation and use; - Insufficient authentication;
- Risk for security and protection of personal information due to the vast database collected through IoT.

Technological change, known as the Fourth Industrial Revolution, carries the spirit of the new reality. Industry 4.0 was first mentioned in 2011 as part of the German Federal Strategy for High Technology for Digital Production (Concept for digital transformation of the Bulgarian industry (Industry 4.0), 2017). The strategy is defined as one of the critical initiatives, emphasizing the new wave in industrial progress. Industry 4.0 plays a significant role in exploiting the opportunities of digitalization at all stages of production and service systems. It is implemented as a combination of many physical and digital technologies. Regardless of the mechanism used, the main goal is to increase resource efficiency and productivity, increasing companies' competitiveness. The transformation era has necessitated a change in business processes by expanding the concept of smart and connected products by introducing service-oriented business models.

In the new digital market, consumers use various interactive tools to navigate the products and services offered and their relative merits as they decide whom to trust, where to shop, and what to buy. At the same time, businesses are undergoing digital transformations, rethinking the concepts of access to their audiences and what customers value most. It helps create operational models to take advantage of new opportunities to acquire competitive positions based on business and product differentiation (Berman, 2012, p. 16). Digitalization and new business processes introduced into product production "implement" activities that did not exist before.

Digital transformation is a term accepted by the business. It is mainly related to the need to use new technologies to remain competitive in the Internet age, where services and products are delivered, both offline and online. The transformation of online service is seen as a way to improve adaptability and automation through standardization (Andal-Ancion, Cartwright & Yip, 2003). The remarkable and rapid changes found a projection in production and services. It results from the synergy gained from the integration of information technology, manufacturing and the services sector. They lead to increased productivity in both service and production. Over the last two decades, companies have faced the challenges of coordinating and connecting concepts such as communication and

networking, embedded systems, adaptive robotics, cybersecurity, data analysis and artificial intelligence (Cevikcan & Ustundag, 2018, p. 3). It affects business processes, creating new business models. The challenges facing modern companies arise with the construction of complex value chains that require a standardization of production and business in search of a closer connection between them.

The need for digital systems seems inexhaustible, as they contribute to improvements in almost every area in terms of productivity, quality and (resource) efficiency of products and processes. The leap in development is so far-reaching that we can rightly speak of a 'digital revolution' (Neugebauer, 2019, p. 2).

The digital transformation is not really about adapting to new technologies but about directing the organization to be more adaptable to changes imposed by the environment in which companies operate.

Those companies that adopt the new way of thinking and new approaches to work successfully in current conditions. It does not mean that they have to meet the needs of their customers and become more flexible and able to adapt to change in the future (Herbert, 2017, p. 14). Real transformation needs to be done once and is a prerequisite for companies in the digital age.

The growing digitalization of business has caused an absolute explosion in the so-called Big Data, accepted and researched in building a business. According to Perkin and Abraham (Perkin & Abraham, 2017, p. 50), digital transformation has three fundamental truths:

- Digital transformation is inevitable. Change happens whether we like it or not;
- Digital transformation is more than technology. It is also strategy, process, culture, behaviour and people;
- Digital transformation involves fundamental and comprehensive change.

It is the way a company works. According to the same authors, two main measures determine the degree of transformation: digital intensity is defined as investment in technology initiatives to change the way the company works (customer engagement, internal operations, business models) and the intensity of transformation management related by creating leadership skills to drive digital transformation (vision, management, commitment to change, information technology or the business relationships that control it). As a result of these measures, four types of digital maturity of companies are formed:

- Beginners - organizations that have invested minimally in digitalization and have low awareness of its opportunities;
- Conservatives - companies that are wary of innovation, have a unified vision, but are sceptical of the value of digital technology;

- Innovators - follow the digital trends and implement innovations in digital technologies, but do not have a unified vision for digitalization of their business;

- Digitally oriented companies - understand how to manage value chains through the digital transformation of their business. They combine their transformed vision and investment management, innovation and constantly invest in the qualification of their staff, improvement of processes and technologies (Perkin & Abraham, 2017, p. 51).

Technology needs instructions to work. For simple processes, this can be done through manual setup, but in current conditions, this does not meet the needs of companies. Massive databases must be stored and used according to the rules generated in the digital code (Neugebauer, 2019, p. 2). Neugebauer compares digital codes with the human genetic code. He claims that both genetic and digital codes have the potential for protection (storage of information) and the opportunity for innovation. They can be considered in combination, i.e. to build on changes in existing achievements, and this is why digitalization has led to a significant boost in innovation. His claim is based on the potential of evolutionary progress in technology. On the one hand, new digital information can be integrated in a very targeted way, and on the other hand, it can be transported worldwide in real-time via the Internet. Thus, evolutionary improvements in technology can occur instantaneously, hampered only by the limitations of patent law from law and politics.

Mergel, Edelmann and Hoag, whose interests are focused on digital transformation in the public sector, consider the elements of transformation, placing the main emphasis on essential features in digital processes (Mergel, Edelmann & Haug, 2019):

- Use of technologies for transformation of service deliveries;
- Use of technologies for transformation of the organizational culture and the relations with the clients;
- Creating value as a result of transformation.

Presented briefly, we can focus on the most critical aspects of these elements.

✓ The digital transformation efforts result in a change in the delivery of services, but this also expands direct participation and contact with customers. Providing feedback is valuable for companies, as it helps to maximize the adaptation of the products and services offered according to the change in consumer tastes. The emergence of customer communication platforms makes it possible to create the necessary conditions for closer interaction between producers, traders and consumers. Here we are talking about increasing the value covering the possibility of connecting the various counterparties in the market. The digital transformation is becoming visible through the proliferation of intelligent products that allow real-time monitoring and updating of results and transforming production processes and customer relationships. The digital transformation has shifted the

market layers and created an opportunity to redistribute market shares, enter into new markets, and attract new customers.

✓ Digital transformation breaks the paradigm and changes entrepreneurial initiatives. Traditional marketing in current conditions is not enough to reach the target audience. It requires a complete redesign of the company's strategies to expand its business scope. The digital transformation can be seen as a technological revolution that requires adaptation to new consumer habits and expectations for access to high-value digital services. It is seen mainly as a cultural change that must happen in the organization. That provides an opportunity for additional value that companies realize by changing the structure and culture of the organization or engaging and integrating companies to design relationships and relationships with customers jointly. The process of influencing the consumer does not end with the finalization of the purchase. It is a continuous dialogue that aims to maintain relationships, build trust and make customers loyal. Consumers are not only recipients of information; they are also active participants in the sales process.

✓ Creating value is one of the most distinctive contributions of digital transformation to business. That contribution can be sought to implement hyper connection and cooperation between consumers and companies in the scope of supply of a value chain: co-design, co-creation, co-production, co-marketing, distribution and co-financing. (Mergel, Edelman, & Haug, 2019, p. 3). Berman believes that leading companies focus on two complementary activities: reshaping the value proposals for the customer and adapting them to new technologies for more interaction with customers (Berman, 2012, p. 16).

In recent years, companies in almost all industries have taken initiatives to explore new digital technologies to take advantage of them. It often involves transforming critical business operations and affecting products, processes, organizational structures, and management concepts. (Matt, Hess & Benlian, 2015, p. 339) The authors believe that it is necessary to build an approach by formulating a strategy for digital transformation, which will serve as a comprehensive concept for integrating all coordination, prioritization and implementation of digital transformations within the company. In turn, this can be interpreted that the benefits for companies undergoing digital transformation are significant, ranging from increased productivity or sales, innovation and value creation, ways to access customers and more.

Conclusion

Disruptive technologies are essential for digital innovation and digital transformation, which continue to be important factors for companies to respond

adequately to change. Thus, “organisations can adjust or change according to the new requirements that have emerged in their environment” (Filipov, 2020, p. 9). The digital economy requires entrepreneurs to look beyond the desired results and achieve them by adapting their activities to new market requirements. Technological short-sightedness confronts companies with serious problems. The lack of strategic foresight, flexibility and solutions adapted to the technological innovation makes them lagging, dooming them to failure.

REFERENCES

- Aagaard, A. (2019). *Digital Business Models. Driving Transformation and Innovation*. Springer International Publishing, Palgrave Macmillan. doi:<https://doi.org/10.1007/978-3-319-96902-2>
- Andal-Ancion, A., Cartwright, P. A., & Yip, G. S. (2003). The digital transformation of traditional business. *MIT Sloan Management Review*, 34-41.
- Arthur, W. (2011 r.). The Second Economy. 90-99. Извлечено от <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-second-economy#>
- Berman, S. J. (2012). Digital transformation: Opportunities to create new business models. *Strategies & Leadership*, 40(2), 16-24. doi:<https://doi.org/10.1108/10878571211209314>
- Caron, X., Bosua, R., Maynard, S., & Ahmad, A. (2016). The Internet of Things (IoT) and its impact on individual privacy: An Australian perspective. *Computer Law & Security Review*, 32(1), 4-15. doi:DOI: 10.1016/j.clsr.2015.12.001
- Cevikcan, A., & Ustundag, E. (2018). *Industry 4.0: Managing The Digital Transformation*. Springer International Publishing Switzerland.
- Dimitrieska, S., Stankovska, A., Efremova, T. (2018). The Fourth Industrial Revolution – Advantages and Disadvantages. *Economics and Management*, 15(2), 182-187, <http://em.swu.bg/images/SpisanieIkonomikaupload/Spisanieikonomika2018/THE%20FOURTH%20INDUSTRIAL%20REVOLUTION-ADVANTAGES%20AND.pdf>
- Dimitrov, P. I. Vasenska, Bl. Koyundzhiyska-Davidkova, Vl. Krastev, P. Durana, I. Poulak, (2021). “Financial Transactions Using FINTECH during the Covid-19 Crisis in Bulgaria”. Project "Licence, Master professionnels en formation ouverte et à distance pour le développement du tourisme durable en Chine, au Vietnam et au Kirghizstan" (the LMPT Project), co-funded under the EU Erasmus+ Programme
- Dzheneva, D. (2017). IoT pridava novo znachenie na termina "umna korporatsia". Izvlecheno ot [technews.bg: https://technews.bg/article-97972.html](https://technews.bg/article-97972.html)
- Evans, N. (2017). Mastering digital business: How powerful combinations of disruptive technologies are enabling the next wave of digital transformation. *Journal of Information*

Technology Case and Application Research, 19(20), 128-130.
doi:10.1080/15228053.2017.1328888

- Filipov, M. (2020). Strategic PR as a System for Preemptive and Defensive. Reputation Communication. *Contemporary Humanitaristics*, 16 (1), pp. 6-12.
- Filipova, M. (2010). Decision making system. *Economics and management*, VI(4), 25-32.
- Herbert, L. (2017). *Digital Transformation: Build Your Organization's Future*. London; New York: NY: Bloomsbury Business.
- Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. *Business & Information Systems Engineering*, 57(5), 339-343. doi:10.1007/s12599-015-0401-5
- McKinsey&Company. (2014 r.). *The digital tipping point*. Извлечено от McKinsley Digital: <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-digital-tipping-point-mckinsey-global-survey-results>
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36, 1-16.
doi:<https://doi.org/10.1016/j.giq.2019.06.002>
- Ministerstvo na ikonomikata na Republika Bulgaria (2017). Kontseptsia za tsifrova transformatsia na balgarskata industria (Industria 4.0).
https://www.mi.government.bg/files/useruploads/files/ip/kontseptsia_industria_4.0.pdf
- Neugebauer, R. (2019). *Digital Transformation*. Springer-Verlag GmbH Germany.
- Perkin, N., & Abraham, P. (2017). *Building the Agile Business Through Digital Transformation*. Kogan Page LTD.
- Shopov, A. (2017). Digitalna transformatsia na biznesa.
<https://www.tbmagazine.net/statia/digitalna-transformaciya-na-biznesa.html>
- Stankovska, A., Dimitrieska, S., Stamevska, E. (2019). Finance innovations. *Economics and Management*, 16(2), 51-57,
<http://em.swu.bg/images/SpisanieIkonomikaupload/Spisanieikonomika2019/FINANCE%20INNOVATIONS.pdf>
- Stoyanova, Ts. (2019). Digitalnata transformatsia na choveshkite resursi - faktor za povishavane na konkurentnosobnostta na organizatsiitte. Sofia: Avangard Prima.
- Yang, L., Yang, S., & Plotnick. (2013). How the Internet of things technology enhances emergency response operations. *Technological Forecasting and Social Change*, 80(9), 1854-1867. doi:<https://doi.org/10.1016/j.techfore.2012.07.011>

BRANDING A CITY WITH FILM FESTIVALS

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Abstract

The research aims to explore the potential film festivals can offer to create their city brand. Film festivals are special events of shared experience, which combine the production and consumption of culture. They gather various participants such as producers, film studios, media representatives as well as spectators. The festival and the place where it happens become the attraction point for internal and international high-value tourism. It also offers a unique opportunity to a city to build its brand as a place of culture. Thus, to become a nationally and internationally recognizable, a must-visit cultural place, which could attract business and create job opportunities. Furthermore, some cities outperform national economies and become a vital driver of social, economic, technological, and cultural development. Such cities motivate more qualified and culturally conscious people to move to live in them.

Keywords: film festivals; city branding

JEL Codes: D83, M31, M37

Introduction

One of the various challenges and benefits that globalization offers the world has to do with the power-gaining cities worldwide. Namely, it is expected that cities will replace countries in the framework of economics and international trade due to the blurring country borders (Shah, 2004). By 2030 more than half of the global population will live in cities. Given such tendency, cities of both developed and developing countries face the necessity of developing strategies to reach and sustain the leading position in both the national and international arena. This worldwide competition implies various measures being taken by state and regional governors, offering branding a city on a national and international scale (Nordström, 2007).

City branding is crucial. The simple understanding of branding refers to a name, logo, slogan, corporate livery, which identity a company, product or service. Advanced

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brand theory expands this understanding as a sustainable advantage of an organization or corporation in the marketplace. It is tightly related to the shared beliefs about the product or service and motivate a degree of consistent behaviour. Consequently, the (corporate) branding provides an organization with an approach and critical strategies in managing the business, becoming its most valuable asset (Anholt, 2005).

Place branding and destination branding are two similar but yet different terms. In their review of place branding, Kasapi and Cela (2017) address the distinction between these two terms. Destination branding deals with national aspects of touristic promotion. Place branding refers to as a marketing strategy applied to the development of places, such as countries, regions or cities, from the perspectives of economics, politics, social and cultural aspects. Finally, the term city branding is developed based on corporate, place and destination branding. It is defined as economically driven promotion of a city aimed to (re)establish a positive image of a city. Its goal is to differentiate a city as a place to visit, live, and work. At the same time, city branding adopts corporate branding elements, such as the abovementioned name, logo, slogan, symbols, that function as essential branding factors of a specific city (Cai, 2002, cited in Kasapi & Cela, 2017). The importance of city branding leads to the value of special events (cultural, sport, and business) in facilitating building a city brand. Special events such as concerts, festivals, exhibitions, meetings, fairs are widely used to form a confident attitude of consumers towards the corporate brand. Their distinctive features help people to escape from their daily routine and generate celebration and bring the sense of social belonging and interaction. Special events evoke emotions and psychological arousal in their consumers. Such emotional excitement builds a positive connection with event organizers and sponsors (Karpinska-Krakowiak, 2015).

Entertainment and culture provide significant opportunities for city branding. Culture and entertainment elements facilitate city branding in commerce, touristic flows, economic power, and social attractiveness. There are two essential facets of culture that link them to city branding. First, the city image requires special consideration as it shapes the perception of the city's potential. Second, the way city is identified on regional or global scale, significantly influences its brand. The tourism's role in shaping a city's identity also need to be considered because the brand transfers meanings from a corporate to city context. However, it is important to note that is not so much about the degree and amount of tourists, but the image of the given city and the associations about it in the minds of current and prospective tourists (Kavaratzis, 2005).

Cultural festivals and film festivals in particular are the types of events that help shape, maintain, and strengthen a city's brand. In the context of event studies, Cudny (2016)

extends Getz's classical definitions of a festival as a themed public celebration and Falassi's conceptualization (1987, cited in Cudny, 2016) "a periodically recurrent social occasion in which, through a multiplicity of forms and a series of coordinated events, participate directly or indirectly and to various degrees all members of the whole community, united by ethnic, linguistic, religious, historical bonds, and sharing a worldview" (p. 18) to the modern realities. As a result of this, Cudny (2016) claims that festivals nowadays refer not to specific national and social groups but global culture and that festival is also referenced to their impact on economics and the environment.

Film festivals vastly contribute to city branding. Focusing on art festivals and film festivals, in particular, Waterman distinguishes art festivals as contributory to both production and consumption of culture (1998, cited in Cudny, 2016), which involve and contact different actors, such as performers, entrepreneurs, media representatives, visitors and volunteers. At the same time, art festivals contribute to popularizing a given art – either film, music, theatre, literature, architecture or any other type of art. In their turn, film festivals contribute to the art and industry of cinema, becoming essential and must-visit cultural events for the abovementioned men of art, businesspersons, media representatives, spectators, and volunteers specifically involved in the cinema industry (Cudny, 2016). Elsaesser (2005) refers to festivals and film festivals as "the moments of self-celebration of a community" (p. 85). Three conditions define a festival, an occasion, a place and the presence of large numbers of people. Besides that, several characteristic features of film festivals distinguish them from other types of special events and festivals:

- It is common for film festivals to be held during the slow tourist times of the year (Grunwell & Ha, 2008);
- One of the general functions of film films festivals is the gathering of people for reflection and regeneration
- In some way, films festivals can be referred to as rituals and ceremonies. Depending on the involvement of the audience, the reference changes. For instance, a film festival is characterized as a carnival if the audience is active. It can be characterized as a ceremony if the audience is passive.
- There are pre-defined scripts that film festival follow in terms of performances taking place during the event, or every act follows its intuitive sequence.
- A place where a film festival takes places and a film festival itself is self-referencing.

- Films festivals generate distinctive audiences with specific roles, which include self-celebration and performance of authority and sovereignty.

- Some of the constituents of a successful film festivals organization include total experience (including good experience for filmmakers and visitors, hospitality, food services), quality programming and optimal destination for journalists, sponsors, various facilities, marketing and PR (Grunwell & Ha, 2008). For the international film festivals, there are some specific characteristics as well:

- Some of the functions of international film festivals are categorization, classification, sorting out, and selecting annual film productions from all over the world.

- Compared to local, international film festivals are considered more cost-effective in facilitating infrastructure and facilities development and attracting both local and foreign audiences.

- The scale and the nature of competition among festivals are more “vigorous” – first, there is a competition of host cities of different countries to attract a bigger audience to the location; second, there is a competition for the most desirable dates of the event, which is particularly important for annual festivals (Elsaesser, 2005).

Films festivals have both advantages and disadvantages in their organization and management and impact various aspects (such as environment, economy). Therefore, they are considered as contributing to the cultural and economic benefits of the industry. Grunwell and Ha (2008) list film festivals’ positive aspects:

- Well-established and well-organized film festivals significantly contribute to local communities and governments in investing in economic well-being and activity (touristic flows, workplaces).

- Film festivals positively affect the image and identity of a given community, having a widespread and notable impact on society.

- From a long-term perspective, film festivals can be used to build the image of a host city and improve its attractiveness.

- Compared to other street festivals, film festivals negatively impact such factors as traffic, security, and ground maintenance.

- From the perspective of environmental effects, festivals cause less negative environmental impacts than other types of events, one explanation of the built environment (rather than the natural environment) in which the festival is set (Negrusa, Toader, Rus & Cosma, 2016).

- Within the organization of festivals, film festivals hold several advantages as well. For instance, compared to music festivals in time and space management, film events are less concentrated and cause less noise (mainly when held in closed venues), traffic congestion, and crowding.

Besides having positive impacts on environmental, socio-economic, and other aspects, festivals and film festivals, particularly, possess several adverse effects. However, most festivals' effects argue that festivals' positive impacts and benefits outweigh their adverse outcomes and costs (Gursoy & Kendall, 2006). Based on the study of Negrusa, Toader, Rus and Cosma (2016), some of the disadvantages of (film) festivals include:

- In terms of socio-cultural impacts, there is a possibility of alienating groups of host populations who do not participate (actively or passively) in the event or do not have a particular interest in cinema.

- Although considered insignificant, there is a probability of causing interruption of city residents' commercial activities and temporal migration.

- In terms of environmental effects, film festivals are considered less harmful than other festivals. Still, there are potential effects, such as tourist attraction destruction and increased pollution and waste generation.

- The inconvenience of traffic within the city, near the event's location, can be caused by blocking off or closing the streets, particularly for the residents and city visitors.

Conclusion

A city brand is not expected to communicate a complete picture but aim to create positive images in the minds of audiences. It frames the location selectively and aesthetically. Branding inadvertently frames and packages the place into a relatively well-defined and commercially attractive product, which focuses on images, attractions and activities that are considered significant and relevant to the brand values (Zlateva, 2020). Therefore, highlighting the glamour and excitement of a film festival, gossips about celebrities and the screening of new exciting movies will not only draw attention to the city, it also suggests that it is an (exciting enough) playground for the famous and rich. The active night life and city attractions are backdrops to the stars. Thus, place branding allows for guiding people's experiences of the location by first shaping their preconceptions. It helps to develop a coherent, consistent and meaningful sense of place, and offers a memorable brand experience and connection with a place.

Films and film festivals contribute to the place brand by generating awareness of the place and showcasing its ability to successfully stage events. They become a fertile ground

for city brand storytelling. A film festival also gives the city a cinematic identity. Sundance is known as the independent film festival. In many countries, a film festival suggests that there is a – fledging or mature – film industry in the city; a celebration of local movies is also a celebration and reminder of the movie industry in the city. Promotion and getting people to pay closer attention to experimental and independent movies affirms the brand story of a city. Successful examples are early adopters as Cannes International Film Festival (Cannes, France), Venice International Film Festival (Venice, Italy), or later adopters as Copenhagen International Film Festival (Copenhagen, Denmark), Rome Film Fest (Rome, Italy). They are exemplars of integrated marketing marketing strategies that have turned a film festival from a simple cultural and entertainment event into a whole image-making and city branding strategy.

REFERENCES

- Anholt, S. (2005). Some important distinctions in place branding. *Place Branding*. Henry Stewart Publications.
- Cai, L. A. (2002). Cooperative branding for rural destinations. *Annals of Tourism Research*, Vol. 29, No. 3, pp. 720-742.
- Cudny, W. (2016). Festivalisation of Urban Spaces. *Springer Geography*.
- Elsaesser, T. (2005). Film festival networks: The New Topographies of Cinema in Europe. *European cinema: face to face with Hollywood*.
- Falassi, A. (1987). *Festival: definition and morphology*. University of New Mexico Press.
- Getz, D. (2005). *Event management and event tourism*. Elmsford, NY: Cognizant Communication Corporation.
- Getz, D. (2008). Event tourism: Definition, evolution, and research. *Tourism Management*, 29(3), 403-428. doi: 10.1016/j.tourman.2007.07.017
- Grunwell, S., & “Steve” Ha, I. (2007). Film Festivals: An Empirical Study of Factors for Success. *Event Management*, 11(4), 201-210. doi: 10.3727/152599508785899893
- Gursoy, D., & Kendall, K. (2006). Hosting mega-events. *Annals of Tourism Research*, 33(3), 603-623. doi: 10.1016/j.annals.2006.01.005
- Karpinska-Kraskowiak, Malgorzata. (2015). Marketing Events In A Digital Era – A Comparative Analysis of New and Traditional Events in Terms of Branding Effectiveness. *Conference Proceedings, 11 Annual International Bata Conference (...)*. Eds. M.Hrabal, M. Opletalova, G. Orlitova, B. Haltofova, pp. 239-255.
- Kasapi, I., & Cela, A. (2017). Destination Branding: A Review of the City Branding Literature. *Mediterranean Journal of Social Sciences*, 8(4), 129-142.

- Kavaratzis, M. (2005) 'Branding the City through Culture and Entertainment', paper presented at the AESOP 2005 Conference, 13–18 July 2005, Vienna, Austria, pp. 1-7.
- Negruşa, A., Toader, V., Rus, R., & Cosma, S. (2016). Study of Perceptions on Cultural Events' Sustainability. *Sustainability*, 8(12), 1269, pp. 1-17.
- Nordström, K. (2007). *Funky business forever: How to Enjoy Capitalism (Financial Times Series)*. Stockholm: Bookhouse Publ.
- Shah, A. (2004). Fiscal Decentralization in Developing and Transition Economies: Progress, Problems, and the Promise. Policy Research Working Paper; No.3282. World Bank, Washington, D. C. World Bank. <https://openknowledge.worldbank.org/handle/10986/14114> License: CC BY 3.0 IGO."
- Waterman, S. (1998). Carnivals for elites? The cultural politics of arts festivals. *Progress in Human Geography*.
- Zlateva, D. (2019). Digitalizatsiya na marketingovite komunikatsii. Universitetsko izdatelstvo Neofit Rilski. ISBN 978-954-00-0205-7

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