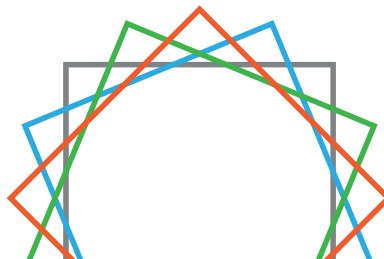




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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### DIGITAL REPUTATION MANAGEMENT. RELAPSES OF THE SEMIOTICS IN THE REPUTATION OF DIGITAL ECONOMY

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**Abstract:** *Never the management reputation has been so important for a company or a public administration; the digital world collapses time and space, the rate of spread of the criticism threatens to cancel any defense, the clumsy response to a crisis can be extremely expensive. A good public screening produces a competitive, solid and long-lasting advantage. To have an effective on-line reputation is not enough to know and use technical solutions of SEO, SEM or Social CRM; is required an overall and aware communication strategy, starting from semiotic processes involved in reputation. In this paper, we will deepen the topic of reputation as a permanent marketing strategy, of the relationship between reputation and digital marketing, and of what skills should own a digital reputation manager in a business world where advertising in its traditional forms loses ground, while the digital reputation becomes essential for the survival of a brand. We will closely examine instruments such as Sentiment Analysis, Data and Opinion Mining, evaluation of Influencers and of processes of Social Intelligence, as well as instruments for the Census of Reputation Risks.*

**Keywords:** *Reputation, Digital, Semiotic, Economy, Marketing.*

#### 1. INTRODUCTION

*"We are not what we say we are the credit other give us"*

Jose Saramago (Saramago, 2011)

We live in a world that sees us at the same time as actors and spectators, producers and consumers (so-called prosumer), observed and observers, judged and judges. But, above all, we live in space-time different from the past and the visibility of our behaviors acquired gigantic size and timing: the network is a kind of eternal world square and whatever we do, say, publish in Internet can potentially be viewed or heard by billions of people and especially never forgotten: is forever! That is exactly why the reputation today acquires a deeper value and requires from all of us a greater awareness (Peverini, 2014)

Today it is no longer enough to tell. The story must be credible as well as the brand. Because we are what the search engines say that we are.

Therefore, the definition of one's own strategy of brand reputation becomes a thorough job, not left to chance, and that requires an adequate and rigorous scientific professionalism able to ensure a shift from Risk Assessment to Risk Management (Giorgino, 2015). The Digital Reputation Manager so represents that specific professional figure, which, in a liquid and digital society like the contemporary one, cannot be improvised but must know very clearly the domain of its intervention.

A document to keep always in mind should be the Reputation Manifest that defines in ten points and very clearly, what we should and could expect today about our reputation in the net.

According to the document cited above: socially, we are what others say about us; what people say about us and what we really are not always coincide; what does not coincide, is not what we should socially take care of. What we need to take care of can follow two directions: to look like what we want to be or to look like what the society says or thinks of us (Landowsky,1991).

The society does not know our being, but only our doing; our do is social projection; the social is an arena where interests, which are not neutral but ideological, meet and clash. The ideology is one of the products of a specific culture: the culture is the place where the individual develops from childhood; the individual left alone in the social clash succumbs.

## **2.REPUTATION AS A PERMANENT MARKETING STRATEGY.**

The shift of advertising from the products to the respective brands has attenuated only in part the problem of measuring the Return of Investment, but did not fix it (Blanchard, 2012).

The passage from promoting the product to that of the brand, brought up a new problem: how many times we can change the style of a brand, its story and its values?

Changing the perception given to a single product does not change the perception of the brand, while changing the perception of the brand means to change the perception of all the products related to it. The hierarchy between the brand and its products is not a matter of communication, but is a specific economic and productive fact. Whether it relates to the product or the brand, eventually this form of direct marketing faces a huge problem: that of creativity.

The amount of advertising in the world is just so high that it is unavoidable to fall into the already seen.

The time acts as a container of billions of words and images of *headlines* and *body copies* and of all the cultural kit necessary to advertising.

Certainly, sometimes emerges something new, but it has a minimum weight compared to the worldwide investment in advertising.

These problems were not so evident until the TV and radio channels multiplied, on one hand and on the other hand, until the advent of Internet. In the first case, the limits of creativity emerged because it cannot be infinite; in the second case the web has changed the basic paradigms of communication. There is no longer an issuer who speaks to thousands of passive recipients, but a new “many-to-many” model, braided, exciting but also dangerous for the brands (European Digital Behaviour Study, 2013).

The “make do” or “make believe” of traditional marketing does not work anymore because technology makes comparisons easy; the abuse of advertising in every segment of life, puts into the recipient a strong feeling of distrust.

And the motto into vogue during the 80's and the 90's “as long as they speak of it”, today is no longer allowed.

Today it is good “as long as they speak well of it”, otherwise it is the disaster of the reputation, triggering a domino effect that can be extremely harmful for brands

(see the recent case of the Moncler, a company that produced duvet jackets and clothing with a turnover of 93 million Euros in 2013, which was denounced by an Italian TV program for the fierce and illegal practice of plucking, having serious repercussions on its brand (Repubblica, 2014).

From Floch onward, advertising has tried to engage in the use of semiotics to represent advertising models and consumers' attitudes. In *Semiotics Marketing and Communication* Floch represents different forms of advertising communication (Floch,1990) taking as examples the work and recommendation of some leading experts of this field: David MacKenzie, Ogilvy, Jaquès Sèguèla, Jean Feldman, Philippe Michel.

The shift from the product to the brand did not cover only the advertising phenomenon but all corporate organizations of producers, the entire value chain, anyone who came into contact with it. The companies' staff had to behave in a certain way, executives were to appear according to precise directives, messages had to tell the magic worlds of the brand.

After NO LOGO (Klein, 2013) everything changes. Successful stories implode under the weight of journalistic investigation that reveals unedifying successes.

Some brands must take action to protect themselves, Nike first.

Big headlines and shining concepts, to cover disreputable behaviors. The reputation of big brands is there at the click of a mouse, under the eyes of all. (In 1997, the Nike CEO, Paul Knoght, was received by Stanford's students with these words: “Ehi, Phil, get off the stage. Pay your workers a wage that allows them to live!”).

Therefore, it strongly emerges a dichotomy between what advertising conveys and the behavior of the one conveying the message. Just to tell a story is no longer enough: the story must be credible as well as the brand.

The marketing should take care of reputation because a progressive mistrust is spreading toward the brand and action must be taken before it becomes complete distrust.

Just think of the Merkel case, in 2015, connected to the auto show in Frankfurt. The German reputation is at the top of its expansion. Whatever is German wins: rules, transparency, efficiency. After a few days, the catastrophe: Volkswagen is in the storm for providing false data about the exhaust gas. The title slumps on the stock exchange (Repubblica, 2015). The new Western audience of consumers is more attentive to messages, to products, to ethical processes of production, to the relationship between companies and the ecology of the planet. A new form of ethical consumer's attention is taking shape in the global market.

## **3.REPUTATION AND DIGITAL MARKETING.**

For many years, and for subsequent simplifications, the digital reputation has been linked to some aspects of the digital marketing. This is an absolutely complex world, whose ramifications are heading toward every corner of the activities of new media.



In the past and with the building of technological fads, it has been taken for granted that SEO, SEM, E-mail, Marketing and Social CRM, constituted the central nervous system of the reputation.

For a long time, in digital marketing, notoriety was confused with reputation; this, based on the cheap communication principle “as long as they speak of it”, which sounds like “as long as they find it first”. At the origin, there is the power of search engines and their linked acronym: SERP. Technically, it means Search Engine Results Page and represents the list of objects found by a search engine, starting from a sequence of terms for the research itself. Therefore, much of the work is directed to place the web resources in the first few pages, so that they may be the most visited (see SEO e SEM). The census of users with whom entertaining a relationship, is placed in a complex technological environment called Social CRM (Customer Relationship Management). These Digital Marketing paths, are involved with different modalities in the management of the reputation although they are not individually crucial for it (Di Fraia, 2011). Imagine a cultural association that for many years has helped the spread of civilized correct behaviors. It has been working on the web, posting on websites, blogs and social networks. It has reached a strategic visibility on the SERP; has a very high number of visitors and loyal users (lead, reach, engagement). At a certain point, the President of the Association becomes responsible for non-ethical behavior and it turns out that much of the collected resources have been diverted for personal gain in favor of the members of the Association. We clearly understand that the reputation does not depend on reached notoriety (Fumo, 2012).

#### 4. THE SEMIOMATIC OF THE REPUTATION

The semiomatic is born from the encounter between semiotics and information technology for all activities involving computerized support. To understand its utility simply imagine what it could mean, without a suitable software, to analyze hundreds of thousands of texts obtained from a web search engine; the clash between quantitative and qualitative analysis strategies would be challenging (Cosenza, 2014).

Thus, the semiomatic is at the same time both a proposal for applied research and a set of analytical models that assume the use of technology in quality and especially quantitative investigations. Specifically, semiomatic of the reputation is the set of semiotic-informatics activities that lead to the identification of reputational information, their organization, to drafting models of analysis and identify analytical procedures. To have a synthetic overview of the entire cognitive and operational universe connected to investigations on reputation, it may be useful to outline and describe some macro components such as *storytelling*, *intelligence overview*, *management life cycle*, *social intelligence* and *sentiment analysis*.

There are two reputational regimes: the generic reputation and the specific reputation.

The first relates to the lifestyle of a human being, of a company, an institution, a political party, an association. Its evaluation is based on conformity or non-conformity

of social behaviors (which vary from culture to culture) considered conventionally correct.

The second refers to the social projection of behaviors related to a specific profession, mission, activity, social role (Barthes, 1951).

To build the reputation of a subject (individual or collective) means to enhance its reliability and credibility in the public narrative (Centenaro, Sorchiotti, 2013). It organizes the narrative of acting (doing) and being in a consistent and likely way. Consistency focuses on action toward what has been, while verisimilitude focuses on what we are now and the plausibility of the causes that determined this.

We should analyze these characteristic in terms of compatibility with the specific culture of reference (Greinas, 1995) (for example, in some cultures the frequent change of work activities is a positive thing, while others consider it a problem).

Each level of perception that we have is the intersection of these two dimensions.

In this respect and in view of what explained so far, the process of *Digital Reputation Management* is essential, understood in a top down sense, which we call *reputation intelligence overview* (Collins, 2016).

The main process classes are *social intelligence*, *social CRM*, and *Company Admin*. In the first find their place listening and comprehension of digital phenomena; in the second, those relating to structured interaction with users and, the third, outlines some administrative and business processes involved.

Within the social intelligence class, there are processes of listening divided by analysis characteristic: *sentiment*, *opinion mining*, and *passion*. For all these processes there should be an alerting function toward the personnel, which may authorize and implement a prompt defense after a public attack (Ceron Curini, Iacus, 2013).

The sentiment analysis clearly shows the polarity of the analyzed text in terms of positivity, neutrality and negativity. The opinion mining, possible with the use of quite expensive platforms, is able to carry out evaluations on the text, highlighting reviews and evaluations.

It is widely used in some English-speaking countries by large corporations and political market.

Study is under way about passion analysis, and many believe it to be the most effective marketing support.

With this survey methodology, which uses powerful algorithms of learning machines and ample reference textbooks, it is possible to detect the degree of anger or wrath of the users, their empathy, and their frustration.

The Social Analytic measures quantities, indicators of access, usage, period, frequency, timing of permanence, places of origin of access and eventual information on the target (Sponder, 2013).

This information is important to understand the level of diffusion of resources available on the web.

It is thus possible to build an historical archive to analyze the trend of usage, so to be able to prepare analytical reports in support of the return of investment. The Social CRM segment deals with the multidirectional relationship with customers. The social caring is useful to assist consumers, clients, simple observers and followers.

It is not just a matter of responding to requests for help, but also of being proactive, that is, to anticipate based on information providing a signal, questions and problems.

## 5.CONCLUSION

Today, more than ever, we can therefore say how important has been for a company the reputation management: the digital world collapses time and space, the speed of spreading of the criticism threatens to cancel any defense, the clumsy response to a crisis can be extremely expensive.

A good public projection produces a competitive, solid and long-lasting advantage.

For an effective reputation management, is not enough to know and use technical solutions such as SEO, SEM, or Social CRM; it requires an overall and aware communication strategy.

Starting from semiotic processes involved in reputation, only through the *Digital Reputation Management* we can arrange those activities and skills required for the construction and defense of the public perception.

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### VIRTUAL MOBILITY AND THE INNOVATIONS IN THE INTERACTION WITH THE VIRTUAL LEARNING ENVIRONMENT

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**Abstract:** *Virtual mobility of students is gaining in importance in higher education because it enables almost the same benefits as with physical mobility with no the need to travel. While virtual mobility courses allow several types of interaction and communication, there is a strong need for strategic planning for effective communication and interaction in an online environment. In the article authors present an interaction and communication model in virtual mobility courses at DOBA Faculty and show the results of an empirical study on the satisfaction with implemented joint implementation online course. The results shows that the experience of international connections between higher education institutions from different countries and the mutual transfer of knowledge between institutions was beneficial both for the students and the course holder as well as expert staff from both schools. It mostly had a positive effect on the development of soft skills.*

**Keywords:** *virtual mobility, interaction and communication model, online course, internationalization at home, case study*

#### 1. INTRODUCTION

Virtual mobility of students is gaining in importance in higher education because it enables mobility to students who are unable to engage in traditional mobility programmes. According to Pursuea et al. (2005) virtual mobility is a tool that fosters the use of e-learning. It allows collaboration between foreign students and teachers that are no longer location dependent (Schreurs et al., 2006, p. 4, Op de Beeck et al. 2007). Similar to this is definition of Poulová (2007, p. 87-92), who stated that virtual mobility is the opportunity for collaboration of people from different backgrounds and cultures, who are working and studying together and are not placed in the same country. With the use of information and communication technologies within virtual mobility one can obtain almost the same benefits as with physical mobility with no the need to travel (Elearningeurope.info

2009), therefore virtual mobility is often used as an alternative for physical mobility (Vriens et al. 2010, p. 1).

With virtual mobility one can acquire new skills that are necessary for today's innovative working methods. In addition to obtain the credits granted by the host universities and acquire specific skills of the subject, in a virtual mobility course the student obtains also other important academic skills. These are the increase of knowledge about other cultures, language, acquisition of technological skills, etc. (Hammer and Bennett, 2003, Otten 2000, Bijmens and de Beeck, 2006).

Interaction on distance education is a complex and multifaceted concept (Anderson, 2003). According Cummings et al (2012) one key element that contributes to student learning success and satisfaction in online courses is related to learner interaction.

This article presents the interaction and communication model in virtual mobility courses at DOBA Faculty.

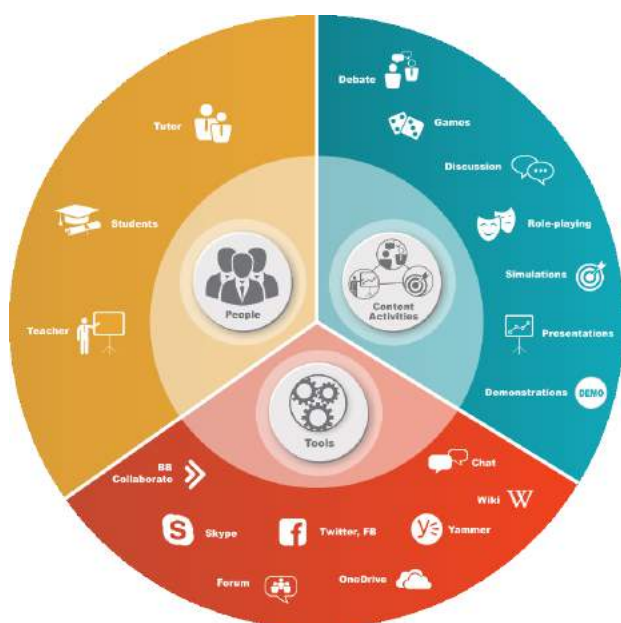
Section 2 provides the communication and interaction model in virtual mobility at DOBA Faculty. Section 3 discusses the results of an empirical analysis of the students' satisfaction on joint implementation of the course with the Institute of Communication Studies Skopje, Macedonia. Section 4 draws conclusions.

## 2. INTERACTION AND COMMUNICATION MODEL IN VIRTUAL MOBILITY COURSES AT DOBA FACULTY

DOBA Faculty started implementing virtual mobility courses in 2005. Students from different countries work together in multicultural and multinational groups and gain international experiences and competencies from the professional field with the help of global communication technologies. DOBA Faculty offers three forms of virtual mobility: international virtual summer school, joint implementation of courses with international higher education institutions and international week. Students can choose between short courses, parts of courses and regular courses offered by DOBA Faculty. Since students receive ECTS points for successfully completing the courses they can have their institution recognise the completed study obligations.

Virtual mobility courses allow several types of interaction and communication: interaction with the VLE (virtual learning environment), interaction with the study material, and interaction between the teacher, the tutor and the students which is facilitated via communication tools (synchronous and asynchronous communication).

Communication and interaction in an online environment requires strategic planning. This is usually not the case in a face-to-face environment where interaction may occur naturally and without thorough planning, designing and implementing. DOBA Faculty thus designed an interaction and communication model in virtual mobility courses which is defined through the prism of people, tools, and content/activities.



**Image 1:** Communication and interaction model of virtual mobility at DOBA Faculty

## The prism of people: teacher, tutor, and student interaction in virtual mobility courses

Teachers are nowadays moderators and facilitators (Hammer, Bennett, 2003) and their role has changed dramatically in the last years (for example, see Elearningeuropa.info, 2009). Teachers in virtual mobility courses at DOBA Faculty focus mostly on:

- communicating the expectations for online participation,
- providing guidance and support,
- helping shape the conversation and keeping it aligned with learning outcomes,
- giving timely content-related and continuous feedback on students' performance which can be given individually or to the whole group. Teachers use audio, text, or video to provide feedback.

The following picture presents the prism of people in VLE.



**Image 2:** The prism of people in VLE DOBA Faculty's model of virtual mobility

Teachers can choose asynchronous communication (e.g. discussion boards/forums, blogs, wikis, emails, group or one-on-one virtual meetings, chat messaging and discussion forum...) or synchronous communication (virtual meetings, chat, Skype...) to interact with students and tutors.

Successful implementation of an online course, especially a virtual mobility course, depends on good cooperation between teachers and tutors. This is the reason why teachers conduct coordination meetings with tutors before the start of the course and make sure to align expectations and discuss the features of the target group.

Tutor-student interaction is another type of interaction in virtual mobility courses. Tutors are responsible for motivating and guiding students, monitoring their participation and performance, counselling and giving encouraging feedback. Students are also challenged by

tutors with topical issues. Tutors encourage discussion and debate and help students to become self-directed and self-motivated learners.

The third type of interaction is student-student interaction which is carefully designed by teachers. Students have a lot of opportunities to interact with each other: virtual team work, peer-reviews, sharing of ideas and practices, etc. Various forms of student-student interactions are important but our experience shows that the quality of their interactions is even more important.

### **The prism of activities: activities to promote interaction and communication in virtual mobility online courses**

Online courses, especially virtual mobility courses, require a careful course design and preparation. The teacher, as a course designer, has to structure and plan all students' activities in advance. A lot of effort and time is dedicated to designing the course, to preparing relevant context and interesting tasks for students. The course activities can be classified in three types according to Horton (2011): activities to absorb, activities to do, activities to connect. Teachers choose mainly activities to do and activities to connect to enhance communication in virtual mobility courses and to achieve the learning objectives. Image 2 presents the prism of these activities.



**Image 3:** The prism of study activities in VLE DOBA Faculty's model of virtual mobility

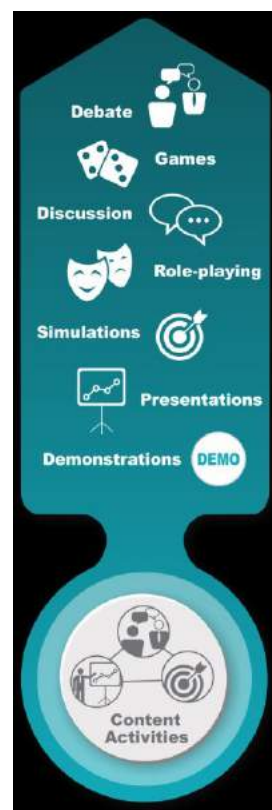
The selected course activities have to enable students to gain experience in enacting or simulating the performance of competent professionals in the real world. They require students to be in constant communication and interaction with the tutor, the classmates as well the teacher. The activities that promote interaction and communication best are: debates and presentations, comments,

discussions, brainstorming, role playing, project based learning activities, virtual round tables, team projects activities, etc.

Teachers encourage students to become actively engaged learners responsible for their own learning by incorporating interactive and reflective writing activities. Such activities help students raise the awareness of their own learning processes

### **The prism of tools: Communication tools for enhancing interaction and communication in virtual mobility online courses**

Communication in virtual mobility courses means constant presence in the virtual learning environment and frequent interaction. Communication in the VLE is an ongoing process, which takes place daily or even hourly during an online course, while in a traditional learning environment communication is mainly limited to face-to-face sessions.



**Image 4:** The prism of communication tools for enhancing interaction and communication in VLE DOBA Faculty's model of virtual mobility

Choosing the appropriate communication tools which support the tasks and thus encourage students' communication and interaction is of vital importance. Teachers have to thoroughly plan the communication dynamic and choose the appropriate tool that will support the course content and most important, support achieving student learning outcomes.

Digital tools DOBA Faculty uses and VLE offer a lot of possibilities for communication and interaction. Different types of communication are the basis for choosing the most appropriate tool (e.g. team of students to team of students, teacher to students, student to the whole group,

etc.) and different types of activities (e.g. simulations, games, project presentations, role-playing, discussion).

In the last years synchronous communication tools are being more frequently used in virtual mobility courses (Skype for Business, Blackboard Collaborate, Yammer) although the forum is still most commonly used tool. Students also often use other tools, such as Viber, Twitter, Facebook Padlet, wikispace, YouTube, etc.

Our experience in virtual mobility courses show that too many tools can create a students' "technologies overload". It is important that students have no difficulties using different tools since too many tools may negatively affect the course.

### 3. EMPIRICAL ANALYSIS ON JOINT IMPLEMENTATION A VIRTUAL MOBILITY

In the 2016/2017 academic year we planned and implemented virtual mobility<sup>1</sup> of Serbian-speaking undergraduate students of the Marketing, Social Media and Public Relations programme from DOBA Faculty with postgraduate students of the Strategic Communication Management of the Institute of Communication Studies (ICS), Skopje (Macedonia), which is also in line with the Strategy for the Internationalisation of Slovenian Higher Education 2016-2020, which defines Western Balkan states as one of the priority areas.

The virtual mobility was called *Strategic and Crisis Communication* and included 27 students: 12 Serbian-speaking students (DOBA Faculty) and 15 Macedonian-speaking students (ICS), of which three students were not active. Students could choose Serbian or English as the language of communication and all chose Serbian.

Students from Macedonia were introduced to and qualified for the work in the Blackboard learning environment until 2<sup>nd</sup> January 2017 and for the next six weeks the study process was organised so that every week began with a webinar held by the course holder (in the third week, a visiting lecture from a practising expert, i.e. the owner and director of Trivit Group and the students were able to apply their knowledge to the practical example) and ended with a preparation and submission of weekly assignments. At the interactive webinars, students solved case studies in virtual teams in limited time and joined the discussion triggered by the course holder.

<sup>1</sup> Virtual mobility is defined as "a set of ICT (Information and Communication Technology) supported activities, organised at institutional level, that realise or facilitate international, collaborative experiences in a context of teaching and/or learning" (Boaretto, Op de Beeck and Volungeviciene, 2015) or as "a form of learning which consists of virtual components through a fully ICT supported learning environment that includes cross-border collaboration with people from different backgrounds and cultures working and studying together, having, as its main purpose, the enhancement of intercultural understanding and the exchange of knowledge" (Achten, Op de Beeck, Van Petegem, 2011).

In the first two weeks, students prepared individual assignments, where they showed their understanding of the main theoretical concepts and content and in the next four weeks they applied their knowledge of strategic and crisis communication to a concrete organisation, which is present in both markets, in the form of team assignments in mixed Serbian/Macedonian teams. Students used collaborative tools provided by the Blackboard platform to communicate (team forums, file exchange, Skype groups, etc.), as well as Viber and WhatsApp. Students prepared the weekly assignments as Word files or infographics.

At the end of virtual mobility, an online survey was implemented among the students (83% response rate), where students assessed the implementation using a 7-point Likert scale as follows.

**Table 1:** Satisfaction with the course

satisfaction with the implementation of virtual mobility as a whole	6.7
satisfaction with the practice-oriented nature of the course	6.7
satisfaction with the appropriateness of the study literature	6.7
satisfaction with teamwork in mixed Serbian/Macedonian teams	6.3
satisfaction with the organisation of virtual mobility and individual content	6.8

Virtual mobility participants also assessed the development of the acquired knowledge and skills as follows.

**Table 2:** The development of the acquired knowledge and skills

expert knowledge and skills associated with the content of the course	6.8
information skills (use of ICT tools for communication) in the course	6.7
intercultural awareness, adaptability	6.8
knowledge and skills for verbal and written communication (communication in the team, substantiated expert writing, etc.)	6.6
entrepreneurial spirit and management (the ability to solve problems, adaptability, solving conflicts, critical thinking, etc.)	6.5
innovativeness and creativity	6.7
personal development and self-initiative, positive attitude and continuous learning	6.7

Students emphasised the intercultural adaptability and tolerance and the exchange of experience as the greatest benefits of virtual mobility or working in mixed



Serbian/Macedonian teams. Students reported the biggest problem to be the language of communication (different levels of linguistic knowledge), while following this experience, 86 % of all interviewed students would again like to participate in virtual mobility of different institutions.

#### 4. CONCLUSION

The article shows the components and the importance of interaction and communication model in virtual mobility. The case of DOBA Faculty shows that with the help of global communication technologies students from different countries can work together in multicultural and multinational groups and gain international experiences and competencies from the professional field. Virtual mobility courses at DOBA Faculty allow several types of interaction and communication: interaction with the virtual learning environment, interaction with the study material, and interaction between the teacher, the tutor and the students which is facilitated via communication tools. The presented empirical analysis of joint implementation online course at DOBA faculty shows that satisfaction with the course as well as the development of the acquired knowledge and skills are rated very high at the 7-point Likert scale.

The results of the empirical analysis shows that the experience of international connections between higher education institutions from different countries and the mutual transfer of knowledge between institutions was beneficial both for the students and the course holder as well as expert staff from both schools. It mostly had a positive effect on the development of soft skills (intercultural awareness, adaptability, innovativeness, motivation, critical thinking, ability to solve problems in mixed teams, effective work in mixed Serbian/Macedonian teams).

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### NEUROMARKETING RESEARCH - A NEW MIRROR ON CONSUMER BEHAVIOR

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**Abstract:** Large global corporations invest millions in marketing research, trying to understand the mind of consumers. Through these investigations they seek answers to the following questions: What happens in the consumer's mind? How to perform a comparison of specific products/services? How to make a decision about buying? How marketing activities influence consumer behavior? Neuromarketing studies command a wide range of implementations. In addition to measuring consumer reaction to advertising, these studies can be used to measure unconscious reactions of consumers to the music in the store, smell, taste, packaging products, and the like, which provides companies with the opportunity to largely adapt and develop products that will better suit the wishes and necessities of consumers.

**Keywords:** neuromarketing, consumer behavior, marketing research, neurosciences

#### 1. INTRODUCTION

Companies want to understand the mind of consumers, and "force" them to buy products/services that they offer. Traditional market research such as interviews, focus groups, surveys etc., to a greater extent, are less reliable than neuromarketing research because respondents are often unable to articulate their views, filter information, give socially acceptable answers, or they are influenced by the attitudes of other subjects. Neuromarketing, as compared to a traditional marketing research, equips companies with more precise answers [2].

Neuromarketing is an area of marketing examining customer's reactions to different stimuli. The

measurement of this type of reaction is a common procedure in research, which according to Wang and Minoru includes the measurements of: consumer behavior, their verbal responses and psychophysiological measures [21]. It is an instrument that effectively explains how consumers think and act when considering the potential purchase of products and services, although using the same can skillfully reveal the methods used by marketing experts in order to investigate the human brain. Neuromarketing does not mean forcing consumers to buy something they do not intend to, but through research it comes to the conclusion concerning what is already in the customer's mind (Lindstrom, 2007) [11]. Neuromarketing is defined as a relatively new trend in the marketing discipline that interprets human behavior more closely, from the rational to the

irrational and the unconscious (Veselinović, 2010) [20].

According to Garcia and Saad neuromarketing is a discipline that examines the impact of marketing on consumers by observing and interpreting their emotional reactions [8]. Within the framework of neuromarketing the neuroscience methods are used for the measurement of neurological reactions of consumers to various corporate forms of communication (advertising, packaging, catalogs, and so on.).

Neuromarketing is applicable and has an impact on all marketing tools, ranging from branding, advertising, defining prices, new product development, communications, product distribution, decision-making, product design and consumer behavior when purchasing [2]. These are the main reasons for the revision in the ethics of neuromarketing applications.

It could be said that neuromarketing is the combination of applied neurosciences and marketing research (Morin, 2011) [14]. Neuromarketing research provides companies with the ability to fundamentally understand the emotional preferences of consumers, and to predict consumer behavior itself.

These studies of measuring and analyzing two key unconscious processes (attention and emotional responses of the brain at the level of milliseconds) provide scientific proof as to whether consumers see what companies want them to see and if they like what they see or not, without having to ask those specific questions (Pessoa, 2010) [17].

At the end of the research companies get a report (neuroreport) in which there are precise data on which companies can create their advertising campaigns, design their products and so on.

First of all it is necessary to define and explain all of the above mentioned terms. At the beginning it could be specified that neurosciences represent a broad biological area and include all the scientific and systematic as well as experimental and theoretical studies of the nervous system [10]. The analysis and study of the nervous system are essential for understanding the ways in which we perceive and perform interaction with the environment, especially in what ways human experience and human biology are mutually dependent.

## **2. METHODS OF NEUROMARKETING RESEARCH**

Neuromarketing researchers use modern technology visualization of the brain to study all the processes that take place within the brain (cognitive, conative, and affective processes) in response to the external stimulation (marketing communications) [14]. In the neuromarketing research are applied all methods of neurosciences measuring neurological reactions of people, especially those which can render the visualization of brain activity (Brain imaging technology).

Here are the following:

- computed tomography of the head;
- diffuse optical imaging - DOI,
- magnetic resonance imaging - MRI,
- functional magnetic resonance imaging - fMRI;
- magnetoencephalography - MEG,
- positron emission tomography - PET;
- electroencephalography - EEG;
- echoencephalography and the like [28].

Among these, the most commonly applied is the functional magnetic resonance imaging and electroencephalography.

Functional magnetic resonance imaging (fMRI) is a method that measures all changes of activities that occur in the context of certain brain regions. fMRI represents functional neurovisualization of MRI technology, which measures the activity of the brain by detecting the changes associated with the blood flow [22]. This technique relies on the fact that cerebral blood flow and the activation of neurons are connected. When used in a specific area of the brain, the blood flow in this region also increases. We can say that fMRI is used as a brain decoder [2]. The basic disadvantages of this neuromarketing technique are high costs (about US\$500 for an hour of recording in the USA, and in Serbia the price of one recording is 200 euro) and this complex technology requires the laboratory conditions (Mikić, 2016) [13].

Electroencephalography (Electroencephalography) or abbreviated EEG is a graphical representation of the electrical activity of the brain - brain waves, which is registered through electrodes placed on the scalp [14]. When a person thinks about something her brain impulses travel to the motor cortex to be able to articulate her thinking. This process is extremely quick and EEG records each pulse. During half a second between the moment when our brain receives a stimulus and its response there is a neurological reaction that takes place entirely in the subconscious. This is an action that takes place just

before consciously filtering data due, for example, to bias or social responsibility. EEG records the electrical waves and connects them in memory, emotion and attention in accordance with activities in certain parts of the brain. This method of measuring brain waves is portable and it could provide data on what the consumer feels and what types of activities are occurring in his brain while observing certain advertisements, products and the like.

Monitoring eye movements (eye tracking) provides insight on behalf of companies into what a consumer observes (which products are initially observed), the color of the first notice, and what is the first thing to attract her attention[28] .

For example, with the help of GPS devices it is possible to collect data on the consumer's movement in the retail space, where he decided to spend more or less time etc.

As already mentioned neuromarketing explores the interactions that occur between the brain and marketing communications. It also uses methods in the context of cognitive neurosciences.

We claim that the main object of neuromarketing research is determined based on the standard questions of marketing. Some of them are the following ones: In what manner to make buying decisions, how to form specific views on brands or companies, how to assess competitive products, etc.

Neuromarketing research is based on two basic fundamentals: individual sensor and motor system that can be characterized as part of specific networking in the cells of the brain, as well as monitoring of such networking through the launch of unconscious or emotional appeals of consumers when making purchasing decisions (Achrol & Kotler, 2012) [1]. Quantitative and qualitative marketing research methods can neither implement nor explain this type of research.

As the benefits of neuromarketing research we could mention the following: providing more information about the emotions of potential (and undecided) consumers and better predicting consumer behavior. Brainwaves, facial expressions and the visualization of brain activity show explicit opinions, attitudes and feelings of consumers who observed in this manner become more reliable indicators of their behavior when purchasing products and services.

Disadvantages of neuromarketing research originate in the extremely high cost of devices that conduct tests of

consumer behavior, but also the limited time the researchers themselves can hardly afford for the long and continuous monitoring of the customer's mental and psychological changes. In this regard, we should not underestimate the factor of extremely bulky and almost immobile devices used by most neuromarketing researchers, which may also indirectly affect the consumer's emotional state.

Ultimately, the results obtained due to the effects of neuromarketing technique, mainly through functional magnetic resonance imaging (fMRI), are not complementary to other neuroscience tools, such as the indicators of everyday consumer behavior in a sample which uses different measurement scales (Ulman *et al.*, 2015) [19].

The application of neuromarketing research allows a researcher to understand the thoughts and feelings of potential customers (Butler 2008) [4], while the value and reliability of the data obtained in this manner are above expectations.

### **3. THE APPLICATION OF NEUROMARKETING RESEARCH**

The first neuromarketing study was conducted in 2003 by a neuroscience Professor Read Montague at Baylor College of Medicine, and its results were published in 2004 in the journal *Neuron* (Morin, 2011) [14]. The study showed that different parts of the brain work when consumers are aware of it or the opposite when they do not know which brand they consume. As part of this research was used the fMRI machine. The objective of this neuromarketing research was to better understand why Coca Cola is more popular than Pepsi in the US.

During the course of this study drinks were unmarked - without labels. It was interesting that the majority of respondents in this case stated that Pepsi tasted better. However, when next time these same respondents consumed labelled drinks Coca Cola was better for them once again [14]. The positive associations that Coca Cola puts in the spotlight in their advertising campaigns are deeply engraved in the mind of the consumer. Emotions like happiness, love, loyalty consumers associate with this brand.

Based on the results of neuromarketing studies are conceived advertising campaigns nowadays, retail stores are being redesigned, packaging designs are altered and all aspects of the communications are created and employed by companies to attract and retain a greater number of consumers. As an example

we can mention retail outlets, the layout of exhibited goods, scents and music that create the atmosphere and shopping more enjoyable. The aromas of flowers and the scent of vanilla are often noticed in clothing stores because they have a calming effect and thus enhance the experience so that a consumer spends as much time as possible in the store.

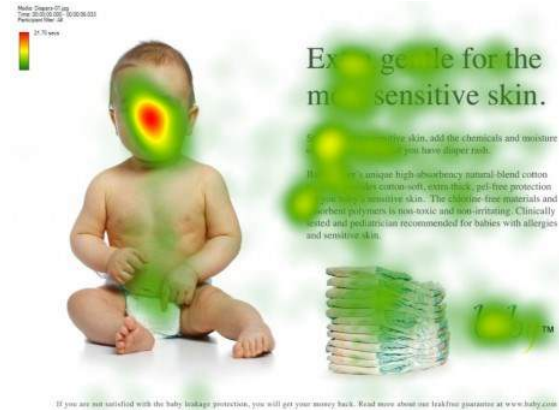
Depending on the brand and the target group it is intended for the stores are dominated by different music genres. For example, in buildings where the sale items are intended for teens music is louder and faster, while, on the other hand, in the stores where they sell things designed for business people music is unobtrusive and quieter in order to provide a pleasant experience, because it usually takes more time to make a decision what to buy.

When it comes to the Serbia it seems that companies that have come to our market are trying to apply their experience from abroad. Retail stores are designed like those located abroad; the specific layout and positioning of products, as well as music in the stores are dominant today. On the other hand, the implementation of neuromarketing research has commenced only recently in our region.

At the end of September 2015 there was a first neuromarketing study in Serbia, which applied EEG technology and eye-tracking. The aim of the study was to measure the unconscious reactions of consumers to a variety of advertisements and brands [23].

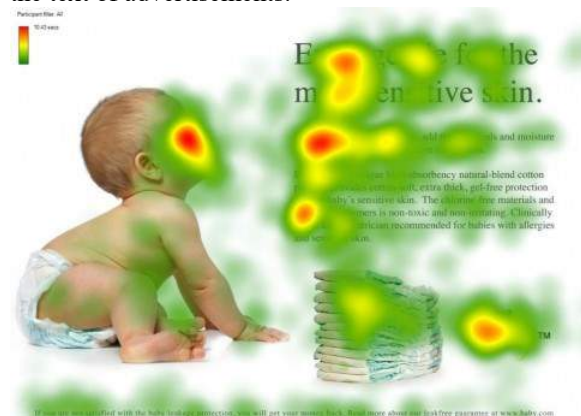
#### 4. EXAMPLES OF APPLICATION OF THE RESULTS OF RESEARCH NEUROMARKETING

One interesting study from Australia shows what it takes to make the advertisement with the baby in the picture so effective. James Briz has conducted research on how people watch commercials with babies (you look at where they look). He used the technology of tracking eye movements to measure the direction and duration of eye movements of subjects. In any case, the respondents have started observing the advertisement from its center [24].



**Image 1:** Advertisement with the baby facing forward [24]

When respondents were shown commercials with a baby that looks straight ahead at them the heat map shows that the respondents' view fixed on the baby's face and a lot less attention was devoted to the title and the text of advertisements.



**Image 2:** Advertising with the baby facing towards the title and text of advertisements [24]

When respondents viewed advertising with the baby facing the side towards the title and ad text the central focus still remained on the baby, but comparatively far more attention was paid to the title and the text of advertisements. It can therefore be concluded that the respondents view what the person in the advertisement observes [24].

Authors Emily B. Falk, Elliot T. Berkman and Matthew D. Lieberman conducted a study using fMRI to compare the advertising campaign before releasing it to the public. Three different commercials for the phone line of the National Cancer Institute (National Cancer Institute) are presented to respondents. Campaign, which led to the highest activity of a particular region of the brain brought in the significantly larger number of calls. The conclusion is that fMRI has enormous potential to

improve marketing strategies, and increase the rate of engagement and action [25].

The titles or slogans are one of the first things that the observer sees and therefore it is necessary for them to be separated and easily identifiable. This created a special neuromarketing technique called Hippocampal Headlines. Researchers from University College London have found that when a little known term is slightly changed our hippocampus is activated, and our attention is encouraged [26].

As an example may be cited slogan for tequila - "Practice Makes Patrón" and the slogan of the brand Diesel - "Make Love Not Walls"[7].



**Image 3:** Diesel - "Make Love Not Walls" Campaign [5]

Substituting the word in the famous expression, such as in the case of **practice makes perfect**, is an often applied technique for writing headlines. When you make a word change at the end of phrases, increases the likelihood that the title will attract the attention of consumers. The reason for this is our brain. When the brain recognizes a pattern it automatically predicts what follows and compares this prediction with reality. When there is a discrepancy between predictions and reality, our brain registers it and turns our attention to this [26].

PRACTICE  
MAKES  
PATRÓN.

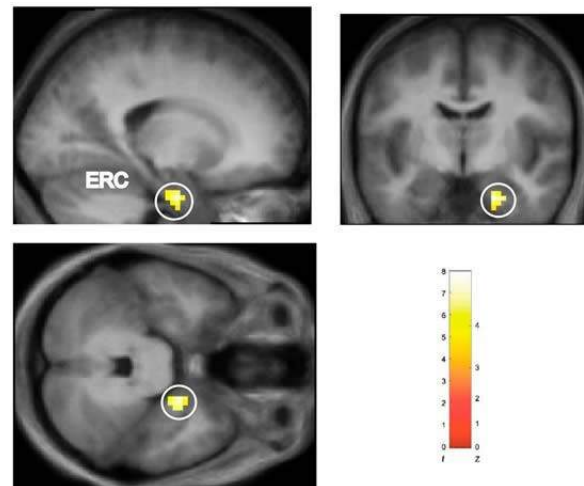
FROM HARVESTING THE FINEST WHEAT BLUE AGAVE TO SIGNING EVERY LABEL, IT TAKES MORE THAN SIXTY HANDS TO CRAFT EACH BOTTLE OF PATRÓN TEQUILA. THE EXCESSIVE ATTENTION TO DETAIL MAY NOT SOUND EFFICIENT, BUT PERFECTION RARELY IS.

IT DOESN'T HAVE TO MAKE SENSE TO BE PERFECT.



**Image 4:** The slogan was created on the basis of neuromarketing [26]

The latest campaign of the brand Diesel - Make Love Not Walls, is another example of the Hippocampal Headlines neuromarketing techniques.



**Image 5:** Detecting discrepancies in the hippocampus [26]

The researchers have found that the hippocampus works as a certain kind of brain machine for prediction and comparison, which responds when there is a discrepancy between what is expected and reality. Therefore, when a consumer sees the Perfect Patrón instead of Perfect or Walls instead of War at the end of phrases his brain wakes up and responds.

Neuromarketing techniques are also applied in designing the web sites. Starting from color combinations, site layouts, and the size and type of font the results of neuromarketing studies are implemented directly on the web. Newer horizontal schemes are effective to a lesser extent than the traditional vertical layout. This is because reading the web page from top to bottom engages the brain and makes visitors to continue their reading [27].

Neuroscientists have found that hormones dopamine and phenylethylamine directly feed the consumer's brain at the moment he sees a "familiar face". Both hormones produce a positive emotional state causing us to believe more in the promotional message forwarded by celebrities (Mucha, 2005) [15]. The appearance of public and famous individuals increases sales and profits of brands advertised in this way. In this situation "more is better", thus resulting in multiple exposure to famous characters in order to increase affection and interest in a specific product. By contrast, the human brain is also programmed to avoid danger - as a result of the tendency for survival. Once a known individual is associated with negative or unpleasant facts, the customer's mind tends to avoid any contact with him.

The research team that worked for the famous car company Daimler Chrysler conducted a neuromarketing study among volunteers - drivers, who were shown 66 pictures of different car models (Britt, 2004) [3]. There was no surprise that the sports cars were far better ranked in terms of attractiveness than other models, but the most interesting was the discovery of what actually increased brain activity in the research process. Impressions of subjects' brains in fact showed that the tiny nucleus - accumbent had enhanced activity while displaying sports model of the vehicle (a part of the brain that is responsible for the center of self-rewarding - which is also activated by the natural stimulants such as chocolates, sex, cocaine, etc.) In this manner sports cars are ranked at the level of prize stimulus, but is this a reason good enough to purchase them? Probably not, but in the full constellation of features and functions of a four-wheeler, the probability of purchase is considerably larger.

## 5. ETHICS AND NEUROMARKETING

In considering the application of neuromarketing it is necessary to consider the ethical issues of using the same. Gary Raskin argued that the reasons for epidemics such as obesity, diabetes, alcoholism, gambling and smoking, are the strong influence of aggressive marketing campaigns and marketing

strategies of manufacturers [16]. Other effects of the neuromarketing may be too large a consumption and the dependence on the products that have equally hazardous properties as the previous ones (Li, Broderick and Chamberlain, 2007) [10].

Other critics argue that neuromarketing researchers will eventually jeopardize consumer privacy and freedom of choice (Kumlehn, 2011) [9].

The most common criticism of neuromarketing comes from the perspective of consumer privacy invasion that later implies the manipulation of the behavior of those same consumers (Flores *et al.*, 2014) [6]. Also, the manipulation of certain companies through marketing activities aimed at customers is extremely unethical. The last-mentioned criticism is based on the idea that the consumers could be unfairly involved in the purchase process, if it is known that specific stimuli are used and these will lead to such psychological responses that inevitably end in the act of buying (McDowell & Dick, 2013) [12].

Only those companies that have opted for ethics in marketing communications and research operations are a prerequisite to a healthy business environment. Although a code of ethics does not specify and does not define any business situation, it is important to indicate how a company can behave under some completely unforeseen business circumstances (Popović Šević, 2016) [18].

## 5. CONCLUSION

Nowadays neuromarketing studies take primacy not only in scientific circles but also in media. This type of research is attractive to large companies and their brands because they can provide hidden information associated with their products that would have otherwise gone unnoticed. The results of these studies may be particularly important in the design phase of new products, because in addition to data about what consumers say they also provide information about what they think.

The domain of neuromarketing research expands every year via the application of new technologies and knowledge in the field of neurology. One can therefore say that the development of neuromarketing research depends on the development of neurosciences. With the implementation of new studies and the development of sophisticated modern technologies, such as brain-bow (a method that can map the individual neurons with 90 different



fluorescent colors), we will soon have more precise information on all the activities of the brain.

The application of neuromarketing and neuromarketing research resulted in obtaining more objective results than those obtained using traditional research methods, and revealing hidden information about human behavior.

At the end it is possible to claim: the face in an advertisement will attract attention, but make sure it looks at what you want viewers to see!

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## SYNERGY BETWEEN QFD, DOE TAGUCHI AND TRIZ SIX SIGMA UTILIZATION IN SOFTWARE ENGINEERING

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**Abstract:** *This paper briefly points to the synergy between innovative TRIZ and Six Sigma methodology, combined with two of the most important quality tools viz. QFD and DOE TAGUCHI methods. Utilization of the TRIZ (Theory of inventive problem solving) i.e. Creating Software Quality through invention tools of TRIZ and Six Sigma tools and techniques is described. Then, a review of case studies and a proposed sinergetic use of DOE TAGUCHI methods i.e. Software Quality Improvement using DOE Taguchi Methods to analyze, extract, and eliminate contradictions and harmful effects and generate innovative solution concepts to make better, faster and cheaper software development process is explained. A proposed sinergetic use of TRIZ, Six Sigma methodology, QFD and DOE TAGUCHI methods helps to develop a set of best practice models and techniques integrated in our optimized and quantitatively managed software testing process (OptimalSQM).*

**Keywords:** *Innovation, Inventive Principles, Software Quality, TRIZ, DOE Taguchi, Six Sigma*

### 1. INTRODUCTION

A key element to designing software architectures of good quality is the systematic handling of contradicting quality requirements and the structuring principles that support them. The theory of inventive problem solving (TRIZ) by Altshuller et al. [1] can help to define such a systematic way. The software development industry spends more than half of its budget on QA&QC (Quality Assurance and Control) and maintenance related activities. Software testing provides a means to reduce errors, cut maintenance and overall software costs. The importance of software testing has been emphasized more and more, as the quality of software affects its benefit to companies significantly.

Numerous software development and testing methodologies, tools, and techniques have emerged over the last few decades promising to enhance software quality. While it can be argued that there has been some improvement it is apparent that many of the techniques and tools are isolated to a specific software development lifecycle (SDLC) phase or functional area.

First, we describe the basic TRIZ philosophy underlying various TRIZ tools and techniques, to analyze, extract, and eliminate contradictions and harmful effects and generate innovative solution concepts to SDLC [2]. Secondly, we describe Six Sigma Quality and DOE TAGUCHI methods applied to improve SDLC framework BISA (Business Intelligence Service Architecture) that provides a Software Testing Centre of Excellence for SMEs with scalability, objectivity, consistency and constant improvement features capable to support full lifecycle software assurance following software engineering standards and to provide better and cheaper software products on time [4-6].

This paper presents a set of best practice models and techniques integrated in optimized and quantitatively managed software testing process (OptimalSQM), expanding testing throughout the SDLC framework BISA and implementing synergy between innovative TRIZ and Six Sigma methodology, combined with two of the most important quality tools viz. QFD and DOE TAGUCHI methods. SDLC framework BISA provides a battery of methods and tools to support the work of the quality engineer and the quality manager [4,5].

## 2. TRIZ AND SIX SIGMA AS INVENTIVE PROBLEM SOLVING (IPS) REPRESENTATIVES

TRIZ is an approach for systematic creativity. TRIZ (/ˈtriːz/; Russian: теория решения изобретательских задач, teoriya resheniya izobretatelskikh zadach, literally: "theory of the resolution of invention-related tasks") is "a problem-solving, analysis and forecasting tool derived from the study of patterns of invention in the global patent literature".[1] It was developed by the Soviet inventor and science-fiction author Genrich Altshuller (1926-1998) and his colleagues, beginning in 1946. In English the name is typically rendered as "the theory of inventive problem solving", [2][3] and occasionally goes by the English acronym TIPS. Modifications and derivatives:

- SIT (systematic inventive thinking)
- USIT (unified structured inventive thinking)
- Trizics (Methodology for the systematic application of TRIZ)

Following Altshuller's insight, the theory developed on a foundation of extensive research covering hundreds of thousands of inventions across many different fields to produce a theory which defines generalisable patterns in the nature of inventive solutions and the distinguishing characteristics of the problems that these inventions have overcome.

An important part of the theory has been devoted to revealing patterns of evolution and one of the objectives which has been pursued by leading practitioners of TRIZ has been the development of an algorithmic approach to the invention of new systems, and to the refinement of existing ones.

TRIZ includes a practical methodology, tool sets, a knowledge base, and model-based technology for generating innovative solutions for problem solving. It is intended for application in problem formulation, system analysis, failure analysis, and patterns of system evolution. There is a general similarity of purposes and methods with the field of pattern language, a cross discipline practice for explicitly describing and sharing holistic patterns of design.

The research has produced three primary findings:

- problems and solutions are repeated across industries and sciences
- patterns of technical evolution are also repeated across industries and sciences
- the innovations used scientific effects outside the field in which they were developed

TRIZ practitioners apply all these findings in order to create and to improve products, services, and systems. TRIZ is a systematic approach for understanding and defining challenging problems. It is based on the understanding that the vast majority of problems can be reduced to a trade-off between two contradictory elements. The central purpose of TRIZ-based analysis is to systematically apply strategies and tools to find

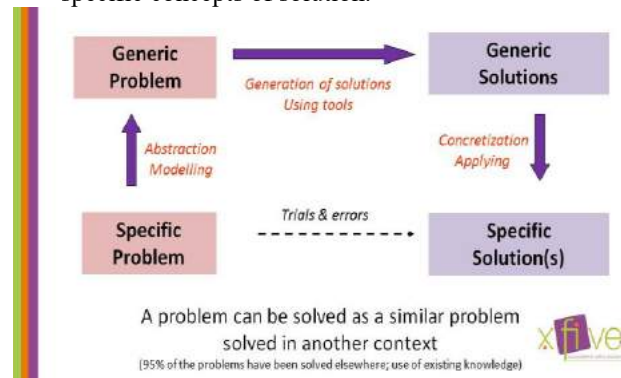
solutions that overcome the need for a trade-off between the two elements.

TRIZ is based on two assumptions:

- A real problem can be described as a contradiction (if not, it isn't a problem).
- The technical systems evolve, because of their designers, to a higher level of ideality (described as ratio  $\Sigma \text{performances} / (\Sigma \text{costs} + \Sigma \text{nuisances})$ ), following 9 laws of evolution and that to solve existing contradictions in these systems.

TRIZ' philosophy of action is summed up in 4 steps (Image 1):

1. Identify the most important specific problem to solve,
2. Then generalize the specific problem into a "generic problem model",
3. Apply to this "generic problem model" a set of solving principles belonging to TRIZ to determine "generic solution model",
4. Derive from these "generic solution models" the specific concepts of solution.



**Image 1:** TRIZ four steps (taken from [www.xfive.be](http://www.xfive.be))

By applying TRIZ, we get a set of concepts of solution providing efficient and inventive response to the problems we face. And because the number of concepts developed through the TRIZ tools is relatively small, robust and relevant, we limit the high costs associated with classical iterative approaches that multiply trials and errors.

In a 2013 article, Forbes magazine shows that Samsung has become No. 1 worldwide in patent filing thanks to TRIZ. The use of TRIZ delivers results: by simplifying thanks to TRIZ one component of its DVD players, the Korean Samsung has saved \$ 4 per unit. With the same The Six Sigma approach incorporates five critical DMAIC processes: Define, Measure, Analyze, Improve and Control. An organization identifies a problem area in SDLC, measures it, identifies its root cause, and then fixes and controls it [4][5].

**Define.** This step is concerned with defining project goals and boundaries, and identifying issues that must be addressed to achieve an improved sigma level (i.e., defect rate).

**Measure.** During this step, information about the current situation is gathered in order to obtain baseline data on current process performance and identify problem areas.

*Analyze.* This step focuses on identifying root causes of quality problems and confirming those causes with appropriate data analysis tools.

*Improve.* During this step, solutions are implemented to address the root causes of problems identified during the analysis phase.

*Control.* Here, the previous improvement phase is evaluated and monitored. method, Kodak and Procter & Gamble respectively invented the iconic red-eye flash and Pampers diapers "that keep baby's bottom dry."

TRIZ principles are relatively simple to understand, but the practice of this approach requires a relatively large expertise. A TRIZ type of intervention doesn't require prerequisite on the part of entrepreneurs, but must be done with a trained and experienced facilitator .

### What does TRIZ offer the Quality Manager?

"We want high quality at low cost." Once upon a time, a statement like that would have been considered a meaningless contradiction. It was impossible. Today, the contradiction has been broken. In today's environment of rapid and often disruptive change, "high quality at low cost" is not only expected, but it must also be fast and profitable. The quality manager must be able to learn fast and adjust quickly. Agility is the name of the game, and the quality manager is looking for tools and methods that support agile adjustments to product quality, and that contribute directly to the bottom line.

While process quality and product quality are mutually dependent, they may be supported by different methods and tools. Deming, Juran, Ishikawa, Taguchi and many other leaders of the quality movement brought quality off the end of the production line and integrated quality responsibility and quality management throughout the company. Process improvements and reduction of variation produces product improvements and delighted customers.

Design for Six Sigma, Design for Manufacturing and Assembly and other methods have moved the quality manager into the total development of products and services in the company. In the end, the product must delight or, at minimum, satisfy the customer and there are many ways that the customer must be satisfied. Quality managers have a variety of proven tools to help them accomplish this task, but the demand for speed and agility also demands interest in new tools and methods.

### What is TRIZ Six Sigma

Most advanced software tools which reflect the state-of-the-art TRIZ research and methodology to Failure Analysis, Failure Prediction and Innovative Problem solving are developed by the I-TRIZ analysts in Ideation International Inc. (I in I-TRIZ stands for Ideation).

#### Root Cause Analysis and Elimination with TRIZ Six Sigma

- The approach to the root cause analysis in TRIZ Six Sigma starts with applying techniques for intensifying the conflict in requirements (e.g. between Customer and

Business Requirements) and formulating the problem as a Contradiction.

- Along with Analysis we »translate« the Contradictory requirements, e.g. from initial Business Contradiction to the Technical Contradiction and further to the Physical Contradictions in a special way, coming closer to the physical mechanism of the **Problem**.

- At each level we apply TRIZ principles and toolset to generate the ideas, how to either eliminate harmful effect, or to improve useful effect or to resolve the contradiction. I-TRIZ tools support these processes on the analytical level and provide exhaustive set of relevant examples on implementing principles and ideas from different application fields, which support our »thinking by analogy« and extends our own knowledge-base.

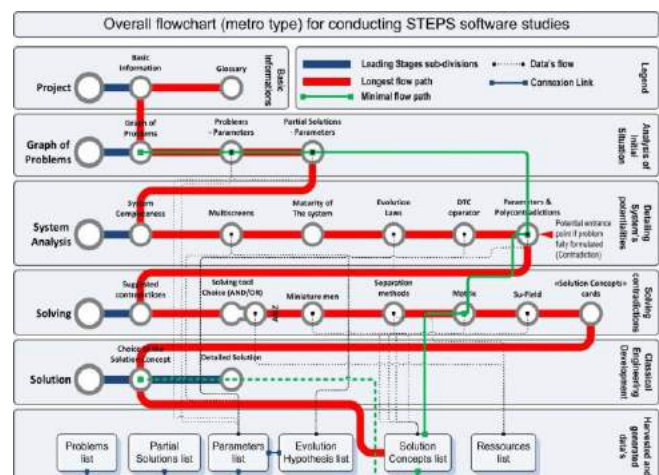
- Using the same tool set we simulate secondary problems and find out potential solutions, which may prevent them

- Last step is a Concept generation and evaluation, where different ideas are combined into the error-prone concepts which may not only efficiently (and low-cost) eliminate the Root Causes but also to provide a sustainable improvement long-term.

Among several other tools integrated into OptimalSQM BISA solution (BISA Framework integrates many very effective tools such as Value Analysis, Value Innovation, QFD - Quality Function Deployment, Agile, Design Thinking, Business Model Canvas etc.), which rely on TRIZ, one of whose characteristics is to get "uncompromising" inventive solutions built in the logic of "AND" rather than "OR" and combining all properties that apparently oppose each other as depicted in Image 2.

### 3. SYNERGY BETWEEN QFD, TAGUCHI, SIX SIGMA AND TRIZ

While QFD and Taguchi methods have originated in Japan, TRIZ has originated in Russia (earlier USSR). QFD concentrates on "what the customer wants?" Thus, it really defines the "Functional Requirements" (FR's), without actually concerning directly with the question : "how these FR's are met and which technology is used?". The "house of quality" does, however, qualitatively shows the gaps between organization's capabilities and customer requirements. QFD's "house of quality" can be used to point out conflicts and the parameters that conflict applying various software test strategy and techniques [1,3,6]. This can be directly used by TRIZ's Contradiction Matrix to eliminate the conflict.



**Image 2:** Deploying TRIZ Six Sigma Steps (taken from [www.xfive.be](http://www.xfive.be))

Testing today's Software Products is complex as it is difficult to model the product in a way that it is easy to understand the product's behavior under various conditions. There are multiple factors that affect the software product and these factors affect the behavior simultaneously. This leads to spaghetti of test suites. The more the product evolves the more complicated the test suite becomes. This makes the test result analysis, Defect removal (DR) reporting and DR analysis inefficient. The result is pouring more and more costly resources in to the test activities. These things have led to SW companies to spend as much on testing as they do on product development. Mature industries such as the automotive industry, spend as little as 5% of total costs on quality assurance, and have far better results.

### What is Six Sigma

The term Six Sigma Quality comes from Motorola. Today, it is synonymous with world class. Six Sigma is a statistical expression that indicates how defect free a process or a product is. Let us say, to make a product we go through 10 steps. Each step is an opportunity to make a defect. Thus, if we were to make 100,000 pieces of the given product, there will be a million opportunities to make defects.

If our defect rate is at Three Sigma level, we make 66,807 mistakes. At Six Sigma level, the defect rate drops to 3.4 mistakes in a million. Average processes and products operate at Three Sigma level. The best in class processes and products are at Six Sigma level. The secret of moving from Three Sigma to world class is use of quality at all levels and in all functions. Six Sigma offers a structured method to improve performance. Its methodology is based on established statistical process control techniques, data analysis methods and systematic training of all personnel involved in the activity or process targeted by the program. Six Sigma is a well-structured, data-driven methodology for eliminating defects, waste or quality problems in manufacturing, service delivery, management and other business activities. Ideally, Six Sigma is based on customer knowledge and accurate performance measures of the core processes that fulfil those requirements. Understanding what the customer considers "critical to quality" is a cornerstone of any successful Six Sigma initiative. The link between Six Sigma and business process thinking often determines the span and depth of performance improvements. Both incremental business process improvement and Six Sigma are intended to develop focused solutions to eliminate root causes of business performance problems without radically changing existing processes or organizational structure.

### What is Orthogonal Array

Orthogonal Array is a DOE method of choosing a set of tests from a universe of tests, to make the testing efficient

and effective. It is based on creating Parameters (control Variables) and Levels (values) for the parameters, which are the inputs to testable functions [5].

There are different algorithms to choose the parameters and levels from the universe of available values. One such method was proposed by Dr Taguchi. This white paper also deals with the OA method what Taguchi has suggested [7].

The quality engineering methods of Dr. Taguchi, employing design of experiments (DOE), is one of the most important statistical tools of TQM for designing high quality systems at reduced cost. Taguchi methods provide an efficient and systematic way to optimize designs for performance, quality, and cost. Taguchi methods have been used successfully in Japan and the United States in designing reliable, high quality products at low cost in such areas as automobiles and consumer electronics.

### The Taguchi Approach

Taguchi suggests five major steps in the designing process. The steps take the test team from formulating the test problem to creating a good test design and refining the test design.

The steps are as follows:

- Formulate the problem
- Plan the experiment
- Analyze the results
- Confirm the experiment
- Adopt the new design
- Taguchi's approach focuses on the first two steps since they are very important.

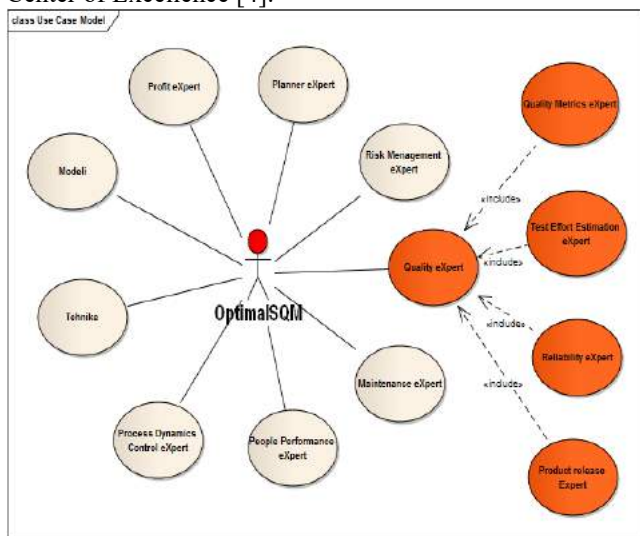
### 4. DOE AND SIX SIGMA IN OptimalSQM SOLUTION BENEFITS: CASE STUDY

Although the development cost was very important, quality, lead-time, and delivery precision were considered as the most important factors. Therefore, an evaluation of what effect the implemented concept had on these factors of Quality-Based Return-on-Investment, using Cost Benefit Analyses, was of interest. This paper satisfies these objectives by designing, constructing, and exercising a multi-part methodology consisting of a Defect Removal Model, Cost and Benefit Data, Return-on-Investment Model, Break Even Point Model, and Costs and Benefits of Alternatives, which all lead up to a Cost and Benefit Model. Testing software product effectiveness can be improved by testing all possible combinations.

A Software companies are often challenged with providing QA and testing of their software in an effective and efficient manner. What a QA staff and project management must do to make software quality more certain? They must have adequate software project management and test management infrastructure such is Optimal Software Quality Management (OptimalSQM) Framework depicted in Image 3. OptimalSQM Framework consists of a Business Intelligence Service



Architecture with integrated Software expert tools (Profit eXpert, Planner eXpert, Risk Management eXpert, Quality eXpert, Maintenance eXpert, People Performance eXpert and Process Dynamics Control eXpert) in order to find optimal development activity combination at the beginning for every SDLC model. OptimalSQM solution is an faster, better and cheaper solution which enable software designers to achieve a higher quality for their design, a better insight into quality predictions for their design choices, test plans improvement using Simulated Defect Removal Cost Savings model as we described in this paper. In this paper we described OptimalSQM Framework Architecture, proposed a set of components which enables to minimize the cost of switching between test plan alternatives, when the current choice cannot fulfill the quality constraints. The OptimalSQM Framework Architecture solution is a Software Testing Center of Excellence [4].



**Image 3:** Optimal Software Quality Management (OptimalSQM) Framework [WSEAS2011]

BISA should be seen as an SDLC service-oriented, knowledgeable cluster of an ecosystems that bring together business entities they need SDLC services either as alone or grouped actors. These business entities may act as software artifacts tending to establish specific B2B relationship asking for the specific SDLC BISA service or people that act in a P2P environment via many of social network opportunities. The important facet of this proposal is a motivation. In addition to general agreement that an SDLC must be applied to any software project, there are several facts that also drive a motivation. They are, but no limited to, grow of service-oriented software, the current absence of SDLC frameworks that meet SEI CMM for services, etc.

### The B(Business) facet of BISA

Business appearance in the BISA name comes from several reasons as follows: (1) all offered SDP services are treated as business processes, (2) there is an e-invoicing system there, (3) all communication between services and customers are B2B transactions of various kind and finally (4) the framework is intended to be an SDP for SMEs.

BISA is a SOA based on SaaS paradigm consisting of several expert tools as follows: Profit eXpert for investment benefit evaluation based on economical parameters mentioned above; Planer eXpert for analyzing different scenarios for project realization based on estimation models, software volume and complexity prediction, development and testing duration, in order to choose the best scenario for the project realization; Risk Management eXpert together with Profit eXpert provides software development and testing managers ability to identify and estimate effects and to reduce risks on a acceptable level.

The role of Quality eXpert is to integrate specialized software tools on demand (Quality Metrics eXpert, Test Effort Estimation eXpert, Reliability eXpert, Product release eXpert), in order to provide software managers with the ability to build appropriate software quality metrics, automate software process, etc. based on the same parameters that are used by Planer eXpert.

Maintenance eXpert should provide service to software managers with the ability to plan and estimate costs of corrective, preventive, perfective and adaptive software maintenance. As emphasized previously, the development of quality software is very complicated and unreliable task, but the management of software development and testing (with more than 100 variables) is much harder without appropriate software environment. From that point of problem, Dynamics Control eXpert should allow identification observable and controllable variable for a given software project and to establish reliable and optimization criteria for every phase of SPD-SPT, as well for the whole software process.

Finally, People Performance eXpert takes care of human resources on a software project in order to track and improve their professional skills. Our intention is to ask customers using e-form questionnaires that will collect necessary data.

It is estimated, based on current published research results (during almost 10 years of development, implementatin and experimentation), that three years of proposed software environment deployment with integrated software tools will result with ROI of 100:1, comparing with existing SPD-SPT infrastructure of software companies that have achieved CMM and TMM maturity of the 1 and 2 level [4-6].

### The I (Intelligence) facet of BISA

BISA intelligence comes from several knowledge bases (KBs) that are maintained and updated every time when new customers entering the system as well as when some testing service is used. There are two groups of such KBs, one take care of software engineering matters, whilst the other group is dedicated to support business communication between BISA and its customers and/or

collaborators.

### **The S(Service ) facet of BISA**

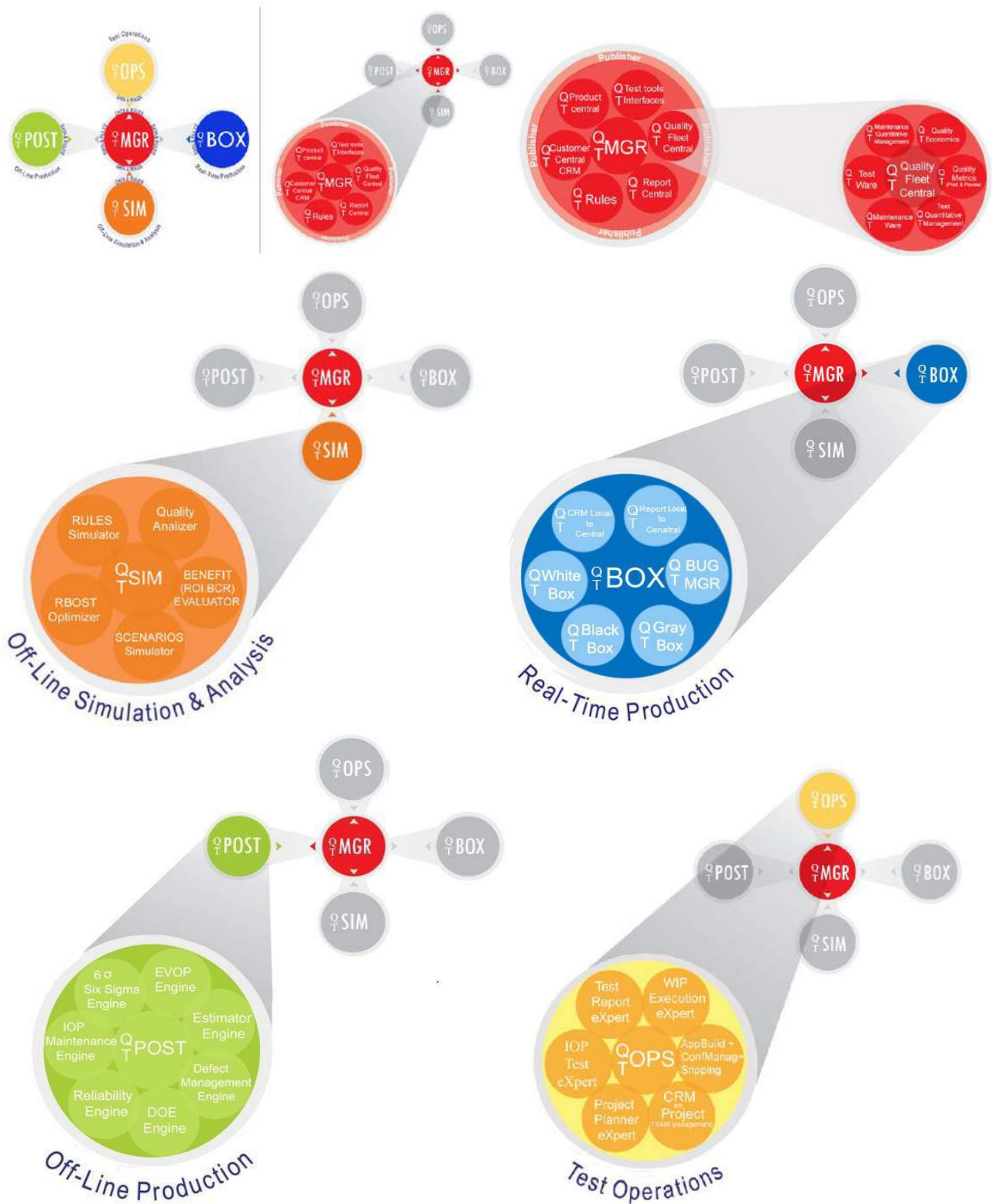
BISA itself is service-oriented architecture intended to serve both, the non-service and service-oriented software projects. For the latest, the leading guide is the SEI CMM for Services. Service operations are managed via service bus that is based on modified version of ESB standard.

Another important aspect is loosely-coupled principles of services. All connections between SMEs and BISA software are establishing on demand via public parts of their either software or business processes, thus the private parts of both parts remain transparent.

BISA kernel should be unified, coherent, balanced and improved version of OptimalSQM, providing the full service spectrum that satisfy the highest maturity level (4 and 5) of SPD-SPT according to SEI CMM and TMM methodologies. Here is short description of BISA concept level. BISA consists of 5 components - MGR, OPS, POST, SIM and BOX, available as a comprehensive suite of test management solutions or modularly, as building blocks as shown on Image 4. However, it is very difficult to test all possible combinations; many a times it is impossible. So the other way to improve testing

effectiveness is through automation. Both the processes require high testing cost and time. There are solutions to this pain area using the famous Six Sigma methodologies which provide tools like Orthogonal Arrays (OA).

Orthogonal Array and ideas from the Design of Experiments (DOE) help in improving the Software product testing. This paper introduces Orthogonal Arrays, explains the process of using OA concepts to improve the testing process. OptimalSQM solution implemented IPS in a systematic procedure for resolving tough technological problems, enhancing system parameters, improving quality, reducing cost, etc., for current generations of products and technologies such as CMMI. A key ingredient in our recipe for success was the implementation of a Process Improvement Support Group, including the Metrics Analysis Group (MAG), which was trained in CMM/CMMI concepts, measurement and analysis techniques (including statistical process control) and process change management. In particular, the MAG's tasks were to support the definition of measurement and analysis models, develop tools (or modify COTS development products) that supported the measurement collection process and perform and/or support the analysis of data at both the project and organizational levels.



**Image 4?:** BISA main software components (MGR,OPS,POST,SIM and BOX) and their sub- components [4]

## 5. BISA FRAMEWORK BENEFITS OF SYNERGY BETWEEN QFD, TAGUCHI, SIX SIGMA AND TRIZ

In our work [6], we propose a strategy for optimization of action plans in an organizational test process by applying design of experiments to the TMM assessment procedure illustrating this strategy with three industrial case studies of software companies assessed at CMM Level 5. TMM

is the representative test process maturity model supporting step-by-step guidelines for the improvement of organizational test processes. In this case, the success factor of process improvement relies on the way in which an organization uses specific methods. We suggest statistical verification of the effectiveness of actions improvement. It could be accomplished through the test process assessment procedure by applying Taguchi approach [7], and Box-Behnken design experiments under Response Surface Methodology systematically varying

different software sizes and application domains in order to find parametric equation for cost of quality (CoQ) related to Defect Removal Efficacy (%DRE). It was noted that maximization of %DRE does not mean CoQ minimization. Validity of the experimental analysis by means of Taguchi approach and Box-Behnken design experiments under Surface Response Methodology systematically varying different software sizes and application domains may not be applicable in innovative projects with lack of domain knowledge on the new technology, environment and new programming language and projects developed with dissimilar platforms.

Our strategy has several benefits. First, it supports the selection of the best solution among alternatives. It makes test process improvement more effective by adopting the best solution that suits organizations. For example, data shown in Fig. 1 present „as-is“ state of an real project test effectiveness %DRE=94.3% and CoQ=2,717.6 [cu] which can be improved to „to-be“ state, applying best in class techniques presented in Table 3, improving %DRE to 96.63% and decrease CoQ to 2,031 [cu]. This result is impressive, only 2.33% increase of %DRE decreases CoQ for ≈34%.

Second, it enables measuring feasible risks before organizations implement actions, so that they can minimize risks in advance.

We are currently implementing this model in our organizational metrics tool and we hope that we will collect and analyze actual project data to gain better understanding of the issues raised in this paper. We also need to evaluate our model for different data samples, and examine a wider range of weighting functions. We implemented [4], many of the techniques described in J. McGarry, D. Card, et al., Practical Software Measurement, Addison Wesley, 2002, and D. Card, Defect Analysis, Advances in Computers, Elsevier, 2005.(See next Image for Test measures and Metrics).

Testing Measures & Metrics	
Measure	Metrics
Test Process Efficiency	<ul style="list-style-type: none"> <li>Process Compliance</li> <li>Resource Allocation and Utilization</li> </ul>
Test Productivity	<ul style="list-style-type: none"> <li>Schedule Variance</li> <li>Effort Variance</li> </ul>
Cost of Testing	<ul style="list-style-type: none"> <li>Direct Cost</li> <li>Indirect Cost</li> </ul>
Test Coverage	<ul style="list-style-type: none"> <li>Requirement Coverage</li> <li>Code Coverage</li> </ul>
Test Effectiveness	<ul style="list-style-type: none"> <li>Residual Defect Density</li> <li>Defect Distribution (Severity)</li> <li>Defect Rejection</li> </ul>
Test Transformation	<ul style="list-style-type: none"> <li>Automation Ratio</li> <li>Onsite-Offshore Ratio</li> </ul>

**Image 4:** Test measures and Metrics

Finally, our work [6], presents and validates a method for measuring the efficiency of the software test process to achieve early and cost-effective software fault detection. That is, it determines how fault statistics can be used for assessing a test process and then quantify the improvement potential of changing the process. The

described method assesses a software development organization through the following three steps:

1. Determine which faults that could have been avoided or at least found earlier, i.e. FST.
2. Determine the average cost of faults found in different phases.
3. Determine the improvement potential from the metrics obtained in (1) and (2), i.e. measure the cost of not finding the faults in the right phase.

The practical applicability of the method was determined by applying it on two industrial software development projects (see Images 5 and 6 for result illustration). In the studied projects, potential improvements were foremost identified in the the largest improvement potential is in the LL Design test phase, i.e. the phase triggered 30661 [cu] of unnecessary costs in later phases due to a large FST from faults injected in Requirement phase. Therefore, the primary usage of the values is to serve as input to an expected ROI calculation according to given formula, when prioritizing possible improvement actions we can improve DRE cost for ROI=39.2%. That is, the LL Design phase inserted, or did not capture faults present at least, too many faults that slipped through to later phases.

Net savings are calculated using this formulae:

$$NS = FST_{r \rightarrow P+1} * (CM_{r \rightarrow P+1} - CM_{r \rightarrow P}), r=1..6 \quad (1)$$

for the given large (~11300 FP, Java implementation about 600KLOC of source code) project example, for original data of process defect removal effectiveness is given in Image 5, and two Scenarios 1 and 2 are shown in Image 6 and Image 8.

DEFECTS			FOUND IN PHASE :							
↓			P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	P <sub>5</sub>	P <sub>6</sub>	P <sub>7</sub>	
			Requirement	HL Design	LL Design	Code (Unit test)	Integration/ System test	Acceptance (User test)	Operation Post - release	Total Injected in phase
PHASE INSERTED :	P <sub>1</sub>	Requirement	1515	602	579	402	391	89	0	3578
	P <sub>2</sub>	HL Design	0	805	400	60	223	60	0	1548
	P <sub>3</sub>	LL Design	0	0	750	452	420	54	0	1676
	P <sub>4</sub>	Code (Unit test)	0	0	0	2421	1895	114	0	4430
	P <sub>5</sub>	Integration/ System test	0	0	0	0	45	5	0	50
	P <sub>6</sub>	Acceptance (User test)	0	0	0	0	0	10	0	10
	P <sub>7</sub>	Operation Post - release	0	0	0	0	0	0	0	0
		Number of Defects found and removed in phase	1515	1407	1729	3335	2974	332	0	11292

**Image 5:** Original Software Process Defect Containment Matrix [6]

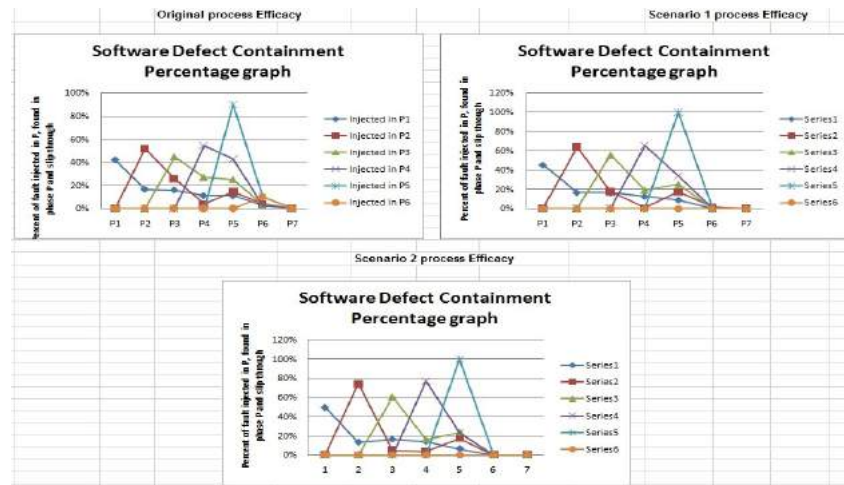
Improvement of original project data given in Image 5 (**Note:** original Defect Removal Efficiency [%], shown on Image 5 is less then Standard quality assurance activities plan (Scenario 1) and comprehensive quality assurance plan (Scenario 2) is realised through feasible series of experiments: software test method, field test, through simulation, or through a combination, which represent test scenario (in our case Scenario 1 with and 2) i.e. sequence of test events.



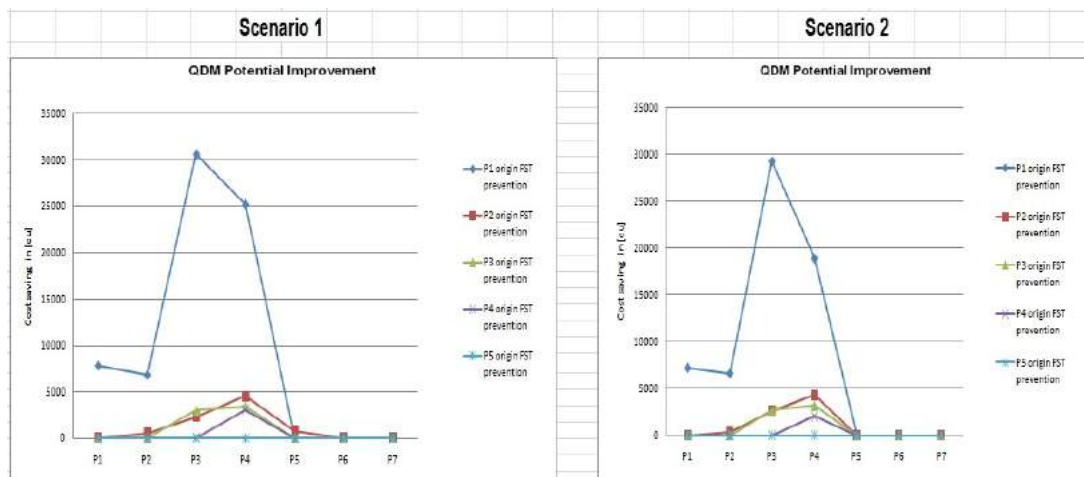
## ACKNOWLEDGEMENTS

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**Image 6:** Calculated Defect Containment Percentage Matrix – for original and anlized scenarios 1 and 2 [6]



**Image 7:** Graph with calculation of Improvement Potential in cu - (IP) for Scenario 1 and 2 [6]

## 6. CONCLUSION

In this article we described a proposed sinergetic use of DOE TAGUCHI methods i.e. Software Quality Improvement using DOE Taguchi Methods to analyze, extract, and eliminate contradictions and harmful effects and generate innovative solution concepts to make better, faster and cheaper software development process is explained. A proposed sinergetic use of TRIZ, Six Sigma methodology, QFD and DOE TAGUCHI methods helps to develop a set of best practice models and techniques integrated in our optimized and quantitatively managed software testing process (OptimalsQM)..

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#### THE ETHICAL ASPECTS OF ADVERTISING AND ITS INFLUENCE ON CONSUMER BEHAVIOR

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**Abstract:** *In the field of contemporary marketing the biggest number of ethical dilemmas appears in the domain of advertising the products and services. The ethical conflicts of advertising actually always come from dualistic nature of this process: from one side, it is necessary component of competitive market system and business in free society, and from the other side it is communication with the hidden interest, with final aim to sell goods or services. Ethical problems, in this domain, may appear in different forms, as: deceiving advertising, comparative advertising, hidden and subliminal advertising, controversial advertising.*

**Keywords:** *advertising, ethical aspects, consumers' behavior, different forms of ethical problems and dilemmas*

#### 1. INTRODUCTION

Ethics in business purports all the ways of ethical business behavior, from strategic decisions to behavior to customers and suppliers, i.e. moral principles and values which determine behavior of the individuals and groups inside the organization. Within it marketing ethics can be abstracted and it purports the respect of principles, values and the standards of marketing vocation.

A specific field of marketing communications open numerous possibilities for ethical problems which, in this domain, may appear in different forms. One is the openness in advertising, which is important in the docketing and marking the products. Very often it happens that the producers emphasizes that their products are something which later proves to be untrue or effusive. (For example, products which has the title where is written „no sugar“ are very often the products „with no sugar added“, which may mean a remarkable difference and cause health problems to consumers which must not consume sugar in that condition.)

Each kind of exaggeration in promotional messages, assuring in lies, or any kind of deceiving the consumers are tough injuries of ethics. Untrue or confusing marketing message with problematic tactics in public relations or promotion of sale and similar forms of abuse of marketing tools are non-ethical and so harmful for the company and the product. In the advertising, the companies sometimes use false facts and certificates, while exaggerations in praising, hiding the important facts, ambiguous and unclear assertions are found very often. The last mentioned are used by companies with the aim to secure themselves in advance in case of any kind of prosecution.

#### 2. ETHICAL PROBLEMS CONNECTED TO ADVERTISING

The art of propaganda, i.e. persuasion is as old as the human civilisation. However, in the period after The Second World War the term marketing industry - advertising actually appeared. The development of contemporary advertising, propaganda activity in the sphere of economy is tightly connected with the development of modern industrial society, which is

orientated to the production of goods or services and their placing to market.

Owing to development of means of mass communications, the marketing industry, that for many, such a banal phenomenon in the beginning, which essence is as Tabrućin says “noisy and snazzy advertising” and whose etimological root is in Latin verb *clamare*, which means shouting, suddenly became a subject of manifold debates and abjudications, because it has been noticed what power it possesses and what potential danger for the various abuses it contains in itself. [1]

The biggest number of ethical dilemmas in the field of up to date marketing appears in the domain of advertising the products and services. It is completely understandable, with regard to the catholicity of booms, their media and public importance and influence on the huge number of people. Only in the USA, there are more than 6.000 of advertising agencies, from which many employ several thousands of people, with the total budget which amounts more than 200 milliards of dollars for a year. [2]

Immediately we can ask a question who pays the booms expenses. In final instance, the expenses of advertising pays a customer, by paying the goods he/she has chosen. But what exactly does a buyer get for the money he/she spends? By general opinion he/she gets very little. According to some research 66% of the consumers believe that advertising does not lessen the prices of the goods on market, 65% consider that, because of the booms, they buy goods that they truly do not need, 54% believe that some of the booms insult their intelligence and 63% of the citizens believe that booms do not give the true information. [3]

Really, it is justifiable to ask if advertising is spending resources or it really has the useful market effects? Does it harm the interests of the consumers or it helps them to make free decision on market?

Immediately it should point out that a part of the problem which impose advertising can not be consider an ethical question when we take it in strict sense. Many of the marketing campaigns are a problem of good taste, not a moral. Let us take for example a boom for selling the automobiles on leasing, which has appeared on billboards in many cities in Serbia: a girl licking the roof of the luxurious automobile with the text “Leasing to a good taste.”

But anyway, the deffenders of the marketing industry see things in totally different light. They emphasize that a boom is before all other, a way of communication, which basic task is to supply the consumers with the useful information about the products.

Commercial advertising is very often defined as a form of information, and an advertiser as a person which gives the information about the product. However this definition is not that precise, because it does not make the difference between the advertising and objective market reports which make comparisons, tests and objectively value the

quality, safety, durance, reliability and usefullness of the different products on market. A study made has showed that close to a half of television booms actually do not give at all any objective information about the product. As Vance Packard emphasises in his study *The Hidden Convicers*, the shoe sellers do not sell female shoes but they sell “nice feet.” A publicist Franck Runny has added to that: “Now people do not buy shoes so that to have warm and dry feet. They buy them because thay feel manful, womanly, rough, different, elegant, young, attractive, modern. Buying shoes becomes an exciting event. Now, we have a task – to sell excitements not just shoes.” [4]

Soul of the boom has a promise that you will be more beautiful and better if you use a certain product. Such a description of advertising may draw attention actually to ethical dimension of boom: does boom should promise that what it promises, and does it fullfills the promises? One of the rebukes in the debates about the booms shows that they impose one-dimensional materialistic view on the world. As the booms necessarily allege to the consumeristic values, consumeristic view on life, people under their infleunce forget their other needs and the ways of selfrealisation. However, it is a big question how much the booms create the consumer’s mentality and the system of values and in what measure they just express and use set up hierarchy of social values and models of life.

The boom, besides the informing, has also propaganda dimension, a task to adduce potential buyer to come into a business relation. Convincing that something should be done, to buy or to sign a contract to certain behavior, easiliy turns into seduction, even into imposture and manipulation.

The ethical conflicts of advertising actually always come from dualistic nature of this process: from one side, it is necessary component of competitive market system and business in free society, and from the other side it is communication with the hidden interest, with final aim to sell goods or services. From the point of view of wider social perspective, marketing brings about spread of human freedom, and it boosts the scope and spectra of choices, enabling the customers to satisfy their needs and wishes and so in final instance to improve their quality of life. As Jack Machoney rightly notices, when the citizens of eastern Berlin, after devastation of Berlin Wall 1989, with the eyes widely open, rush into splendor of the western part of the city and its glittering shop windows, they have become aware of complete poverty in choices and uneasiness in which they lived and worked, not only in economic, but also in human sense, from which they have just started to liberate themselves. [3] Anyhow, this positive aspect of the boom must not daze us so much that we do not see its other side and its often abuse.

The debate of ethical aspects of advertising may be steered on three themes:

- social aspects of advertising;
- creation of consumers’ needs;
- the influence of booms to consumers’ assurances and values.

With the discussion of these themes it should point out once more that a primary function of booms is not giving dispassionate, objective data about the products. The primary function of advertising on market is to provide sale of products or services, and the informational content of the boom is only one of means so that this function can be realized.

Advertising can really be considered a specific communicational process between the producer and the potential buyer. Two characteristics distinguish this process from other forms of communications. Firstly, as opposed to private messages sent to individuals, booms are sent to mass public and so they have wide and mighty social influence. Secondly, booms are directed so that to have influence on different members of society for the purpose of buying certain products.

So as boom would be successful, wish is created in consumer's head or it creates the belief that product in boom is the best way to satisfy his/hers needs. So in the process of marketing, language is very often used metaphorically. In the boom for gas stations *Esso* "Esso puts a tiger in your tank", nobody reasonable would not expect that on gas station a tiger would be put in his/her tank! Anyhow, even the esthetic dimension of advertising may be a mean of manipulation.

Specially ethically problematic ways of advertising are as follows: the deceiving advertising, comparative advertising, hidden and subliminal advertising and controversial advertising.

### 3. DECEIVING ADVERTISING AS AN DISPUTABLE WAY OF ADVERTISING

As advertising is a form of communication, it can be honest or false, as well as the other communicational phenomena. A deceiving advertising can be defined as the "advertising which cause delusion or it is possible that it will cause it at the persons to which it is directed, so it is possible that, that advertising influence the economic behavior of people to whom it is directed, insult or it is possible that it will harm the competitors on market." Although deceiving advertising is not allowed, many of the advertisers are somewhere in between that which could not be treated as deceiving advertising, and not forbidden explicitly by law. [5]

The deceits in marketing may have various forms. Boom may deceive in regard to the quality of product, use untrue testimonies of consumers or experts, use the word *guarantateed* in situations where nothing is sure or guarantadeed, announce lower prices of the products than it is on real sale, avoid to signify that product may have damaging effects, untruly present the products of other companies, etc.

A long ethical tradition criticize marketing deceits because of the fact, that they threaten the right of consumers to free choice, as well as because of the fact that manipulative forms of boom threaten trust in all kinds of advertising, even in the other forms of public

communications. So the central problem is not anymore why advertising is morally forbidden, but the way it becomes deceitful, false, irresponsible.

Each communicative phenomena includes at least three basic elements:

1. author or source of communication;
2. the communicational chanell (media) which carries on the informations;
3. the recipients of information or public.

As advertising is form of communication it implies three conditions:

- author must have the intention to cause untrue belief to public,
- author must know that the message he/she caries on is false,
- author must consciously do something that would lead public to believe in lie.

The consumers are already used to that, that the washing powders do not wash so goodly, as well as the creams are not so effective as in the marketing booms. In the situations of the possible deceitful advertising, there is a problem how to assert if some marketing spot or a message are deceitful and who should identify that. Maybe some products are very effective in controlled and laboratory conditions, while in praxis it is not so. Where is the boundary between deceiving consumers and not doing it?

Independent British regulator for advertising, promotive sale and direct marketing, *Advertising Standards Authority*, has estimated that marketing spot for Pantene Pro-V shampoo and hair balsam, where it is asserted that by using these products hair become even ten times stronger, must be changed, because it deceives the consumers, whereas this mentioned assertion is not based on scientific proofs. [6]

These regulators in Serbia do not exist, so it can be suggested to the consumers a lot of, which is not scientifically based, by advertising.

### 4. COMPARATIVE ADVERTISING AND ITS CONSEQUENCES

The comparative advertising is very often an obvious example of breaking ethical rules and the rules of correct market match. It mostly appears in advertising of competitive products of different producers, and so in the form of direct answer to the campaign, advertising messages of the competitors or characteristics and features of the competitive product. By definition, comparative advertising is each advertising which, with the aim of promotion of some product or service, directly or indirectly relegate to the competitor on market, directly or indirectly refers to the competitor's product or service. Yet, connected to this sort of advertising, there are some assumptions according to which it can be allowed in most cases, but in this type of advertising, an ethical question can be posed. [7]

In the mid of 90<sup>th</sup>, American television company *CBS* emitted marketing TV commercial of the popular producer of the automobiles *Ford*. In the TV commercial big and monstrous automobile, which is used in car races around the whole USA, with its huge tyres has stuck down to the car body crosses over two parked cars (literally it “tramples” them). One of the cars is mark *Ford*, and the other is *Crysler*. As it can be supposed the car body of the mark *Crysler* immediately yields and breaks into pieces, while the car body of *Ford* stays untouched. At the end the suggestive voice of the speaker tells the advantages of buying *Ford*, with the accent on safety and solidity of the mentioned mark. [8]

These examples can be characterised as the ways of disloyal competition, which in some cases may result with a longlasting process on court with a high recompense requests. Still, with the just adjudge, done causes damage which is incorrigible; for example, if TV boom is in question, that boom by emitting is seen by millions of people, by which strong propaganda influence is accomplished, with the aim to openly discredit the competitive company, which is in the case achieved. This method of struggle is taken from another mighty media, and it is newspapers, where disinformations are on the title page as the most important and striking, while dementi usually appears with delay or on the tenth page, by tiny, not striking letters, but the legal form about the freedom of expression and right to deffend is satisfied.

There are many similar examples in bussiness practice. Sometimes it happens that assignment of determined competitor and direct comparison to him/her or his/her product cause a real marketing war, with no end. It is interesting that in USA, it is permited a sort of disloyal competition if the “attacked” producer is leader on market, and the “assailant” is on the second position on market, and of course the second is with leading ambitions.

Bout between the companies *Coca Cola* and *Pepsi* lasts long, and they constantly war with the aims of accessing new markets, mainly in ex comunistic coutries, on Middle East and in Asia. In TV commercial of the company *Pepsi* a boy puts the coins in automat to buy two *Coca Colas*, on which he after stands on them, so that to reach button which is little higher on automat, beside the name *Pepsi*. Is the reason of the spot answer of the company *Coca Cola* where on Jesus “*Last dinner*” all drink *Coca Cola* instead of Judas who drinks *Pepsi*? [9]

The comparative advertising is allowed “if it does not make confusions on market in view of relation of the product or service, which is advertised, and the competitive product or service, as well as “if it does not relate to product or service that are advertised as imitation of product or service with trademark or brandname.” [8] On the basis of just quoted it may be told, that it is not allowed to copy or imitate competitive mark and in that way create confusion among consumers in view of for example visually similar, but different products made by different producers.

Despite that, each mark which is leader on market is in constant danger from various types of copying. Mostly it refers to copy od certain visual identity of the mark, by which consumers think that it is known, established mark, and not its newcome competitors. When *Somboled*, whose products are now under ownership of the companies *Dukat* and *President*, launched tha campaign for their chocolate milk, many of the consumers, when they have seen poster for the mentioned product, have thought that they see *Nestle Nesquick*.

In such cases, the companies which are leaders on market, very rarely choose to put suit, because that are hollow wars in advance. Organizations in whose possession are most of known brands, which in the world struggle with different imitators, find difficult to prove imitation. Very often formally and legally the whole “game” is, how much elements of the mark are copied. Despite shifty playing with law, such actions can not be treated as ethical, because the main aim of the imitator is to try simply to live on the account of the leader.

## 5. HIDDEN AND SUBLIMINAL ADVERTISING

The advertising can be treated as hidden, when it is not directly noticed and very often it is related to biased, uncritical, and with some reasons motivated presentation of the company, product in newspaper’s addendum, TV series, etc. Even though the form and the content of information which is not newspaper’s addendum must present unambiguously that it is not a promotive message, a paid advertisement, or a public statement, in practice it is usually not so. A hidden advertising seduces and in a way it cheats the readers and the public, which presume that success of a certain company or product, that is mentioned in the newspapers, broadcast or for example in the news and it is absolutely true according to the diarian standards. By this action the other producers are discriminated, which are not mentioned there, and also it is unethical way of acting on the consumers which do not expect it is something advertised, so having influence on them is easier.

Hidden or veiled advertising erase boundaries between an ad and the content, and so it can be very effective. In domestic TV series today it is very often seen that the main actor drinks Grand coffee or Nectar juice, while beside his chair lies a bag of Merix washing powder. By the popular American series “*Sex and the City*”, the products like vodka *Absolut*, *Prada* clothes and the shoes of Manolo Blahnik, which has gained worldwide glory and cognisance, are promoted in that way.

The aim of this is that a consumer gets used to seeing the products, so it is assumption that he/she would like to buy them.

The examples of the hidden advertising may be found in various media, and also in a new model of play games. Many products are found in form of background mega-advertisement or logo, or even as component of the scenario of the game. The gamer may choose mobile

phones, the food in the chains of fast food, the vehicles, which are composed of the parts of famous vehicles companies.

Many forms of the hidden advertising are, also, on the Internet, and the one of them is advent of the certain web pages of companies or products on browsers, where users browse, by writing key words. These web pages appear on the found among the first found pages, to which users come by typing key words. So consumers see them willingly or unwillingly.

Connected to the hidden advertising is also term **subliminal advertising**. This phenomenon, which is more and more immanent in commercial advertising of the various brands, companies, and which is based on usage of subtle signs and messages, which we do not consciously notice. In subliminally advertising, the messages under the conscious observation, are emitted at the same time when some other content is emitted. In that way the authors presume, that a subliminally message is carried unsciously and successfully.

It is about the ads which are emitted in shops, on radio, TV and other media in such a way where watchers and listeners subconsciously receive messages, and they are practically not aware of it. For example: a content of some photo that goes too fast, that we do not perceive it consciously, but subconsciously yes. Here when we talk about subliminally concept of chafe, we should know about natural phenomenon of the tardiness of eye. Anatomically and physiologically eye is limited to notice the information which appeared in very short exposition and carry it on to higher cognitive centres in our brain where it would be processed and have its meaning.

Though we do not see or hear the emitted message, the psychological tests have proved that we perceive its content and that influence on our behavior strongly. The question of ethical correctitude is in that, due to unconsciousness of a consumer, that a certain advertisement is imposed to him/her.

So, for example the name of a product appears on the screen, cosmetics or some sort of drink and the quest for it grows. Or if it is printed on a paper beside the picture of a brand "Buy" or "Do not buy". Also some supermarkets put the message "Do not steal" on the tape and it plays with music the whole day. Even, when the sense of the message is not morally arguable, it is obvious that immoral technique of marketing influence, where we do not have conscious control over the content of the message and it could be easily use on the purpose of manipulation.

## 6. CONTROVERSIAL ADVERTISING IN PRACTICE

In the end, there are companies which create advertisements and create campaigns that are controversial and they could not necessarily be accepted, and usually they are not from a great deal of consumers. It happens

that certain consumers, even because of specific way of advertising do not want to buy only a product which is advertised, but also any other which is advertised. Anyway, there is a question why such companies want to hurt somebody's feelings, to come into their human and moral principles and to harm ethical maxims of the people, but also there is an answer – they want people to notice them. Such way of advertising is in the world called "shockvertising" and their aim is to show to the consumers that nothing is that sacred, to provoke people and to cause different reactions like: anger, detestation, fear, etc.

Among the most famous companies that use such way of advertising are the producers of clothes: *Benetton*, *Calvin Klein*, *French Connection United Kingdom* or *F.C.U.K.*, which plays with its name, as well as the American icecream producer *Haagen Dazs*, which is famous with their advertising, because in the booms the icecreams are combined with the elements of sex. The companies, besides all else, do this to win media attention, because they consider that "bad marketing is a good marketing" and there is "no such a good thing as a bad publicity." [10]

In scientific and media circles, there are debates about the problems and the examples of sexist advertising, where female body is used in an ethically inappropriate way. Although in some circles there is such an opinion that sex is an interesting appeal, which besides the aim group may draw attention of larger number of people, the question is why it should be advertised in such a way. There is a big number of products and services, whose image may be destroyed with such advertising. There is a lot of messages, which explicitly show even the sexual act itself, and the public ask rightly, where is the end to that!?

Very often a female body is used in the booms connected to automobile industry, which are products traditionally advertised for men. But it should not be forgotten that today women are also buyers of the cars, so it is right to ask a question about the point of such advertisements, because it may lessen wish and attention to certain percent of population to buy that product. In newer times it is mentioned also the regulation of advertising, which may be caused with women, that braid of different anorexical models and retouched perfect beauties, shown on posters and in the advertisements.

Also, the parents of little children often complain, that their children are discovered to these messages, so the problem is also that, that these messages are not limited to specialized media, but on the contrary, the youngest population are surrounded with them from all sides. Internet, media that is very popular among the children and young population which know about virtual world very much, abound with contents and advertisements, which are not designed for them, but could be found by them very easily. That problem is tried to be solved with the offer of special computer programs with the aim to protect children from the inappropriate meat.



Let us mention also the example of the company *Benetton*, which with their advertisements often carries on the political messages and the reality shows too much realistically or extremely in the greatest degree. Many times there were debates about the ethics of that company: when they put a black woman breast-feeding a white child on their posters, an african bushwhack holding Kalashnikov and the human bond, a ship full of refugees, a girl with bruises on her face, a new born baby in blood with the umbilical cord, the patient which dies from AIDS, a nun and a clergyman kissing, bloodstained and dirty army uniform, or the prisoners sentenced to death, from which the posters they were took to the court for cheating, because they came off to the photos and interviews using fake methods.

Such behavior is in many countries regulated and limited by law. In America the regulation of advertising industry has started in the 1980<sup>th</sup>. In Sweden has been brought the law in 1987<sup>th</sup>, where it is forbidden that both women and men be shown as objects. In Great Britain each advertisement's message is controlled before it becomes public, by *Ethical Comitee* of state association of all participants included in communication and they give the permission. Without that permission it can not come to media. In Italy there is an *Institute for public self-discipline*, which recently has banished one of the campaigns for clothes of the company *Benetton* where two men kiss each other and hold each other for sex organs. [11] The creator of this photography is an Italian photographer Oliviero Toscani, the author which has created the most of *Benetton's* posters, and who oftenly provoke the publicity, by derogating the social norms.

There is no doubt that company *Benetton* because of its method of advertising has been the subject of speech of many, but an open question is how much it has helped them in reality in their bussiness. Such a way of shocking advertising may amuse somebody, or insult the other and the companies which use it must be ready to various reactions of public, certain sanctions and possible negative publicity, which may result in their market sale.

Advertisers sometimes do not take care that by playing with photos, inscriptions, slogans and messages they insult, exploit, discriminate or provoke some groups of people. We can ask a question: why companies use such advertising in spite of all negativities that follow it? Aside from that they want to get the image of the company that consciously play with the written and not written rules and norms, they want to be creative and to draw consumers' attention.

Statistics say that today people are imposed to more than 1.500 ads, and the studies show that they memorize three or four. As people ignore the most of informations to which they are imposed, it is supposed that they will notice that one that rebounds from the others. The same is with memorizing. It is considered that people remember the informations that support their attitudes and beliefs. These advertisers hope that the same effect they will gain with the advertisements that people totally disagree with or appaled to. That the public does not share their opinion,

showed the case with *Benetton's* posters of prisoners sentenced to death. Because of it American state Missouri sued them, and American sale's chain *Sears* threw out their goods from the 400 shops, where their clothes was sold. [12]

## 7. CONCLUSION

As marketing in its essence is the form of mutual communication, i.e. marketing is one of the most important form of market communication, whose aim is to connect producers of goods and services with the potential buyers, so it is not unusual that in that communication many ethical dilemmas appear. That ethical dilemmas appear as with the consumers also with the competition. One part of marketing activities is in that zone of activities of corporations, where morally disputed behavior is sometimes tolerated, because it can sometimes bring some advantages on market. In general market competition, very often there are temptations to manipulate with market and to gain success even if not by unlegally, then by morally disputed means. The ethics of marketing work on that dilemmas and forms of manipulation.

That ethical demands go further from the demands of legal regulatives and they regard all bussiness decisions, deeds and activities. In everyday bussiness work marketing experts meet the situations in which they ask themselves what is right to do, even if they take certain activity which is not illegal nor break the rules of the company. The morally problematic situations are considered ethical dilemmas in which question is asked, would it done be equally good for all the included, and is it really a good deed to be proud of and should we praise it.

People mostly feel the difference between regular and irregular business behavior, regardless if that is regulated by law or not. Legal notions very often can not predict all the situations that may occur. The most often, the laws are brought as reaction to existing non ethical bussiness behavior. By determining the boundaries that should not be crossed and nurturing the ethical behavior, marketing experts should follow the known *golden rule* which tells about that we should behave in a way we expect the other would behave to us. We can add to that a *utilitaristic approach* which tells that the results of our behavior should be greatest good for most of the subjects.

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### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### PRODUCTION OF REALITY AND POST-TRUTH IN A POST-FACTUAL MEDIATED SOCIETY

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**Abstract:** *In this article, the authors examine the most current „post-istics” and try to explain them by means of critical views on the most eminent postmodernists. In a postmodern mediated society, in a time of intense transformations, boundless of arbitrariness, pragmatism and greed, and loss of virtually any utopian ideological paradigm, new „post-istic” concepts are emerging, which, like the old ones, point to the threat for the survival of the fundamental Western civilizational values: post-true, post-factual, post-moral, post-democratic, etc. This unbridled heterogeneous of arbitrariness does not seek truth, but creates its post-true „truth” as necessary every day as „alternative facts”, denigrating the truths of others from the position of power in a post-democratic context as fake news, and ultimately always lead to disillusionment in the form of post-truth. In this article, the authors examine the most current „post-istics” and try to explain them by means of critical views on the most eminent postmodernists. The authors identify postmodernism as one of the intellectual roots behind the post-real world and show some possible typologies of fake news in a post-modern society.*

**Keywords:** *postmodern society, postmodernism, fake news, post-truth, post-fact, alternative facts, post-factual society*

#### 1. POSTMODERN INTERPRETATION AND ESCAPE FROM INTERPRETATION

We live in an interpretative and mediated post-truth era<sup>1</sup>, a period of constant digitization and constant transformation of society, organizations, individuals and their realities. More than a truth and credible facts, it seems that this age is constructed of interpretations of reality depended on the context and falsified news we became aware of only after the disclosure of the truth; that is ‘post-true’. Strongly diverse ideas, which in the context of the gradual shaping of often-incoherent term of ‘postmodern society’, are being developed by a wider scientific discourse for almost sixty years, in many elements contain the tendencies of ‘post-factual’. At the beginning of enforcement of the radical ideas of postmodernism, there are rejection of text interpretation

and celebration of direct receptive experience present in the American literary criticism of the 1960s (Sontag and Fiedler), while in the 1970s and the 1980s, Hassan introduced the concept of the postmodern episteme with differentiation processes that are supposed to be happening in a society and appropriately marking the reception and interpretation.

With his ‘archeologically’ discursive theory, poststructuralist Foucault makes an interpretation depended on the identification of the singular meanings that need to be ‘excavated’ from beneath the surface and interpreted according to each context. The neo-pragmatist Roty goes further and propagates a so-called ‘poetic culture’ wanting to knock down all barriers between art, politics and science. Regardless of the extent to which text interpretation, information or situations are modified according to an individual approach, the more or less common tendency of these views, and even more the extreme ones, is to reject a unified, all-determining, rationally constituted paradigm. In individual radical

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<sup>1</sup> Keyes (2004, 642) states that the term of ‘post-truth era’ was probably first used by Serbian-American screenwriter Steve Tesich in 1992 in his essay titled ‘Nation’.

cases, it even seems it's about an attempt to demolish the Age of Enlightenment foundations of all-connecting and operable worldview, of any binding ideologies (although they are already being tirelessly replaced by more perfidious global ones) and systems (especially political), and consequently also the whole sense-grounded autonomy of science as such. The multiculturalism and multi-perspectivity of the postmodern view consequently ruins the boundaries between reality and fiction, thus contributing to the establishment of a 'post-factual' view.

The post-factual sociality doesn't run away from interpretation since the rational and multifaceted one, with the help of interpretations, has been dismantled and discredited to a great extent for a long time now. The post-factual interpretation is characterized by two dynamically complementary characteristics. On the one hand, a false, incorrect (semi-)fabricated information or interpretation is mostly constantly repeated and repeatedly shared until it becomes – through 'constructing the reality' – a public and personally-perceived 'truth' in the sense of a well-known propaganda doctrine, which is being attributed to Goebbels, and another one, which in view of modern heterogeneity and fluidity requires a new interpretation every time and is being uncritically overtaken (and doesn't accidentally resemble the methods of brain washing) until it finally changes into the dynamics of the first variant mechanisms, therefore unbridled, aggressive repetition.

For Ulrich Beck, perhaps the most important anonymous representative of postmodernism in sociology, the little word of 'post' is the 'key word of our time' (Beck, 1986, 12). In its content and conceptually, the present seems to be uncatchable in view of the multitude of non-transparent, divergent phenomena and processes in their complex intertwining. The deepening crisis of the diffused society, which is generated in the face of new as well as old fears, seems uncatchable and is persistently evading our cognitive apparatus, which desperately tries to circumvent and name what seems to be indescribable. The current state has become obsolete, while the new one cannot be determined yet. Thus, post-istic labels are constantly emerging (pointing to the threat, if not the obsolescence of the basic Western civilizational values or acquisitions): post-historical, post-materialistic, post-structural, post-industrial, and more recently post-realistic, post-factual, post-moral, post-democratic, etc. Everything is vanishing in unbridled heterogeneous randomness, which is no longer searching for truth, certainly not a unified one, and also not a partial one, but only follows unscrupulous insinuation and profiteering, which is creating its post-factual 'truth' as 'alternative facts' every day, while degrading the truths of others from the position of power in a post-democratic context as fake or false news; in the end, a post-true always appears. The mechanisms of the global economic flows of a modern society generate unscrupulous devaluation of life (symbolic or true) values or mercilessly transform them into market ones (Varufakis, 2015), thus undermining the last bulwarks of individual self-determination and social solidarity.

A postmodern society, just like postmodernism, is a diverse metaphor rather than a defined concept. Although this term has been controlled by an intellectual discourse of various artistic disciplines, scientific sciences and other practices for decades now, the un-catchability and diversity<sup>2</sup> of the observed phenomenon, which its interpreters try to comprehend and label with this expression, is a subject of other scientific labelling efforts, too. This leads to overlaps in meanings and explanations with a variety of neologisms, resp. concepts. A strong concept of 'postmodernism', as far as the meaning is concerned, has slowly moved from an aesthetic and philosophical discussion into a domain of social science. At that time, the theory of society, especially due to its scientific self-understanding, started to face new challenges.

The actual discussion of postmodernism began to develop in American literary debate in the 1960s, when literary critics Susan Sontag and Leslie Fiedler rejected any criteria of classical modernism and enthusiastically welcomed the apparent breakdown of traditional values in literature, which was perceived negatively until that point. A postmodern literature should now be distinguished by 'fleeing from interpretation', rejecting all meanings and praising direct, non-intellectual experiences. The elite and mass culture should be coming closer together.

### 1.1. Language games and objective reality (truth)

The term 'postmodernism' was introduced to philosophical debate by Jean-François Lyotard with his work of *La condition postmoderne* (1979). The reception of his work did not fit his purpose since he didn't want to announce a new epoch, but rather to philosophically articulate one of the fundamental problems of the present: the opposition between discursive genres, knowledge modes and life forms. Lyotard used Kant and Wittgenstein as an orientation of this philosophical concept, since he saw them as 'the precursors of the sublime'<sup>3</sup> postmodern'. Lyotard (1988) notes that

<sup>2</sup> Because of the diversity of the contentual dimension and fluidity of the term of postmodern society, it is not surprising that – in a narrow sociological debate – the most important creators in this context of relevant ideas are Ulrich Beck and Daniel Bell (1979, 1985), although neither one explicitly mentions the term of 'postmodernism'. Beck, especially with his work titled *Risk Society*, introduces a number of relatively new terms (*the risk*) in the postmodern discussion and revives and further develops some of the old central concepts (*individualization*), even though – in a view of these facts – he specifically only speaks about a *reflexive modernization*. Bell introduced the concept of a *post-industrial society* used in the context of a *postmodern society* by some authors (such as Welsch, 1987), while other authors (e.g. Scherr, 1990, and Eickelpasch, 2000) critically distance themselves from such 'subsequent stylization'.

<sup>3</sup> In a term of the *supreme* with the help of philosophical discourse, Lyotard's aesthetic approach and his political interest culminate. For him, philosophy always means political engagement. But neither should never freeze in a doctrine, because its heterogeneous parts need to be carefully distinguished, or connected in one's consciousness, which itself constitutes a political act. Arising from Kant, he tries to trace to what extent the aesthetic and political *sense of supreme* – which

postmodernism undermines meta-stories of human liberation, self-fulfillment and social progress. The totality and unified programs of modernism are now replaced by the irreducibility of a multitude of local and heterogeneous language games, forms of action and ways of life. The outburst is opposed to the general one; since the 'great modern meta-narrations' ended, the question of equity must be re-formulated since these narratives have been discredited by themselves. By allowing one single model to rule over all others, they ultimately legitimized the terror of such domination. The analysis of opposition, which runs on a philosophical and linguistic basis, basically serves for a critical disclosure and prevention of such domination. When at least two opposing parties meet, a judgment on the basis of 'meta-rules' necessarily result in an injustice for at least one of the participants. Therefore, it is essential that to identify an idiom that will testify about the opposition, just as a form of connection between sentences that doesn't provoke injustice (Rees-Schäfer, 1988).

Lyotard connects the development of the post-industrial society and the post-modern culture with technology, science and certain social developments, and especially with changes in language. It accepts the challenges of the impact of new technologies without uncritically becoming their apologist. Being conscious that the process of technicalization is irreversible since it was not invented by people, but is a manifestation of the 'complexification process' happening all over the world, he finds important to train people for proper handling of this process. Therefore, it is necessary to test the possibilities of new technologies, as well as to make their properties and effects perceptible to the human's limited detection apparatus (Preis and Welsch, 2015). Therefore, in view of the modern strong dynamics of the development and the spread of modern electronic media, in the context of uncritical and thus virtually unlimited production and reproduction of 'post-factual truths' of various kinds of intentions, the position could not be more relevant.

Ludwig Wittgenstein (1960) has chosen the concept of *language games* to highlight several aspects: the standardized social action, the outstanding extend of the game phenomenon, the incredible diversity of games and the fact that they range from the most primitive forms to the complex, pre-determined activities. Games form the order or arrangement in two meanings: on the one hand, they form a line regulated by themselves and contained in them, while on the other hand, they show this inner order

in the way they are played. In the act of playing, the arrangement of individual society involved is rarely explicitly formulated. They show the way in which the society is organized, how it constructs its hierarchies, how it makes decisions, how it divides social power and authority, how it structures the thinking. Thus, games continue and represent the implicit order or society arrangement. This is the most obvious in those who have spontaneously emerged from a social use, especially the language games (Gebauer, 2010, 1040).

Based in Wittgenstein, among others, the focus of Lyotard's analysis are 'language games' which should serve to legitimize the behaviour of people in the society. Through the formulation of one's own statement, the discourse participant seeks to socially impose the legitimacy of his own individual version of what is said to be true or correct. Although from the time of the Age of Enlightenment, language games have largely been replaced by scientific marking games where it is no longer important who speaks, but only *the objective truthfulness of the statement* which is verified by evidence and rational arguments, Lyotard concludes that a *story knowledge* continues to exist simultaneously, while science is trying to distance itself from it. Science is based on meta-stories, which - along with it - have established faith in the progress and self-actualization of the individual, as well as a wide variety of total ideologies.

In the postmodern age, all of these becomes obsolete. It is characterized by the two: abandoning the search for truth on the one hand, since *marking language games* are discredited and knowledge is fragmented to such an extent that diversity prevents the search for one great truth that would cover and legitimize the whole knowledge. On the other hand, technical linguistic games are being enforced and don't assess the claim according to its correctness anymore, but according to their effectiveness and usefulness, the sole aim of which is merely the usefulness of knowledge in terms of its marketing (Haralambos and Holborn 1999, 916-917). Lyotard notes that the great meta-narratives of the Age of Enlightenment on progress and emancipation, on the subject's autonomy and the meaning of history, have always been inextricably connected with terror. He states that we paid dearly for longing for the unified and one, after the calm of conceptual and sensual, after an experience that is transparent and can be communicated. The battle cry of the postmodern era is the following: 'Let us wage a war on totality; let us be witnesses to the unrepresentable; let us activate the differences and save the honour of the name' (Lyotard, 1983, 203). Welsch (1987) notes that for Lyotard, postmodernism means a mood or a state of mind rather than the epoch.

In the category of the *language games*, we could include - perhaps in a general, broader sense of interpretation - the established phenomena of modern media communication such as 'fake news' or 'alternative facts', which are perceived as a reflection of the enforcement of such declarations as potential guarantors for obtaining a general of social, political, moral, perhaps even legal verification, and as well as an expression of the confirmation of the status, position and influence of

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appears as a juncture between globally separated, heterogeneous discursive genres - might be the only criterion able to reveal the existing conflict. Finding urgent legitimate passages is stressful and time-consuming, because heterogeneous needs to be interconnected without damaging heterogeneity as such. This can only be achieved by long-lasting reflection, that is with a great effort of imagination and an enormous sharpening of perceptual and cognitive abilities. Only this way, it is possible to achieve 'flexibility' in dealing with heterogeneous discursive genres. Just as the artistic avant-garde, alluding to it as not depictable, tried to get closer to the *supreme*, the critical philosophy must also point its look to a supreme event if wanting to strive for justice and testify about opposing (Preis and Welsch, 2015: 487).

individuals and various groups not only in a public discourse, but in a modern 'post-factual' society in general. Modern possibilities of various forms of Internet communication enable the individual, as well as various groups or organizations (chosen political elites as well as illegal terrorist formations), with an optional, practically unlimited and actually relatively anonymous spreading of half-truths and falsehoods. By their own semantics of language games, they reflect their position in society and confirm it, consolidate it and build it by actively acting in a direction of realizing their ambitions or goals, whether it is a relatively innocent implementation of one's own fantasy dreamlike image in the form of a Facebook profile (as a kind of 'post-factual' constructed biography in Beck's sense), or it is a more or less perfidious militaristic incitement and recruitment of a terrorist youth. It is important to gain acceptance in a certain addressed group. Here, a discursive situation of communion is not only constitutive, but also a belief about the importance of the media in determining the truth of information plays a great role. The implementation of the position through the media - then electronic (formerly in the form of oral traditions and direct communication, and after that in a written form which was ensuring the matter with the additional weight due to the high costs) -, despite the apparent problematic nature of these messages, inevitably guarantees them their legitimacy, credibility and truthfulness. In this context, the functioning of these social (partly psychologically dependent) structures seems ironic, but *"every man has a right to his own opinion, but no man has a right to be wrong in his facts"* (Brodnig, 2017, 55).

## 2. MEDIATED INTERPRETATION OF REALITY: FROM FAKE NEWS TO POST-TRUTH

In the post-truth era, we do not only have language games, truths and lies, but also a category of ambiguous statements, which are not exactly the truth, but - from the point of the one that spreads it - they aren't a lie either. Trump's counsellors, for example, call them 'alternative facts', and numerous examples of post-true euphemisms as examples of postmodern linguistic creativity are listed by Keyes (2004, 33):

*"neo-truth, soft-truth, faux truth, truth lite, poetic truth, parallel truth, nuanced truth, imaginative truth, virtual truth, alternative reality, strategic misrepresentations, creative enhancement, non-full disclosure, selective disclosure, augmented reality, nearly true, almost true, counterfactual statements, fact-based information"*.

The postmodern attitude towards truth stepped out of the academic discussions into everyday life and all the pores of society. In a postmodern society, the facts are social constructs and only a relative truth exists. The objective or factual truth is an ambiguous concept. For the postmodernists, there is no true truth, but only what a society denotes as a truth, because the truth is socially constructed and thus depends also on the cultural context this construct arises from. The social constructs vary from one society to another, one group to another and one individual to another. All of what is considered true can

therefore vary depending on the context. There are narratives and stories that are opposite the truth. From the postmodern standpoint, both storytelling and narration, fake news, etc. are socially constructed versions of 'objective truth'. The factual truth is increasingly making a way for the larger truth, the truth in the name of a particular goal or interest. George Orwell warned of this danger in his novel 1984, with its ironically named Ministry of Truth, which argues that to oppress others one must first degrade words such as truth on behalf of some greater good.

The term of 'fake news' is not new and is probably as old as the printed media. To be honest, the truth in the political discourse has always been adapted to the desired interpretations, whether it is the legitimization of war or the digitization of public administration services for citizens. Politicians in a public discourse have always used counterfeit facts to promote their own ideas. In the past, the term of 'fake news' was used to identify various types of content, such as parody, satire, paid advertising articles written as the advertorials, also for misinformation ('the inadvertent sharing of false information'), disinformation ('the inadvertent sharing of false information'), disinformation ('the deliberate creation and sharing of information known to be false', cf. Wardle, 2017), etc. Probably the best-known example of fake news originates from a radio game about the invasion of Martians on Earth in 1938, when Orson Welles actively adapted Well's drama called 'The War of the World' in the form of news in which actors played reporters, government officials and residents reporting live about the invasion. The radio listeners interpreted such a way of storytelling as news. Therefore, the truth. At that time, radio was considered a main source of information, at least as much as various online applications, in particular online social media, blogs and microblogs are today. News is usually interpreted as a journalistic construction or a production of reality, as their traditional content meant reliable, accurate and realistic reporting on recent, interesting and socially important events. This should ensure that the general human right to freedom of expression and information is exercised.

For a modern discourse, the term of 'fake news' first of all refers to viral posts (i.e. posts being spread on and through online social networks) based on fictitious stories that look like news about burning issues and / or persons. At the same time, the term of 'fake news' has also been used to discredit critical reporting in traditional media. Allcott and Gentzkow (2017, 213) define fake news as "to be news articles that are intentionally and verifiably false, and could mislead readers".

With the development of online platforms and the rise of social media, the whole society is mediated, and so are we. We can all become a medium and be a part of citizen journalism. All we need to become the medium is a smart phone, since everyone can set up our own media and publish our own truth, our own news, our own story without any distinction between the facts and the fiction. Rational argumentation is simply replaced by the creation of news that don't need to be justified, but only made attractive. The news as the truth is replaced by storytelling

and narration. Web platforms have ensured everyone to reach a mass audience. Digitization and online social media make possible for a mediated being of the 21st century to directly point his truth in the form of news to users who are likely to accept and share that news, since it is a 'trusted' circle of virtual friends, supporters and followers.

A socially close source helps to legitimize the credibility of information shared by a member of a social network. When a mediated subject (not) willingly shares his truth, misleading or cunning news in his medium, his virtual 'friend' sees it, trusts it and then shares it, spreads it. 'People in networked markets have figured out that they get far better information and support from one another than from vendors', notes the 11th thesis of The Cluetrain Manifesto (Weinberger *et al.*, 2000). Therefore, only a few claims in a form of only 140 characters on Twitter have apparently the same credibility as the results of the research presented in the scientific article published in a highly indexed magazine. Web platforms, including social media, not only ensure the mediation of each individual, group or organization, but also accelerate the rapid exchange and spreading of information, including the incorrect and false ones. But what to do when everything is relative. "The stories are being told all the time and the 'truth' is not true. We will find out about the consequences post-truth" (Coughlan, 2017, 123).

It seems there are two main motives in this conceptualization of false news: financial and ideological. Sensational viral stories provide the 'creators' of content with the clicks that can be converted into the advertising income. Another aspect of fake news is a promotion of a certain idea or a support of certain people, often by discrediting others.

## 2.1. Fake news and alternative facts

News may be falsified or falsified by accidental providing with insufficient or incomplete information (unintentional sharing and exchanging of incorrect information) or misinformation (deliberate creation and exchange of information that is known to be untrue). *Alternative facts* are nothing more than another euphemism hiding the insinuation, falsification of objective facts and truthfulness.

Intentionally fictitious stories that appear as news stories in order to manipulate readers are not a new phenomenon, but have become increasingly noticeable worldwide during the presidential election campaign in the United States in 2016 due to the growing use of social media as a source of news. By online social media becoming a main way of accessing news, the revenue of traditional media is decreasing. If they wish for more advertising revenue, they need more clicks on their content; it is important the content is attractive, not necessarily true, because attractiveness and not truthfulness are those that create clicks, likes, comments and news sharing. Not the truth or quality, the virality is the one that has become a new criterion of value for many classic media, too. And the classic media are following the example of new online social media.

The Australian Macquarie's Dictionary chose 'fake news' as the word of the year 2016 and defined it as 'disinformation and hoaxes published on websites for political purposes or to drive web traffic; the incorrect information being passed along by social media' (Macquarie Dictionary, 2017).

As a part of the First Draft News project (Wardle, 2017), the falsified news on social media were graded in seven different forms, from the most innocent (satire and parody) to the one that represents refusing facts-based arguments in favour of feelings and own personal opinion, and therefore does not need argumentation because it becomes post-true without saying:

- *Satire or parody* (no intention to cause harm but has potential to fool).
- *Misleading content* (misleading use of information to frame an issue or individual).
- *Imposter content* (when genuine sources are impersonated).
- *Fabricated content* (new content is 100% false, designed to deceive and do harm).
- *False connection* (when headlines, visuals or captions don't support the content).
- *False content* (when genuine content is shared with false contextual information).
- *Manipulated content* (when genuine information or imagery is manipulated to deceive).

A similar fake news typology was prepared by Tandoc, Lim and Ling (2017) based on the search and research of the use of the term of 'fake news' in academic texts published in the Google Scholar database. Based on the analysis of 34 scientific members published from 2003 to 2017, the following typology of fake news was prepared:

- *News satire* (the most frequent operationalization of fake news using humour and exaggeration).
- *Parody* (using imitation and non-informative data with humour to form fictitious news)
- *Fabricated news* (news in the style of journalistic articles with no real basis, for the purpose of disinformation).
- *Photo manipulation* (visual news by inserting or removing a person from digital photos).
- *Advertising and public relations* (advertising texts written as news reports, use of journalistic style for marketing texts or public relations messages, e.g. advertorials).
- *Propaganda* (mostly untrue news created by politicians in order to influence the perception of the public).

Falsified and fake news on social media has become a part of contemporary debates at the time of the 45th US president election in 2016, and alternative facts at the time of his inauguration. According to the BuzzFeed News analysis, in the last three months of the US presidential campaign in 2016, the most successful newscasts on Facebook created more engagement of the readership than the most important news of major US online media such as The New York Times, The Washington Post, The Wall Street Journal, The Los Angeles Times, The Guardian, NBC News and others (19 of them in total) (Silverman, 2016). More specifically, in the last three months of the

presidential election campaign, 20 of the most successful falsified news resulted in more than 8.7 million shares, reactions and comments on Facebook, while 20 of the most successful news about the same elections on the 19 news websites resulted in a total of almost 7,4 million shares, reactions and comments on Facebook. Falsified and fake news were mainly based on fake news websites created by Macedonian teenagers.

## 2.2 Post-truth in public discourse

The public debate about the UK referendum on leaving the EU (Brexit) in June 2016 served with poor, inconsistent, unqualified and in some cases misleading arguments and counter-claims, with distortions of facts, half-truths and complete lies (Jackson, Thorsen, and Wring, 2016). The leading British academics in the same source find that the level of disinformation in the referendum campaign was so great that even the democratic legitimacy of the results of the referendum vote could be questioned. Even with the first results of the referendum outcome, the *post-truth* happened: the leading advocates of the United Kingdom leaving the European Union have declared that their pre-referendum 'arguments' were not facts, but rather 'emotional connecting' with voters. In the world of post-true, we therefore live in a society where politicians who were repeatedly stating proved lies during the referendum campaign - as the one about 350 million pounds that the United Kingdom is supposed to pay into the Brussels treasury on a weekly basis - suffer no consequences.

'Post-true' is an expression that includes distortion and falsification of facts that have been repeatedly posted or repeatedly shared on online social media. As the word of the year 2016, the Oxford dictionaries defined 'post-true' as an adjective "*relating to or denoting circumstances in which objective facts are less influential in shaping political debate or public opinion than appeals to emotion and personal belief*", less often also used as "*occurring after or resulting from a disclosure of the truth*" (Oxford English Dictionary, 2017). Therefore, as something that appears after revealing the truth, or the consequence of the disclosure of the truth, which is not criminal since is about personal feelings and beliefs.

The public discourse about Brexit and the one at the time of the 45<sup>th</sup> US president election are not innocent. More and more citizens read the news via online social media - in the European Union only, the average is 46% of the citizens (Newman *et al.*, 2017); six out of ten posted news are shared without first being read by the person sharing them (DeMers, 2016). Different institutions around the world respond to this kind of undemocratic public discourse, but rather unsystematic. The European Commission (2017), for example, launched the Euromyths blog<sup>4</sup>, where it responds directly to untrue, incorrect and misleading media reporting.

Political lying, exaggeration and misleading in public discourse seems to become a completely acceptable, even anticipated cultural-political practice in a postmodern

society. All this even inspires some authors to make an apocalyptic conclusion that the current political, social and economic arrangements are at the point of total collapse (Graham, 2017), and therefore question further development of postmodern society and democracy. In the post-factual world of alternative facts, The New York Times launched an advertising campaign about what the truth is and what its significance is in a world in which the 'opinions', pointed into the incitement and encouraging the hate speech, dominate. The ad starts with "*The truth is alternative facts are lies*" and ends with "*The truth is hard / the truth is hard to find / the truth is hard to know / the truth is more important than ever.*" (The New York Times, 2017). The Washington Post, too has also introduced a 'fact checker' as a special blog revealing the truthfulness of the news and finds that four of the six news of the news they've checked are fake (Kessler, 2016).

## 3. CONCLUSION: WHETHER THERE ARE FACTS OR NARRATIVES?

The original motive of the age of enlightenment was to enable the analysis of the world by separating the reality from the divine authority. Since the science assumed the interpretation of reality and truth, philosophy became more antirealistic in order to preserve a space in which it could still play an important role. The postmodernism, too firstly positioned itself as an emancipatory way to free people from oppressive narratives and abuse of power, which we are constantly exposed to. In the late 20th century, the postmodernists made a step further by claiming that 'there is nothing out of the text' and that all our ideas about the world arise from the models of power that have controlled us. By interpreting that the knowledge is a (repressive) power, the Postmodernism has deprived itself of the ground on which it could oppose power. However, the appearance of media populism in the form of falsified, fake news, alternative facts and post-truthfulness is an example of a farewell from the reality that is not emancipatory at all.

If in a poststructuralist and postmodernist approach, the interpretation still depended on a narrative context, it is no longer so in a post-factual manner. Fake news often do not need a context, but if they do, it is the one that corresponds to their authors at a given moment. The postmodern relativization and dynamics in the modern phenomena of fake news and alternative facts have led to painful culmination. Also to the information reductions for addressing the average educated and naive client in often typified, extremely banal but surprisingly effective form. The delivery to the apparent arbitrariness and substitutability does not require serious rational handling of messages. The interpretation based on the facts is eliminated, as once the factual truth. The messages passing on a post-factorial truth based on alternative facts are all the more dangerous because they are crashing down our value systems, as the media news (credible ones, too) are constantly being proclaimed as 'fake news' and this gradually destroys trust first in politicians and media, then in politics, and finally in a public discourse in general, undermining the foundations of Western civilization and threatening the achievements of

<sup>4</sup> See Euromyths A-Z index on: <http://blogs.ec.europa.eu/ECintheUK/euromyths-a-z-index/>



democracy, while opening the door to modern populism, extremism and totalitarianism.

A postmodern discourse - with the tendency to tear down the borders between theory and ideology, reality and fiction, and with the tendency to unilaterally condemn conceptual thinking, while simultaneously unbridled emphasis on mythic, pictorial and rhetoric - creates a rather problematic anti-enlightenment mood. With the abolition of critical distance, postmodernism has no longer any possibility of critical analysis and is being lost in arbitrariness. The postmodern contingency of social reality and its dependence on subjective definitions, discursive contexts, ethno-methods and cultural codes slightly reminds of versions of interpretative sociology (Eickelpasch, 2000). The postmodern science can also be described as a state characterized by a complete disintegration of any interconnected structures, while sociology itself as the subject of this process is not exempted. Analytical concepts are being abandoned in favour of playing with metaphors and inaccurate language expression, logical-discursive argumentation is replaced by irony, meta-language games and masquerades.<sup>5</sup> If sociology as the theory of society would actually follow this paradigm, it would lose all the hallmarks of science, and therefore itself.

A postmodernism, of course, is no longer an intellectual tsunami on the academic shores, but a postmodern relativism and the general postmodern idea of the truth being imaginary have stepped out of the strictly academic world and moved to the media and then elsewhere a long time ago. Falsified, fake news, alternative facts and post-reality unintentionally remind us of Lyotard's language game, which serves to justify or legitimize the behaviour of people in a society and means that every participant in a public discourse tries to reach - through his statements - the acceptance of his individual version of what is supposed to be true or correct; his interpretation of the facts and the real world. Two characterizes this Lyotard's game: abandoning the search for truth on the one hand, since marking language games are discredited and the knowledge is fragmented to such an extent that diversity prevents the search for one great truth which would cover and legitimize the whole knowledge.

If we come to terms with living in a post-real world, in a society of post-facts, fake news, in a period after the truth and a post-factual world (cf. Pomerantsev, 2016; Coughlan, 2017), then we take on the Nietzsche maxim that 'there are no facts, only interpretations' (Nietzsche, 2004, 481); that every version of the truth or fact is just another narrative where lies can be justified as an alternative view or opinion, because everything is relative and everyone has their own truth. The postmodernists like to use this famous Nietzsche maxim in order to weaken

the interpretation that is bounded to the truth: every interpretation is merely a view of the world, because other views exist and even must exist. Every individual has his own version of the truth; the experience always exists as a fictional discourse and an empirical event at the same time, and it is never possible to decide which of these two options is the right one. But this is a kind of ethical absurdity, which may be the result of a surplus of relativism. Although a postmodernism is definitely one of the intellectual roots of a post-true, post-realistic and post-factual world, the science should remain loyal to finding the truth in the world, where it is difficult to distinguish what the truth and what the fake news are.

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<sup>5</sup> Already in the 1980s, Habermas (1985) and Honneth and Joas (1986; cf. Joas, 1992) have drawn attention to the danger posed by the acceptance of the views of uncritical irrationalism and the anti- Enlightenment retreat to mythicism, as they sort of dismantle the scientific paradigms of the humanist and social sciences. Thus, Habermas (1985) labeled the 'postmodern' theoretical assumptions of post-structuralists Foucault and Derrida as irrational and neoconservative.

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### ARE WE BUYING RATIONALLY OR IMPULSIVELY?

#### WHAT ACTUALLY HAPPENS IN THE CONSUMER'S MIND AND WHAT DOES NEUROTECHNOLOGY REVEAL?

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**Abstract:** Neuromarketing is complementary to traditional methods which are based on verbal reports - it presents an approach that sheds light on new aspects of psychological phenomena, basically - consumer behaviour of an individual. Proponents believe that neuromarketing techniques such as EEG and eye tracking shed light on the unconscious, emotional processes which are the main aspect of consumer behaviour. On the other hand, we know that conscious, cognitive processes play an important role in the control of emotions. Therefore, the main research question is - how does consumer behaviour (under the influence of conscious or unconscious processes) impact cognitive and emotional factors. Analysis of existing research have led to the conclusion that consumer behaviour is always, to some extent, influenced by both the conscious and unconscious processes as well as emotional and cognitive factors. For this reason, so as to make a full analysis of the tested phenomena, the multimedia aspect is a must. Theoretical standpoints of Brainster and MASMI research agencies represent a combination of traditional methods and neuromarketing, which provide answers to various issues on the attitude of consumers towards advertising.

**Keywords:** neuromarketing, conscious processes, unconscious processes, emotional factors, cognitive factors, EEG, eye tracking

#### 1. INTRODUCTION

Neuromarketing is an emerging field that bridges the study of consumer behaviour with neuroscience. It was controversial when started in 2002. Advertising and marketing professionals have been showing growing reliability in neuromarketing lately by implementing more pre test case studies. Each year, over 400 billion dollars is invested in advertising campaigns. Conventional methods for testing and predicting the effectiveness of those investments have generally failed because they depend on consumers' willingness and competency to describe how they feel when they are exposed to an advertisement. Neuromarketing offers cutting edge methods for directly probing minds without requiring demanding cognitive or conscious participation. [10]

According to Jeff Fromm [16] "If 2014 was the year of the millennial, 2015 is all about Generation Z. Some marketers have already begun shifting their strategies to appeal to people born in the 1990s and mid-2000s. Social media and digital advertising will still rein king in marketing strategies. If millennials were in part sort of digital natives, then Gen Z (born 2000-2010) is pure-play digital natives. According to the results of the conducted research, it may be observed that the percentage of usage of the internet and social networks is larger in younger millennials (respondents aged 18 - 24). They are also more likely to get their information via the internet and on-line publications. Having in mind that they are, as a generation, open for new technologies, this provides space for implementation of various forms of interactive materials through use of digital channels. [7] Research results show that Y and Z generations would embrace new technologies and digital approaches in different

industries in more easier and natural way. Today, research agencies that are in the neuromarketing field are aware of changes in consumer behaviour offering to the market cloud based platform.

Neuromarketing comes into play as a new approach to the limitations of traditional methods, especially those that are based on the verbal report of individuals such as focus groups, in depth interviewers and the like. [1] Besides the possibility of manipulating the responses as well as giving socially desirable answers, it is particularly interesting (but also problematic) when the respondent is actually trying to give honest answers, yet they are not the reason of the phenomenon that is the subject of the research. The tendency to perform certain actions, attributed to conscious cognitive processes, can be considered an intuitive feature in humans. [9]

In terms of consumer behavior; if we ask the consumer why he bought a particular item of clothing, he would probably say that he was thinking that he liked it, that the price was acceptable, that it was good quality. A similar situation occurs when we ask an respondent if they like a certain advert. Their response would often be based on conscious cognitive processes that are not an inadequate source of information, however, they are insufficient.

## 2. COGNITIVE VS EMOTIONAL PROCESSES

With the help of neurotechniques, researchers have pointed out that the decisions and behavior of humans is often under the influence of emotions of which they are not aware. The reason for this is the unconscious emotional states which may be the dominant charge of emotions stored in the evolutionarily older part of the brain structures - subcortex. Although the scientific world is in conflict of opinion in terms of the parts of the brain that are responsible for conscious emotional experiences - the idea of the author of the paper is that the so-called "cognitive" neuroscience streams [13] are behind our awareness of emotions. To become aware of emotions - to be able to attach meaning to an emotional state as well as to be understood, is a subcortical structure activity, an activity that is a part of the evolutionary function of the youngest part of the brain – the neocortical. [13]

As noted, when making a decision influenced by unconscious processes, people tend to argue their decision on conscious cognitive processes that in turn tend to unconsciously rationalize decisions. Having said that, "impulsive behavior" is something that common sense usually associates to a purchase. Consumers as well as researchers are fully aware of impulsive purchases - these decisions are often the subject of scrutiny and discussion. [12] In the terminology of chaos that characterizes more recent scientific directions, it is difficult to make a clear differentiation between the conscious and unconscious psychological processes that underline consumer behavior.

However, based on everything said so far, consumer behavior basically can be divided into impulsive and rational buying or, emotional and rational mannerism.

[13] The authors of this paper have attempted to answer two questions:

1. How is consumer behavior influenced by conscious or unconscious processes?
2. What is the impact of cognitive and emotional factors that precede and influence consumer behavior?

## 3. INFLUENCE OF ADVERTISING APPEAL ON ADVERTISING EFFECTIVENESS

If we were to try and answer to the questions posed, it would be needed to narrow the research to the consumer mind - which is the subject of the research. In line with the questions posed, we considered the conditions which foster rational and impulsive behavior. More specifically, what would be the elements of an advertisement which encourage rational or impulsive consumption. [4]

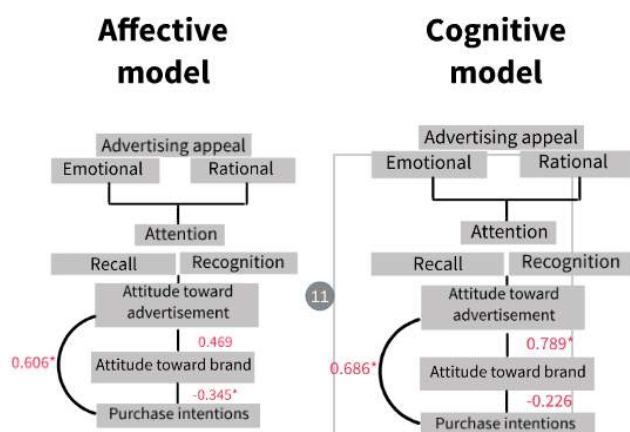
In respect of the above distinction when it comes to shopping styles, there are two theoretical models that explain consumer reaction to advertising. The first model is the cognitive information model, according to which the likelihood of purchasing a product is based on the rational reaction of consumers. According to this model, advertisements should contain information relating to the practical, functional aspects of the product. [2] [5] It is believed that the effective elements of the content for advertising goods purchased for longer periods such as cars, appliances and the like. [12] On the other hand, based on the affective theoretical model, the probability of purchasing a product is the emotional response of consumers. Accordingly, the advertisement should contain emotional elements that will cause positive or negative emotional reactions and motivate consumers to buy the product (Keshari & Jain, 2014). [2] [5] It is believed that cognitive elements of an advertisement are more effective when purchasing items for a longer period such as a car or appliances. [13]

On the other hand, according to the affective theoretical model, the probability of purchasing a product is based on the emotional state of consumers. Accordingly, the advertisement should contain emotional elements that will cause positive or negative emotional reaction and motivate consumers to buy the product (Keshari & Jain, 2014). Also, affective elements of an advertisement are useful in situations where the product brand is not significantly different from competing brands. [3]

To understand what is more effective in the intent of buying, is it ads with rational or emotional elements, Grigaliunaite and Pileliene [4] showed respondents advertisements for two completely new brands. The first group watched five adverts which contained emotional elements, while the second group watched five adverts with cognitive elements. The instruments they used were eye tracking to record eye movements, test of implicit association for examining implicit attitudes and a questionnaire for testing explicit attitudes. Among other

analysis, two SEM<sup>1</sup> models were tested, one for the affective and one for cognitive model.

The goal was to determine how the setting of the attitude towards the advertisement with emotional or cognitive elements contributes to explaining the intention to buy. According to the SEM analysis model, the cognitive approach proved more successful. More specifically, while the affective model's response to the advertisement caused a direct positive influence on the intention of the consumer to buy the advertised product, the cognitive model to advertising did not only have a more direct positive influence on the intention of buying in relation to the affective model, but also indirectly contributed positively on the intent of buying through the formation of a positive attitude toward the brand (Image 1).



**Image 1:** SEM model for Affective and Cognitive model

Therefore, in the mentioned research cognitive elements of an advert proved to be successful. Grigaliunaite and Pileliene [4] these are interpreted by the fact that cognitive elements of the content which provide clear information relating to the product in relation to the emotional elements. Also, rational elements reduce doubt and uncertainty in the consumer relating to the product they consider buying. However, these researchers point out that the answer is never completely emotional or rational, an opinion we also agree with. Namely, the need to classify people in categories is a characteristic of all humans, including researchers. Categorizing people and phenomenon is not necessarily a negative thing. It often allows us to organize existing knowledge and better understand the world around us. However, it is important to be aware that categories are the artificial creations of a

<sup>1</sup> SEM is an attempt to model causal relations between variables by including all variables that are known to have some involvement in the process of interest. By explicitly modeling measurement error, SEM users seek to derive unbiased estimates for the relations between latent constructs. A structural equation model implies a structure of the covariance matrix of the measures. Once the model's parameters have been estimated, the resulting model-implied covariance matrix can then be compared to an empirical or data-based covariance matrix. If the two matrices are consistent with one another, then the structural equation model can be considered a plausible explanation for relations between the measures.

man and that the reality of the phenomenon is more complex. We believe that the analog situation with the dichotomy of "rational" and "impulsive" consumers. Zurawicki [13] provides an interesting example of a man who buys a car under the influence of an advertisement entwined with cognitive elements. Although the man will buy a car because it has good brakes, the question is whether in the decision purchase there are deeper reasons than these pragmatic ones. So, good brakes provide man a sense of security and personal control that could actually be the main driver behind the decision to purchase.

#### 4. MULTIMETHOD APPROACH FOR EXPLAINING CONSUMER BEHAVIOR

Cognitive and emotional states are intertwined. Rarely do we act with just coldly rational, or are guided exclusively by emotions. After all, said extreme values are indicators of an abnormal mental state of the individual. Consumer behavior is always influenced by the conscious and unconscious, cognitive and emotional processes. What style of purchase will be dominant depends on many factors such as individual differences, situational factors, consumer sentiment, the target group to which consumers belong to and whether this ad consists of cognitive and emotional states. [13]

What can be done in these circumstances? We think that the multimethod approach is the best way to testing such a complex phenomenon. Neuroscience is one side of us, but in order to obtain a more reliable and objective picture of phenomena it is necessary to look at it from different angles, perspectives or methods. Also, to make the data as verifiable as reality, it is important to keep in mind that neurotransmitters are tools that enable data collection, but the task of the researcher is to adequately interpret this data so that the client can gain most benefits.

Finally, we are of the opinion that it is important to monitor existing research findings and base ones analysis on the existing theoretical models. Although we are aware that speedy and efficient delivery of finding to clients is the essence of a successful business, at the same time we emphasize the importance of linking theory and practice for the sake of better quality, and therefore more useful data.

The multimedia approach and relating theory and practice are the stand of Brainster [15] and MASMI [14] research agency. Maintaining traditional methods, we also refer to methods in the field of neuromarketing, which we provide answers to various aspects related to advertising.

Some of the issues to which neuromarketing provides answer are:

1. What are the strengths and weaknesses of advertising?
2. How is this ad countered in relation to the advertisement of the competitor?
3. How can advertising be shortened for the sake of the best return on investment?
4. Do consumers understand the message behind the advertisements?

The research conduction is based on Brainster's Technological Platform. It is cloud based platform, powered by machine learning algorithms, that delivers almost in real-time second by second EEG indices and Eye-tracking heat map to a user friendly dashboard. Data is collected using eyetracker<sup>2</sup> i EEG-a<sup>3</sup>. In addition to the known characteristics of the EEG device, it comes as a portable device that allows the measurement of brain activity in the natural environment, which supports ecological validity of research. According to Posner Circumplex affect model by which all the emotions can be determined based on two dimensions - activity or intensity and valence (pleasant-unpleasant), EEG provides data related to two dimensions of the affective state of subjects. [11] [6] These two dimensions are called emotional involvement of the consumer. In addition, the EEG gives us an insight into another measure that is called interest. It is a test of attention of the respondents while watching commercials, so that a high intensity of this measure indicates that the attention is focused on the consumer stimulus in relation to the tested advert.

Although eye tracker is not a neurotechnique in the true sense of the word, it is often used in neuromarketing as it gives relevant information based on the analysis of eye movements of consumers. Another specificity of our findings is reflected in the fact that the analysis is separated into two aspects: the analysis of the slogan - which tells us how much the consumer is associated with the brand and analysis of narrative - whether the content of the advertisement causes the target emotion of a particular intensity and whether it caused interest in the advert. In continuation of this document we will present research conducted to test commercials and show how the above methods and approaches look like in practice

## 6. "LA CRAMERIA" CASE STUDY

### Study Background

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<sup>2</sup> Eye tracking is a useful procedure for the analysis of behavior and cognition. It measures either where the subject is looking (the point of gaze), the motion of an eye relative to the head and the pupil dilation. Eye movements fall into two categories: fixations and saccades. When the eye movement pauses in a certain position there is a fixation; saccade is a switch to another position. The resulting series of fixations and saccades is called a scan path. Fixation varies from about 200 ms during reading a text to 350 ms during viewing of a scene and a saccade towards new goal takes about 200 ms.

<sup>3</sup> Electroencephalography (EEG) is a technique that can show the brain activity in certain psychological states. The method consists of observation of the brain waves whose different amplitudes correspond with different mental states, such as wakefulness (beta waves), relaxation (alpha waves), calmness (theta waves), light and deep sleep (delta waves). To assist in the task of measuring the brain activity, numerous electrodes (up to 256) are placed in various locations on the scalp. Each electrode, also referred to as "lead", makes a recording of its own. In order to draw the meaningful conclusions, the electrical potential measured needs to be compared to the baseline level. The dimensions of such a potential are: the particular voltage and a particular frequency which vary with a person's state.

La Cremeria' is a new ice cream brand manufactured by Nestle in Israel. Nestle is interested in gaining high in-market visibility by associating the La Cremeria brand with values such as hedonism, playfulness, child friendly and family oriented. Nestle is also interested in introducing the variation of flavor and package size within the La Cremeria ice cream line.

### Main research

Questions were as follows:

1. Is the storyline successful in creating associations of pleasure?
2. Are there any pitfalls in the storyline buildup?
3. What are the strength and weakness points of the ad and how can the ad be re-edited to maximize return of investment (ROI)?
4. What are the mental responses elicited by the product's visual appearance?
5. How do women in particular (primary targeted audience) respond to the storyline?
6. Are the effects created by the ad sustained over repeated viewings?

### Methodology & Materials

There were 38 participants who took part in neuromarketing research, while main methodology was EEG recording of brain activity and eye tracking for recording eye movement. Among 38 participants, 27 were women and 11 were men. Age range of participants was between 20-55 years.

Ad was presented within a cluster of 3 other ads (by different brands) in randomized order. Also, ad was presented in two additional consecutive viewings examining how repeated views effect on levels of Interest and Emotional Engagement over time. Data was collected during January, 2017 in Israel.

In storyline of the ad, a group of kids become aware of the fact that 'La Cremeria' ice cream is within reach. The kids gather around from all around the house to the dining table and moments of childish enjoyment and fun arise from eating the ice cream while experiencing feelings of togetherness. Towards the ending it becomes clear that the kids are actually adults that lost control over the irresistible ice-cream.

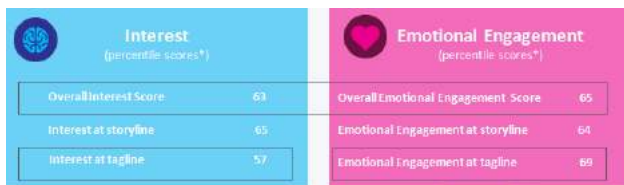
### Main Research Findings

Overall scores<sup>4</sup> showed that satisfactory Interest and Emotional Engagement scores are achieved by the ad, mainly driven by its storyline. Emotional Engagement gains strength at the tagline, indicating strong association of positive emotion and marketing message. On the other hand, interest loses some of its power during tagline. Overall scores are presented in Image 2.

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<sup>4</sup>Scores are benchmarked against the Brainster database and are reported in percentiles.





**Image 2:** Overall scores within top 1/3

The image 3 shows that the sequence of frames displaying the ‘pseudo family drama’ (mom’s arrival, irritated by the kids behavior and immediately lets go and joins in) creates elevation in emotional levels solely among females<sup>5</sup>. This might be due to the stronger identification process women experience with the scene.



**Image 3:** Gender discrepancies in emotional responses to the advertising content

Repeated views analysis indicates an expected decline in Interest levels due to a habituation the ad generates in repeated views. The ad still succeeds in generating positive emotional responses throughout viewings and sustains a positive emotional momentum across viewings. Negative Emotional responses are sustained in repeated views displaying the young kids running around the house with no adult in sight. Even though, viewers are already aware that the stressful scene is resolved.

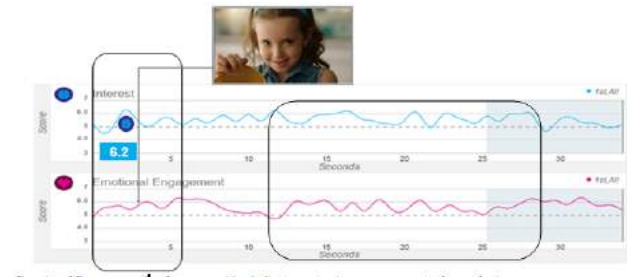
This is an important indicator of the problematic nature of these images. Image 4 shows repeated views analysis with Interest and Emotional Engagement scores.



**Image 4:** Sustainability over Repeated Viewings

Zooming in on the smiling girl opening the ice-cream box sets a lively and playful atmosphere, that is congruent with an elevation in both Interest and Emotional Engagement levels. Importantly, the highest Interest score (6.2) (Image 5) of the entire ad appears on these opening scenes. These robust opening stages with regard to

Interest and Emotional Engagement levels are a positive indicator as to viewer’s openness to the marketing message.



**Image 5:** Storyline Effectiveness

Images of the kids eating, laughing and enjoying the ice-cream elicit fluctuations in emotional levels, while maintaining steady Interest levels. The drama of “getting caught by mom” is not perceived by viewers as a real drama but rather is just a “pause” and therefore elicits a small decline in interest and in emotion levels.

There appear to be three peak moments in the ad representing an elevation in positive feelings such as joy and excitement. These moments serve the purpose of fun and indulgence the product stands for. The first moment is a playful moment of kids gathering together, representing a childish notion of “let’s make this our little secret” (Emotional Engagement 6.3).

The second moment is hedonistic enjoyment of the ice-cream eating, amplified by the sound of cheerful children’s laughter (Emotional engagement 6.1), and the third refers to the moment after ‘pseudo drama’ of getting caught, where the mom is angry, she softens up quickly and joins in with the family (Emotional engagement 6.2).

The Tagline stating “La Cremeria transforms you back into being a child” stated in a child’s voice might be a good booster for the increase in positive emotions. The advertiser’s message appears to be well adopted by viewers, as indicated by the elevation in levels of Interest and Emotional Engagement.

Zooming-in frames focusing on the product elicit an increase in levels of Interest and Emotional Engagement. Also, product enlargement produces an expected and desired increase in Interest levels due to the introduction of new information regarding the product.

The scenes presenting the kids gathering around the dining table create a decline in Emotional Engagement levels. This might be due to strong negative emotions such as tension and anxiety arising with regard to witnessing young kids running around the house and climbing with no adult in sight (5-12 sec.). Interestingly, this decline is accompanied by an elevation in Interest levels resulting from the tension viewers experience as a result of the storyline. Furthermore, the scene displaying the kids running around the house with no adult in sight elicits a strong negative emotional peak specifically among females. Tagline scenes presenting multiple ‘La

<sup>5</sup> The male subgroup size (n=11) is too small for independent statistical analysis; accordingly, gender discrepancies should be viewed as mere potential trend indicators.



Cremeria' products are accompanied by a decrease in levels of both indexes. Eye tracking heat maps indicate a pattern of scattered visual attention on the different elements displayed (e.g. product name, 3 product packages and 1.4 liter symbol). Finally, the company logo ('Nestle') receives visual recognition only 3.5 sec. after its' initial appearance. Importantly, it's worth mentioning that 'La Cremeria' is actually marketed "independently" as 'La Cremeria' with Nestle only at the back.

## Summary and Recommendations

The ad is successful in eliciting favorable responses in viewers on both Interest and Emotional Engagement measures. These effects are sustainable over repeated views. Interestingly, there is even an increase in Emotional Engagement levels over exposures to the ad content which is a strong indicator for the ad's effectiveness and durability. Ad is effective in bringing out the brand message asserting the ice-cream's irresistible nature, transforming self-controlled adults back to being kids. The Storyline is successful in creating associations of pleasure, joy and playfulness associated with eating the ice-cream. Generally, produces an increase in levels of interest emotional responses. Product Enlargement (new information provided by the ad) produces a desired elevation in Interest levels. On the other hand, strong Negative Emotions such as anxiety and tension arise with regard to the scenes displaying young kids running around the house with no adult in sight. These effects are even stronger among females' viewers (primary targeted audience). Importantly, there is some moderation in these emotional responses in repeated views. Viewer Confusion in Tagline originating from overcrowded frames, displaying multiple products elicits a pattern of scattered visual attention. 'Nestle' brand receives negligible recognition in Tagline visual.

## 6. CONCLUSION

The purpose of this study is to search more deeply into the realistic attitude of the consumer mind, as well as to understand the connection of the cognitive and emotional processes which lie at the root of consumer behaviour. We have concluded that consumer behaviour is almost never completely impulsive or rational, thereby the division between impulsive and rational buyers is made easier to analysts but basically artificial in foundation. It is therefore needed to analyse this complex phenomena from various angles so as to come to a wholesome conclusion. This analysis can be conducted only through the multimedial approach, careful interpretation and a high level of critical analysis, as well as a constant comparison of theory versus practice. This is a short resume of the manner in which theoretical analysis of research agencies are put in practice.

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### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### NEUROMARKETING AS A METHOD OF DISCHARGE OF CONTROL OF SUBLIMINAL MESSAGES

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**Abstract:** Psychological factors play an important role in marketing, of which the so-called "subliminal perception (subliminal messages) as a phenomenon that is based on the use of subtle messages, signals and signs that are not consciously observed, and emitted below the lower line of stimulus. As such, it has been challenged by numerous controversies and until recently he remained one of the most controversial concepts in marketing communication. One group of marketing experts claimed that subliminal messages and one of the most manipulative psychological techniques were acting on the subconscious part of the psyche, and hence one of the most successful techniques for controlling the behavior of consumers. Others argued that there was no effect of these messages on psychic processes and that therefore they had no influence on consumer behavior either. This dilemma finally resolved neuromarketing by establishing brain scans (using modern brain mapping devices) that certain centers in the brain respond to external stimuli that are emitted below the absolute line of stimulus. Therefore, it has been established that subliminal messages trigger certain mental activities, that is, the scientific validation of the effectiveness of subliminal advertising has been confirmed.

**Keywords:** psychological factors, subliminal perception, neuromarketing, consumer behavior, impact, brain mapping

## 1. INTRODUCTION

„People really see and hear much more than they knowingly know to hear and see, and what they see and hear without being aware of it is recorded in their subconscious and can affect their conscious thoughts, feelings and behaviors“

Oldos Haksli [Haksli O., 2009: 78]

Consumers are under the influence of numerous external stimuli on a daily basis in order to create consumer behavior dispositions. Numerous studies have shown that intrinsic (internal, psychological) factors such as: motives, attitudes, beliefs, beliefs, habits, needs, perceptions, personal values, characteristics of the personality structure, value orientation, lifestyle, information, affect the consumer's behavior more extensively than extrinsic (external). Therefore, marketing stimulation primarily focuses on psychological factors. In the professional literature it is possible to encounter different determinations of the phenomenon of marketing stimulation. For our need, we have identified the definition proposed by Henry Assel in his book

„Consumer Behavior and Marketing Action“. It says: "Marketing stimulation is any kind of communication or physical stimulus that aims to influence consumers, that is, their thinking, emotions, behavior, where propaganda can be included in these stimuli" [Assael H., 1992: 130]. From the internal marketing stimulus corpus, for this occasion, we perceive perception as a determinant of consumer behavior. Within the framework of perception, as a factor of consumer behavior, one often refers to a rather controversial<sup>1</sup> notion that appeared in the propaganda psychology - the concept of "subliminal perception" and a subliminal message based on it. Her discovery is attributed to American economists, Nobel laureates and Harvard University professor John Kenneth Galbraith (John Kenneth Galbraith, 1931-2013).<sup>2</sup>

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<sup>1</sup> Controversial (latin controversus) - controversial, challenging, controversial, in question.

<sup>2</sup> His most important books are "Good Society: Human Order", "Price Control Theory", "American Capitalism", "Anatomy of Power", "Society of Abundance", "Great Breakdown of 1929", "Liberal Time", "Triumph" and many others

## 2. THE CONCEPTS OF "SUBLIMINAL PERCEPTION" AND "SUBLIMINAL MESSAGE"

Subliminal perception (subliminal observation) is a particular type of perception (observation) whose specificity is determined by the phenomenon of subliminality. The etymologically observed adjective "subliminal" consists of two parts: "sub" and "limes". The first term "sub" (latin sub) is a prefix that appears in complex words and signifies that something is in front (or under) and the second part of this term limes (latin limes) indicates a limit (limit value). There are many different definitions of this phenomenon. Their analysis suggest that subliminal perception is a controversial notion.

The most commonly view of subliminal perception is that is a type of perception that is not recognized at the conscious level - there is no experience, emotion, performance because the intensity of the stimulus is below the threshold of the sensation of the receptors in the senses. Because of their specific nature, they are not usually identified as a mental phenomena. The phenomenon of simulation of the intensity of irritation is also interesting to look into, especially when it occurs in the case of an increased duration of irritation, which is by the intensity below the absolute threshold of irritation. Psychologists Ljubomir Kasagić and Milanko Čabarkapa also point to this: "Sometimes the intensity of irritation which is slightly below the absolute threshold value, if it lasts longer, can cause a sensation" [Kasagić Lj., Čabarkapa M., 2002: 29]. In this sense, it is considered that subliminal perception is one of the most manipulative psychological techniques acting on the subconscious part of the psyche. It is often referred to as a "brainwashing" technique.

Branko Maričić offers a negative definition: "Subliminal perception is not what is clearly seen or heard, because in that case the lower or absolute threshold of the feelings of persons has been reached" [Maričić B., 2011: 345]. Filip Kotler and Kevin Keler believe that the theme of subconscious perception has fascinated marketers for years. In this regard they argue that it is obvious that marketers enter hidden, subconscious messages into ads or consignments. Consumers are not aware of their presence, but they still influence their behavior.<sup>2</sup> They express doubts about their effectiveness: "although it is clear that subtle subconscious effects in the processing of information exist, there is no evidence that marketers could systematically control consumers at that level" [Kotler F., Keler K., 2006: 187]. Peter Bokun believes that "our brain processes unconscious pulses that manifest themselves as delusions of the senses (...), but this requires a strong psychic activity" [Bokun P., 1999: 49]. Similarly, Zoran Slavujević: "This technique is used in messages presented in small, insufficiently recognizable parts, high-frequency sound signals, ultraviolet images whose broadcast lasts a fraction of a second, etc." [Slavujević Z., 2007: 103]. Philip Marikle defines subliminal perception as "the perception of stimulus below the level of consciousness. It is assumed that it occurs in the conditions of the stimulus presentation

below the threshold of consciousness and as such has the power to influence the feelings and behavior of consumers" [Marikle M. P., 2000: 498]. Branko Maričić believes that it is possible to distinguish three basic types of subliminal persuasion of consumers: a) through visual effects, b) with the help of fast speaking, and c) by means of hidden messages in the form of a word in a text [Maričić B., 2011: 345]. Schiffman L. and Kanuk L. while considering irritations of less intensity or of very short duration, conclude that they do not allow perception at conscious level (they are not seen and not heard), but that they can have enough intensity to be registered. [Schiffman L., & Kanuk L., 2004: 127]. Đuro Šušnjić on subliminal messages says: "Some messages are deliberately transmitted sufficiently briefly so that people do not consciously notice them and long enough to penetrate into the preconceived and subconscious, and have settled there, in order to be revived in a suitable way by some consciousness refreshing process" [Šušnjić Đ., 1990: 113]

Subliminal messages are not endemic, because in everyday communication at the interpersonal level (as verbal and non-verbal messages) they are constantly broadcasted. They reflect the attitudes, emotional states, intentions, wishes and expectations of the subjects in the communication process. Numerous things evade conscious observation and conscious perception. We are busy with other things. They become subconscious as such because we register them at the subconscious level. Conscious impressions quickly become forgotten, but what has gone into the subconscious is of a more prolonged character and more effective behavior. They are designed to perfidiously and subtly direct consumer behavior. They are much more present than they are thought to be. Therefore, customers are not even aware of why they bought something, or ordered it, etc. A world-renowned Dutch neuro-marketing specialist Martin Lindström claims that the operation of subconscious messages is "terrifyingly good." [Lindstrom M., 2010: 113].

## 3. CONTROVERSY OF SUBLIMINAL PERCEPTION

From its first appearance, and to this day, the term "subliminal perception" has always been the subject of suspicion, denial, apology, and scientific interest. Many controversies are related to this notion. Opinions are often highly polarised. Several dilemmas have followed the phenomenon of subliminal perception, which makes it controversial. Here we list only five which we consider to be dominant. Those are:

- inconsistency in the use of the term "subliminal perception",
- doubt the mere existence of the phenomenon subliminal perception,
- doubt the possibility of perception without a conscious experience (observation),
- identification of subliminal perception and subconscious perception and

- the influence of subliminal messages on consumer behavior.

These dilemmas have sparked debate on numerous issues in the professional public. Does subliminal advertising, through such (hidden) messages, encourage the desires, motives, dreams, fears, interests, according to certain products? Does it effectively stimulate disposition for behavior? To what extent does the consumer make a purchase? The answers to these, like many other marketing issues, were obtained by neuromarket research (primarily magnetic resonance and electroencephalography). Therefore, the riddle of subliminal perception is solved with the help of neuromarketing. The results of these studies are significant and therefore deserve attention. We are primarily interested in those studies that have been concerned with the relationship of neuromarketing and subliminal perception to indicate the contribution of neuromarketing in resolving controversy about the (in)effectiveness subliminal advertising.

#### 4. CONFIRMATION OF THE IMPACT OF SUBLIMINAL PERCEPTION

The literature lists the examples of experiments which have confirmed the possibilities of an impact of subconscious suggestion on behavior. It has been found that every information lasting 17<sup>th</sup> part of a second (1/17), does not cause the spectator to experience visual impression. Thus, in one experiment, the images were exhibited before the respondents through video media in the duration of one 100<sup>th</sup> of a second (1/100) in different contents. When, later, they were presented with the same images at a speed that allowed normal perception, the respondents claimed that they had already seen that images, but could not remember where and when. The conclusion was derived therefrom that there is an upper and a lower threshold of sensitivity of the senses, whereby the duration of impulse broadcast plays an important part in this form of perception. This was the first evidence that subliminal messages remain memorized in the human mind. In late XIX century (1898), **Edward Wheeler Scripture** (1864-1945) wrote the book "The New Psychology" in which he disclosed the basic principles of subliminal perception. It was not long before this phenomenon was used for commercial purposes.

In order to resolve the controversy, numerous psychological researches focused precisely on the impact of subliminal messages. Therefore, in his paper entitled "Does subliminal advertising work?" on the basis of the experiments carried out **Adams Secil** concluded that "weak stimuli produced poor impression, that is, subliminal messages do not have greater hypnotic power than the slogans on the billboards that we glimpse every now and then" [Adams S., 1977]. Other researchers have also confirmed that subliminal messages have no greater impact on consumer behavior, but that they only "stimulate basic urges (hunger, thirst)" and that "persons without developed values and attitudes are more susceptible to subliminal messages" [Maričić B. 2011: 364]. The public was encouraged that, regardless of

subconscious impact, the purchase of products and services is always carried out on a conscious level. The claims were made public that only strong stimuli affected behavior, while messages broadcast below the stimulus threshold level have no effect on behavior.

In his paper entitled "Subliminal stimulation: permanent psychological problem", **William Bevan** indicates that the concept of subliminal perception was historically significant in 1957 when **James M. Vicari** performed the first experiment drive-in theaters in Fort Lee (New Jersey) by sending subconscious messages for commercial purposes.<sup>3</sup>

At the end of the XX century (1999), a research on the power of subconscious suggestion was conducted at the Harvard University under the leadership of a professor of medicine **Jeffrey Hausdorf**. The aim was to determine whether subconscious messages that suggest negative stereotypes affect the way of walking as a form of behavior. Respondents were exposed to stimuli (pictures, messages, etc.) lasting very briefly, which prevented the respondents from attentively observing them, to form a perception (sensation, experience) on a conscious level. The research sample consisted of 48 old-age volunteers who played games on the computer while short messages lasting several thousand parts of a second were simultaneously broadcast on a screen. The respondents did not know about messages being broadcast. The respondents were divided into two groups: positive messages containing the words such as wisdom, ability, sharpness, health, etc., were broadcast to one group, and message containing the words such as senility, illness, disability, addiction, etc. to another group. Before the commencement of the experiment, the speed of their walk was measured, i.e. precisely speaking the "swing time" - the time that the leg spends in motion in the air. After the experiment, "swing time" while in motion was measured again. It was found that the respondents who were exposed to subconscious positive messages corrected their walk by 10%. That is, subconscious positive stereotypes had a positive psychological effect that corrected the walk. This was the first scientific evidence that subconscious suggestions have impact on human behavior.

Further experiments have confirmed that subliminal messages affect consumer behavior. One of the experiments was conducted to determine the impact of "unconscious emotion" on consumers [Lindstrom M., 2010: 87]. The volunteers in the experiment were exposed to subliminal images containing either smiling faces (one group) or frowning faces (another group) for sixty milliseconds. Such broadcast did not allow to establish a conscious observation of the facial expression emotions in the observed images. The respondents were later offered a luxurious drink on a bid. It was found that those who observed cheerful facial expressions demonstrated willingness to pay double the price than those who observed frowning faces. The researchers concluded that subliminal perception of images led to minor emotional

<sup>3</sup> The term "subliminal propaganda" is also attributed to him.

changes in respondents, and that they were neither aware of these mood swings nor of the stimulus that caused them. It has long been known that the smiling face (smile) subconsciously influences consumer behavior (a smile of salesmen, employees, etc.). Today, it is known that a subliminal message in the form of a smile can affect consumer behavior. **Leon G. Schiffman and Laslie Lazar Kanuk** consider as well that "people can also be motivated by something that is below the level of their consciousness" [Schiffman L., & Kanuk L., 2004: 127]. Despite numerous classical experiments that have proven the correlation between subliminal messages and consumer behavior, many questions have remained open, among which the following are particularly outstanding: Do subliminal messages influence consumer behavior and to what extent? To what extent are subliminal messages effective? Does memorizing of these messages last longer than memorizing of messages sent by classic methods? Do they have a stronger disposition basis than messages broadcast in a classic way? The researchers strove to give answers to these questions through numerous conventional experiments, but have lately started relying on the results obtained by neuromarketing. Namely, a series of brain mapping experiments have established that the power of subconscious suggestion should not be ignored as a factor in determining consumer behavior. Here we list only two neuromarketing experiments that have confirmed the impact of subliminal messages on the activity of certain brain centers and, hence, on consumer behavior.

The tobacco industry was the most interested in scientific knowledge about the effectiveness of subliminal messages at first. Because of world ban on media advertising of cigarettes and the obligation to place on cigarette packs a warning of the harmfulness of consumption, large tobacco industry companies have found themselves in the position to direct most of their marketing budget to other forms of advertising to prevent possible negative consequences for their business. They were looking for new advertising models to keep their customers (smokers). They also requested help from psychologists, who directed them to new indirect forms of advertising, as well as from neuromarketing. Therefore, the application of subliminal messages in advertising of their products was one of the ways to solve emerging marketing problems. In this sense, they have also begun financially supporting neuromarketing researches. The first question that was arisen is whether subliminal propaganda through the subconscious advertising of smoking can bypass legal restrictions, but to achieve a desirable influence on the behavior of smokers. That is, there was a dilemma about their effect. At that time, it was reasonably considered that subliminal marketing is just one of the factors that determine the behavior of consumers. In addition, it was known that the power of subconscious advertising is not based primarily on the product itself or the service which is trying to be presented, but it relies on certain characteristics of the brain, i.e. draws its strength from the psychological structure. The previous knowledge of subliminal messages led to the conclusion that the gained experience, i.e. the knowledge about a product or service, is also one of the important factors of the psychological

structure of man. In this context, it was very important to determine if the same thing is happening with the messages that were subliminally incorporated into the subconscious? Whether the brain is able to invoke the information emitted below the charm threshold and which are below the level of consciousness, and whether they can determine consumer behavior? And to this question, neuromarketing offered an answer by investigating whether images emitted below the level of consciousness have affect on smokers.

The management of the tobacco corporation „*Philip Morris International*“ has shown the greatest interest in the effectiveness of this marketing tactic. Experts for neuromarketing came to the rescue and started researches to offer answers to this question. The underlying goal was to determine whether smokers' desire for cigarettes could be caused by picture which contains the brand's "protective color" and which relates to a particular brand of cigarettes, but is not explicitly linked to her. Therefore, respondents (volunteers), long-term smokers, were underwent to brain scanning with magnetic resonance. The experiment was carried out on the example of the two most famous brands: a) „*Malboro*“<sup>4</sup> and b) „*Camel*“<sup>5</sup> cigarettes. At the time of the brain scan, for five seconds, the following (subconscious) images, that do not have direct connection with the brands of these cigarettes, were shown to respondents who were passionate cigarette smokers of „*Marlboro*“ and „*Camel*“, but who remembered earlier ads for this brand: a) a cowboy behind which is a rocky landscape, b) the hilly landscape of the American West, c) a jeep on some prairie road, d) sunset with a cowboy and e) an impenetrable desert with camels. Then, advertisements of these cigarettes were explicitly shown to respondents. It has been found that subconscious short-lived images, which bear only some association, cause the same need for cigarettes, as well as spotted advertisements. Specifically, in both cases, a part of the brain which is called *nukleus akumbens* responded. More precisely, it's about an area for which neurologists have recognized a long time ago that it is a center for craving, dependence and experience of reward.<sup>6</sup> It has even been established that subconscious images caused greater activity in the primary visual cortex of the respondents than when they watched the advertisements [Lindstrom M., 2010: 111-112]. Therefore, they subconsciously linked these image messages (masculinity, power, leisure, individuality) with the impressions which they have already entered into their own memories, by being exposed to earlier advertisements. It was also observed that during the observation of images the part of the brain, which is called the primary visual cortex,

<sup>4</sup> „*Marlboro*“ is a brand of cigarettes in the international market produced by the company „*Philip Morris International*“;

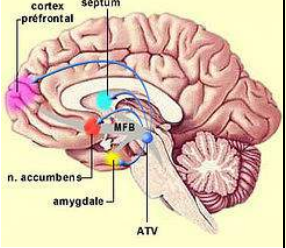

<sup>5</sup> „*Camel*“ cigarette is a well-known international brand, launched on the market by US companies „*R. J. Reynolds Tobacco*“ in 1913., as a mixture of Turkish and Virginia tobacco. At the beginning of 2008. the company has changed the composition of tobacco and packaging design;

<sup>6</sup> Nucleus akumbens is a part of the ventral system, known as the region of the brain that is sensitive to opiate activity.



became active, which is understandable from the point of view of processing the associativity of images.<sup>7</sup>

Image no. 1. *Visual display of active parts of the brain*

Nukleus akumbens	Primary visual cortex
	
Source: <a href="http://www.ff.uns.ac.rs/stara/lokal/psihologija/Cas8P.pdf">www.ff.uns.ac.rs/stara/lokal/psihologija/Cas8P.pdf</a> (23.03.2017.)	Source: <a href="https://commons.wikimedia.org/wiki/File:Brodmann_area_17_18_19.png">https://commons.wikimedia.org/wiki/File:Brodmann_area_17_18_19.png</a> (23.03.2017.)

By scanning, it has been established that smokers do not need to see the logo of „Marlboro“ or „Camel“ to be motivated to burn their favorite cigarette brand by the part of the brain that causes craving. It is enough to activate some stimulus that contains enough associative elements (even when it is in the form of subliminal messages) in order to have a desire for smoking. The study found that at 98% of the respondents an association on cigarettes emerged [Lindstrom M., 2010: 114]. The researchers assumed that this, among other things, was also due to „viral marketing“ (commercials are still on the Internet, in some public places, etc.) which is still present in the visual environment of the recipients. In addition, research has shown that smokers barely notice warnings about the harmful effects of smoking on cigarette packs because their so-called neuronal mirrors focused the attention on a memorized atmosphere, the former pleasant emotions which triggered „points of craving“ of the brain. Cognitive dissonance contributed to this behavior of smokers. So, the dilemma that has ruled so far has been resolved: subliminal messages leave implications on human consciousness, subconscious advertisements act on the psyche of a man, and consequently on his behavior. There are still open questions: to what extent does it work and why? New researches will also answer these questions.

## 5. CONCLUSION

1. In the sea of stimulus to which our senses are exposed, marketing facilities that seek to shape the perception of recipes (viewers, listeners) and thus influence his behavior are taking a significant place. Under the pressure of permanent search for new ways, techniques and

methods in order to improve the efficiency of its effect on consumers, marketing began to rely on, to a very controversial, subliminal perception. Subliminal propaganda (subliminal advertising, subliminal advertising, subliminal exposure, etc.) emerged as a special type of marketing activity, which proved to be a specific way of acting on consumer behavior and caused numerous controversies, doubts, fears, disgrace and disturbance to the public as well as alarm in scientific circles. This was the result of the knowledge that consumers were unaware (unconscious motivation, no awareness of the reasons why they did something), and consent were exposed to subliminal propaganda messages. Numerous authors have suspected the possibility of subliminal action and argued that the influence of these messages on the behavior of people is still not experimentally (accurately) determined. They thought it was good only for marketing professionals and marketing agencies because they care that people believe that they acted in accordance with their own intentions and hints. Thus, the danger of launching the idea of banning this type of manipulation is reduced to a minimum: how can something be forbidden if you can not prove that it exists at all ?! But there is not a small number of experts who believe that this marketing technique works, gives results, and that it is widely used. They argue that the effectiveness of subliminal perception has been determined by numerous experiments and psychological researches organized at the end of the XIX and early XX centuries. So basically there were not only ethical but also dilemmas related to the effectiveness of subliminal marketing. Many questions have also been raised: Does subliminal perception stimulate desires, motives, desires, dreams, fears, interests, according to certain products? Does it effectively stimulate disposition for behavior? To what extent does the consumer make a purchase? Answers to this, if many other marketing issues are obtained by neuromarket research.

2. Subliminal perception is a type of perception that is not recognized at the conscious level - there is no experience, emotion, performance because the intensity of the chin was below the threshold of the stimulus of the receptors in the senses. Because of their specific nature, they are usually not identified as mental phenomena. The basis of subliminal perception is the mental capacity of man to receive and receive information through his senses as a being, not only on the conscious, but also on the subconscious and unconscious level. This mental ability allows, besides, with or through consciously perceived messages, p (r) otters and subliminal messages that contain hidden semantic content. Wilson Bryan Key, 1925 - 2008, considered that this specific "speech within the speech has the character of concealment (" covert message ") and an entirely different meaning than that of a conscious message [Key B. V., 1974: 11]. Signals of these messages receive human senses and transfer them to the brain, but due to low intensity (below the threshold of irritability), they do not turn into a conscious experience and as such they are located in the subconscious part of the personality. Therefore, subliminal messages are below the limit of human perception, which they can not rationally explain. They are specific in their

<sup>7</sup> The primary visual cortex (area striata) is located on the very pole of the occipital lobe, hidden from its medial side. In it the information such as color, light intensity, orientation, spatial density or movement are encoded separately and sent futher by special projections to the corresponding areas of secondary visual bark.



characteristics - they are emitted below the threshold of conscious experience (absolute limit, absolute threshold) so that our senses (the eye, ear) and, therefore, can not perceive the mind consciously. They are not an endemic, because everyday communication at the interpersonal level (like verbal and non-verbal messages) is constantly being broadcast. They reflect the attitudes, emotional states, intentions, wishes and expectations of the subjects in the communication process. They are emitted independently, but are most often embedded in another message, and therefore we are not aware that our subconscious records and memorizes them. So, ideas, words, pictures, music or feelings that we later perceive as ours are 'absorbed'. Subliminal messages can be found in sounds when a message is emitted below the threshold of sensibility, in images, design, films, advertisements, posters, wallpapers on various web pages (when they are below the visibility threshold) therefore, everywhere they can be incorporated into some content. The absolute limit is most often determined as the minimum irritation that can be detected by some senses. This subliminal propaganda as a marketing method was popularized by hardcore professor Wilson Bryan Key, 1925-2008, by his cult book "Subliminal Seduction". He particularly emphasized the effects of subliminal embedding of erotic messages that stir up subconscious motives and consumer preferences [Key WB, 1972].

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### DEFINITION AND SCOPE BUSINESS MODEL OF THE GREEN BANKING

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**Abstract:** *The term "green banking" is gaining more and more popularity in recent years all over the world. It is becoming a popular part of PR strategy of many financial institutions, but apart from that behind the advertisement there are initiatives and efforts within the banks to justify it. The aim of the current paper is to present a definition of the term "green banking", to offer a definition of its scope and based on these to propose a working green banking business model. The paper is entirely conceptual and is part of a broader research under way.*

**Keywords:** *green banking, climate change, pollution*

#### 1. INTRODUCTION

There is no universally accepted definition of the term "green banking", although it has been widely used both in scientific and in popular literature, and is gaining more and more importance at present times.

The importance of green banking stems from a number of factors. The dominant one is definitely the very role that banks are called to play in the modern economy worldwide. Banks are the main providers of liquidity and credit to the business, to the individuals and to the public sector. In this role they have enormous capacity to influence all types of actors in the economy. In this respect banks cannot stay aside of the processes that are taking place at macroeconomic policy level. For the last 20 and more years, the awareness of climate change and pollution has been gaining strength due to the adverse effects from these phenomena and the increasing research activity dedicated to them. The findings of numerous research papers prove that climate change is due to human activities causing pollution. Thus the vital importance of the fight with climate change and pollution came to the forefront not only through the work of researchers but through policymakers as well.

Currently there is common understanding that efforts at all levels are needed to ensure that humanity is not to be destroyed in the near future by its own actions. This kind of thinking was reflected in the targets that many countries in the world, among which the United Kingdom, Australia, and the European Union as a whole placed on

themselves with the aim to manage climate change and pollution. Macro policy has been defining specific targets at micro and macro level with the aim of attaining constraint of spreading of the already existing adverse effects from climate change and pollution.

As a natural result from this banks have started to offer products and services that match the needs of the various types of economic agents. Simultaneously, banks commenced ever-widening staff awareness, public relations (PR) and marketing activities with the aim to position themselves as modern, progressive, responsible, which started to coincide more and more with being "green", i.e. showing a responsible attitude towards everything that has to do with the preservation of environment.

#### 2. DEFINITION OF GREEN BANKING

To date, there is no commonly accepted definition of the term "green banking" outlining its precise meaning and scope. For the past ten years, there are numerous scientific publications related to the importance of various aspects of green business – green marketing, corporate entrepreneurship as a means to achieving sustainable banking, etc.

As part of the research centered around other topics, few papers provide definitions on green banking.

In this respect Lalon (2015) defines green banking as "...any form of banking from which the country and nation gets environmental benefits. A conventional bank becomes a green bank by directing its core operations toward the betterment of environment." Bhardwaj and

Malhotra (2013) define it as “...an effort by the banks to make the industries grow green and in the process restores the natural environment.” Papastergiou and Blanas (2011) in essence discuss green banking under the broader concept of sustainable banking and explain the connection among the various organizational initiatives (including HR, marketing, internal resource management) to achieve sustainability in the services the banks are offering. They build their analysis on the basis of Jeucken (2001) four stage model. Isalm and Das (2013) point out that green banking “...indicates endorsing environment-friendly practices and reducing carbon footprint from banking activities.”

The definition proposed by the authors is that green banking is banking in all its business aspects (deposit gathering, credit disbursement, trade finance, leasing operations, mutual fund s and custodian services, etc.) which is oriented towards preservation of environment. And here a strict delimitation needs to take place so that the term is understood and used correctly. Green banking in its essence is actually the provision of loans, deposits and other banking products (mutual funds and other investment products, custodian services etc.) that would have positive impact on the environment.

Activities such as introduction of paperless statements, electronic communication with clients, internal efforts to save energy, paper and toners, various internal campaigns targeting the building and sustaining of staff awareness vis-à-vis environmental issues, PR and marketing activities in this direction, are not in their nature green banking activities. This is true because all these efforts, though highly important for the organization and for the society, do not represent core banking practices, and could be, and are deployed in many other types of organizations, despite the fact that the latter are not banks. The proposed definition of green banking is more narrow compared to the one proposed by other authors, such as Lalon (2015) who states that all kinds of banking activities, including internal operations generating consumption of paper and other resources could go under the definition of it.

One of the reasons why the understanding and usage of the term green banking is related to the practices described above, and not to the core banking activities, is that these practices are comparatively easy to put in place, and banks use the information on them for PR purposed. At the same time the implementation of product lines targeting the specific and wide-ranging environmental needs requires huge efforts inside the bank, level of education and awareness especially among corporate and risk officers, and last but not least, a lot of time for implementation. Another important hurdle for the fast deployment of such kind of products and services is the fact that oftentimes they are related to accepting higher financial risks on the part of the banks, or/and lower interest rate margin, and in certain cases, even customer attrition (due to increased requirements from the customers which are required to ensure that they operate in an environmentally-friendly way). Also, this is against the interests not only of the bank as a whole but also of the individuals who are supposed to sell those products

and services, and whose bonuses depend on the income they have generated.

### 3. SCOPE OF GREEN BANKING

The scope of green banking, as understood by most authors, could be delineated on the basis of the activities of the banks related to the environment. These activities could be divided into two groups, related to the two types of aspects and hence the two types of impacts on the environment: direct and indirect ones. In the opinion of the authors, the indirect ones are actually the important ones and to them the attention of the bank management should be concentrated.

The direct aspects and consequently – impacts - are related to the usage of resources by the banks for the purpose of its operations – electricity, oil, heating, paper, toners, and others, and the waste related to their consumption, where relevant. Indirect impacts are related to all kinds of activities through which banks can indirectly have influence on the environment. Under this category fall:

- the relations with the clients of the banks and the conditions which the banks place on them in return for granting loans and other services as well as
- the staff awareness, PR and marketing activities that the bank organizes which have relation to the environment, and which impact the level of awareness of the importance of being environmentally cautious at societal level.

Green banking implies not only the creation of green products, but also the incorporation of environmental indicators in the risk assessment and control process. This requires the existence of a pertinent environmental risk management procedure, where the following need to be defined:

- Environmental risk assessment method
- Importance of environmental risk assessment outcome for the loan approval
- Environmental risk follow-up upon loan disbursement
- Measures that are going to be taken by the bank in case the client proves to fall out of compliance with the environmental requirements of the bank related to his risk performance
- Roles and responsibilities related to environmental risk management in the bank
- Reporting to the top management on the exposure the loan portfolio has to this risk, etc.

By the implementation of such a procedure, the bank, even if it does not support a line of green products, actually act as a green bank, because it places specific requirement on its client to abide by certain environmental criteria. In such a way, depending on the strictness of these criteria, the bank has the power to restrict access to finance to polluting industries and to give preferential terms to businesses that are environmentally-friendly.

Here comes another important question: why the banks

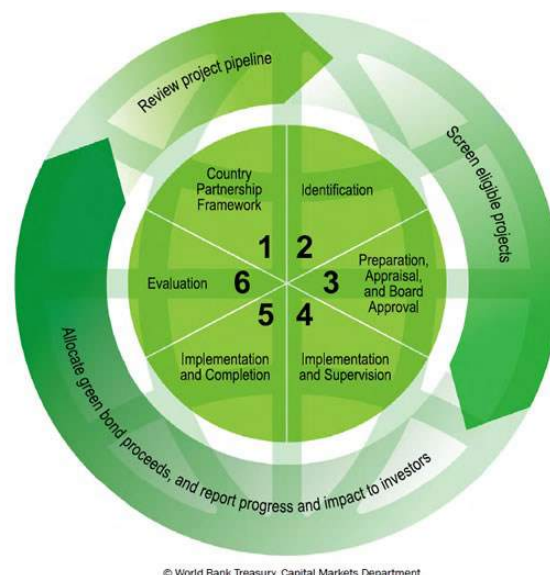
are not doing this easily? Because at present many industries have medium or high environmental risks, and some of the most lucrative industries are actually the polluting ones. This is evident from the European Bank for Reconstruction and Development categorization list presenting the level of environmental risks associated with each type of industry (EBRD, 2014). The banks do not wish to deprive themselves of the income these industries have the potential to generate. To mention a few the oil industry is polluting, the extracting industries are polluting, almost all kinds of processing industries are polluting. If banks restrict access to finance to those industries, where could they compensate the lost income from? And also, this would pose serious problems to these industries as they would experience problems finding funds for their operation. Another important side effect from restricting access to banking funds could possibly be the increased difficulty for those industries to tap alternative sources of funds for example by issuing securities. The fact that banks are not willing to finance certain activities gives signals to the market that these activities pose risks or are not reliable and this might make investors cautious buying such securities or they could withdraw funds already invested in such securities. This might be one of the factors behind the very low regulation of environmental risks at macro and central bank level, which is a subject that falls out of the scope of the current research paper.

All the above just presents the complexity of green banking as an activity which has a multitude of implications.

Here comes the real challenge ahead of modern banking, which in the opinion of the authors is doomed to become more or less green: how to come up with such products and services, which are green, and which at the same time offer wide margin and customer attraction.

#### 4. PROPOSED GREEN BANKING BUSINESS MODEL

In line with the definition the authors propose for green banking, namely, that under this term the core banking activities only need to be understood, a model of green banking is proposed. It is schematize in fig. 1 below.



**Image 1: World Bank (IBRD) Green Bond Project Cycle**

The idea behind it is simple and follows the below steps:

- The bank parameterizes a deposit product and market it as “green” by announcing that the funds generated by it will be lent to environmentally-cautions companies or to green projects (the precise definition of environmentally-cautions or green projects is up the bank). In order for the product to be attractive, it could be given a slightly higher interest rate than the current average rate on deposits
- Using the funds collected by this product, the bank lends it to companies that develop some type of green activities. How these activities will be defined, whether they would be related to decreasing the CO<sub>2</sub> footprint of polluting companies, to start-ups with green ideas, to energy efficiency project or to some other kind of activities, it is up to the bank to decide depending on the risk appetite of the management and on the current conditions in the respective economy in which the particular bank operates. What level of interest will be place on these loans, whether it will be fixed or variable, whether there will be grace periods, etc., is again in the discretion of the bank management to decide. There are generally two options: if the bank places a slightly higher than average interest on the green deposits, to try to compensate it through placing a slightly higher interest on the green loans, especially if they bear high credit risk considering that in some cases it is so (start-ups and renewable energy development, for example). The other approach is, in order to make the product attractive, to accept the more narrow interest margin by placing a slightly lower than average interest on the green loans. In return for the lower margin, the bank would hope to gain market share, of course.

In the view of the authors, only through applying a model like the one presented above or a similar one, a bank can claim that it is truly green.

The application of a green bank business model ensures

that the bank is making profit by encouraging environmentally responsible behavior 1) on the part of depositors and 2) on the part of business and individual clients who are going to use the dedicated credit products. In such a way not only the bank will profit from entirely environment-oriented business, but it would also facilitate spreading the awareness of the importance to care for the environment in society. Another inevitable effect from one bank in a market adopting such a course of action is that peers would follow. This will lead to a domino effect in the whole banking system of a country. Also, the banks who have subsidiaries outside of this country would want to disseminate this practice abroad. This would spread even farther the usage of this business model. Let's not forget the provision mentioned above, that the green credit products would be available even to companies with medium and high environmental risks in case they wish to finance with these credit products improvement in their operations which will lead to reducing the harmful impact their activities have on the environment.

Contemplating further over the proposed green banking business model, the credit products could be accompanied with insurance products especially important for the companies having high environmental risk. These products could cover potential losses for the company-beneficiary of a green credit product in case of an accident such as pollution due to incident, even for cases when fines or/and bans are imposed by authorities for non-compliance with environmental legislation and the company is not in a position to service its obligations in front of its clients and creditors.

The implementation of such a business model could definitely bring financial benefits to the bank which adopts it. The success however, could be ensured only after having carefully considered the following minimum factors:

- 1) The products specifications in terms of interest rate type, term, minimum amount for the deposit product(s), currency, and size, term, collateral requirements, currency, purpose for the credit products
- 2) The exact pricing of the products – both the deposit and the credit ones, which would bring the precise interest rate, hence product margin
- 3) The level of credit risk associated with the credit products in terms of loss given default, probability of default, exposure at default, hence the expected losses and the expected level of provisions needed (Credit Risk Management, GARP Series, 2011) as well as the other risks – market and operational related to these products
- 4) The proper marketing and PR of the products.

While the deposit side seems to be easier to come up with – a deposit product with a green purpose could be defined and parameterized considerably easy, this is not the case for the loan products. There is a wide variety of purposes for which green credit products could be designed. It is the bank's management which needs to identify which kind of need of the economic agents could be satisfied by such products so that the bank profit from them and simultaneously contribute to the protection of

environment.

In order to find the answer to this question, the authors believe that the bank should start from identifying what kind of activities in the economy in general are polluting, need improvement but lack finance and are not harmful to the environment, but contribute to its protection. Under the umbrella of these three general kinds of activities, the bank could identify multiple sub activities which need finance. Each of these sub activities would of course, have a risk profile of their own, would be in need of specific finance (term of loan, amount, type of collateral), and hence would potentially offer specific expected rate of returns. It is then up to the management of the bank whether the bank would start offering one, two or many loan product with environmental orientation.

It might be wiser to start with a more conventional credit product with comparatively average risk level. The success of the launching product is vital for the success of the business model as a whole, for its sustenance and sustainability in the long run. A successful product would bring the following benefits, the list not being exhaustive:

- 1) Profit for the bank
- 2) Courage to the bank management to go further offering more similar project thus encouraging innovation
- 3) For the peers it would indicate that the model works and that they need to replicate it, which would be good at macro level because banks would support the efforts of the government to achieve targets related to the environment
- 4) For the society it would mean that the banking sector is supporting environmental protection and this would be a strong signal that business needs to be green in order to get access to finance.

The main strategic challenge for the implementation of the proposed business model lays with the top management commitment to do it. There needs to be understanding of the importance and sustainability of such a model. Only then the top management would want to engage with it. In order to facilitate this kind of understanding among senior management, in case it does not exist, bottom-up efforts are important. If the top management is presented with a strong case, it would rather accept to go for it.

## 5. CONCLUSION

Green banking is getting more and more attention in the last years. This is not peculiar on the background of the climate change talk at governmental level and the environmental agenda that the leading economies in the world, EU among the first runners, are adopting. Overcoming climate change and pollution is a cause predate without the active participation of banks. That is why it is important there to be a clear and correct understanding of what green banking is called to be.

In the opinion of the authors, banks should refocus from concentrating internal efforts only towards saving resource consumption within the organization and place energy into coming up with innovative ways of stimulating the environmental protection as part of their

core business, which is actually what green banking is. Banks could profit from the green business model, and this is something that the future would prove. The ones that are the first to understand this, would definitely have the potential to gain market share and profit. The challenge at operational level is with devising the product specificities so that the profitability of the model is ensured. The strategic challenge is overcoming top management skepticism.

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### ANALYSIS OF SOFT FACTORS IN SIX SIGMA IMPLEMENTATION

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**Abstract:** *The paper discusses the importance of soft factor in terms of critical success factors for the implementation of Six Sigma projects. The analysis is based on a recent literature review from various industrial sectors, including manufacturing and service industry, and from various regions. It shows that the soft factors are, in general, more important for the successful implementation of Six Sigma than the hard factors. Among soft factors, the following factors are found as the most significant ones: top management commitment, education and training, linking Six Sigma to customer i.e. customer focus, linking Six Sigma to business strategy, and, cultural change.*

**Keywords:** *Six Sigma, critical success factors, soft factors*

#### 1. INTRODUCTION

The paper discusses a general significance of soft factors in the implementation of Six Sigma projects in different industrial sectors. What is important to begin with is that organizational development through the years has changed a lot, and these days it includes strategic change, like implementing Six Sigma in the first place.

Defining critical success factors for Six Sigma implementation is an important task. Among these factors, there are hard factors and soft ones influencing the implementation. The hard factors mainly refer to the technical aspects of Six Sigma implementation. However, in a modern industry, the soft factors are becoming more and more important, due to an evolved and emphasized role of the management involvement.

To begin with, in the 1960s when organization development emerged, it was primarily concerned with individual and group level interventions to support gradual or incremental organizational change [1], [2]. Later on, this field was broadened to encompass large-scale interventions including a strategic change in an organization.

Transformational change during and after Six Sigma implementation is unavoidable in many organizations whose environments are complex and turbulent. Its outcomes often include a fundamental reevaluation of organizational purpose and vision as well as an expanded view of the groups and organizations that are critical to its success [3].

#### 2. CRITICAL SUCCESS FACTORS FOR SIX SIGMA IMPLEMENTATION

As stated in many papers, Six Sigma has been developed into a standard methodology for quality improvement in the manufacturing industry, but as well in the service industry, healthcare, software industry, etc. Six Sigma was developed by Motorola in the 1980s, but became globally recognized as a good practice for quality improvement after its adoption by General Electric in the mid 1990s. Six Sigma is a methodology for managing and executing quality improvement in project-wise fashion in organizations. What is important for this approach is that besides a conceptual framework specifying its purpose and rationale, Six Sigma offers prescriptions for improvement projects. These prescriptions consist of a roadmap of a large number of tools and techniques, and a number of improvement principles. Besides, Six Sigma offers directions for project



selection, guidelines for training and implementation planning [4].

Welch [5] emphasized that Six Sigma is a quality programme that improves customers' experience, lowers costs and builds better leaders. Six Sigma, a term developed by Motorola as previously mentioned, is a disciplined methodology that uses a set of statistical and management tools to solve problems and improve operating processes [6]. Six Sigma is widely recognized today as a process improvement methodology in various industrial sectors. Higher quality, efficient development and operating costs, thus enhancing the organization's competitive strength are the results of a breakthrough improvement in the understanding of products and processes within the company, which are direct results of a proper Six Sigma implementation aiming, in general, to improve overall quality.

Pyzdek [7] emphasized that the strength of Six Sigma includes but is not limited to implementing and measuring quality improvements using the concept of DMAIC (define, measure, analyze, improve, control) for an existing processes or systems, and the DMADV (define, measure, analyze, design, verify) approach for a new process or system.

Later on, more and more studies show that there are many factors that influence implementation of Six Sigma within one company. These factors are referred to as critical success factors. Critical success factors are the factors that influence the success of the implementation of Six Sigma projects. In other words, if during the implementation of Six Sigma all the critical factors are well analyzed and well used, the implementation alone will be successful. On the other hand, if some of the critical success factors are even slightly excluded, the whole implementation of Six Sigma could be jeopardized and it can be a failure.

However, it is very debatable which factors are the most important for the successful implementation of Six Sigma, since the set of success factors could depend on various factors such as type of a company, industrial sector, geographical region, etc. For a beginning, the most important is that within a company, everybody understands the most significant factors i.e. the critical success factors for implementing Six Sigma in their company.

As Coronado and Antony stated, there are several critical success factors for the successful

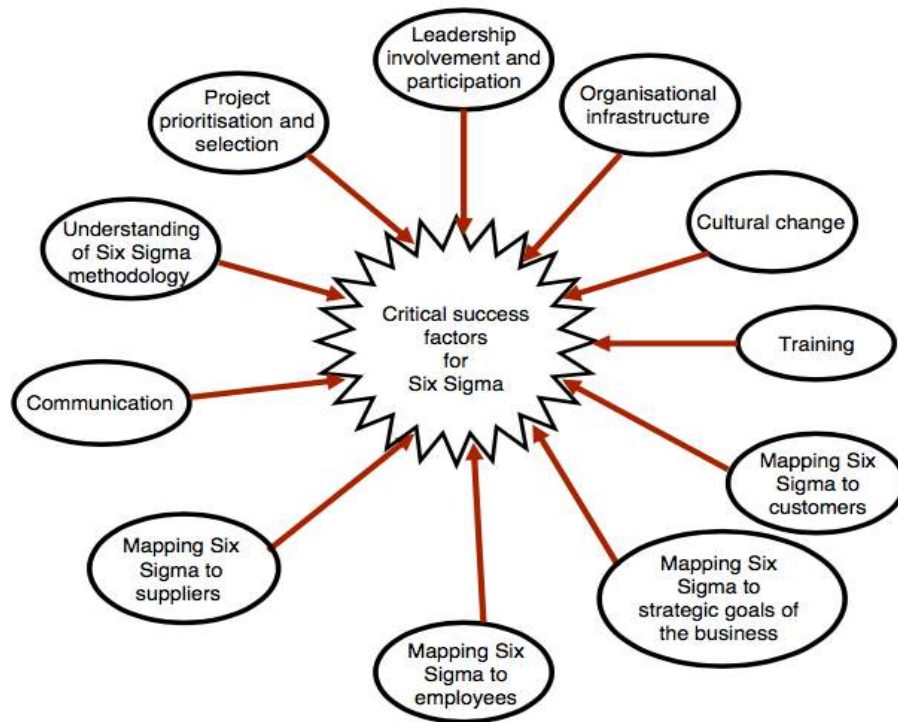
implementation of Six Sigma projects in organizations. [8] These factors will be analyzed further on, concentrating on the soft critical success factors.

In a paper written by Suresh et al. [9], impact of leader and leadership on Six Sigma is emphasized. As it has been stated, individuals who have a clear idea of what they want to do – personally and professionally – and the strength to persist in the face of setbacks and failures are the leaders. For Six Sigma implementation it is very important to have a good leader, due to a fact that the transformation of processes within a company is not an easy task. Having a real leader during this process transformation can be a turning point in terms of success or a failure of implementing Six Sigma. In the same paper three hypothesis are proposed and verified [9]:

- There is a positive relationship between leader attributes and successful deployment of Six Sigma initiatives.
- There is a positive relationship between leadership characteristics and successful deployment of Six Sigma initiatives.
- The role of leaders and leadership are two important critical success factors for successful deployment of Six Sigma initiatives.

Image 1 shows the commonly accepted set of critical success factors for the implementation of Six Sigma in a company [9], proposed by Suresh et al. Typically, a set of critical success factors is divided into two groups:

- 1.) Hard factors:
  - Organizational infrastructure,
  - Project prioritization and selection;
- 2.) Soft factors:
  - Leadership involvement and participation,
  - Cultural change,
  - Training,
  - Mapping Six Sigma to customers,
  - Mapping Six Sigma to strategic goals of the business,
  - Mapping Six Sigma to employees,
  - Mapping Six Sigma to suppliers,
  - Communication,
  - Deeper understanding of Six Sigma methodology.



**Image 1.** Critical success factors for Six Sigma implementation [9]

There are other variants of this classification. In this paper, the classification of critical success factors for Six Sigma implementation proposed by Khan [10] was adopted as a basis for the further analysis presented below.

This author defines the following factors as the soft ones when it comes to critical success factors for implementing Six Sigma:

- Creating an effective cultural change
- Top management support
- Effective communication
- Teamwork
- Employee training and education
- Linking incentives with Six Sigma.

In the same paper [10], it is defined that the hard factors for implementing Six Sigma are:

- Effective use of Six Sigma methodology
- Organizational infrastructure for Six Sigma
- Effective use of Six Sigma tools
- Project management skills
- Role of IT

- Use of consultant.

It is important to mention that while understanding importance of the soft factors as the essential to obtain the company's goals, they must be supported by the hard factors to manage, track and improve the whole improvement process until the very end of implementing Six Sigma [10].

### 3. ANALYSIS OF SOFT FACTORS EFFECT ON SIX SIGMA IMPLEMENTATION

Based on a review of a recent available literature, critical success factors for Six Sigma implementation in different industries and countries are presented in Table 1. Specifically, first five of the most important factors in implementing Six Sigma are extracted from each study. The classification of soft and hard factors varies from study to study; therefore, they will be summarized and analyzed according to the classification proposed by Khan [10].

**Table 1.** Analysis of Six Sigma Critical Success Factors from different studies

TYPE OF INDUSTRY	COUNTRY	FIRST FIVE SUCCESS FACTORS IN IMPLEMENTING SIX SIGMA
Manufacturing	India	<b>1. Management involvement and participation</b> 2. Organizational infrastructure <b>3. Linking Six Sigma to customers</b> <b>4. Understanding of Six Sigma methodology</b> <b>5. Leadership for Six Sigma</b>
Electronics	Korea	1. Project selection 2. Implementation system <b>3. Customer-centric</b> <b>4. Management leadership</b> 5. Belt system

General industry	Brazil	<b>1. Linking the Six Sigma to the business strategy</b> <b>2. Commitment of the top management</b> <b>3. Environment of trust, ethics, integrity and respect for people (cultural change)</b> <b>4. Training</b> 5. Project selection and prioritization
Software	India	<b>1. Management commitment and involvement</b> <b>2. Linking Six Sigma to business strategies</b> 3. Project planning and management <b>4. Understanding of Six Sigma methodology</b> 5. Project prioritization and selection
Manufacturing	Greece	<b>1. Understanding of Six Sigma methodology</b> <b>2. Effective internal communication</b> 3. Organizational infrastructure <b>4. Linking Six Sigma to customers</b> <b>5. Management involvement and participation</b>
Service	Singapore	<b>1. Top management commitment</b> <b>2. Cultural change</b> <b>3. Organizational readiness</b> <b>4. Customer focus</b> <b>5. Education and training</b>

As it could be seen from the third column of Table 1, majority of the most important factors are the factors previously defined as soft factors (marked in bold). Some of the factors from studies presented in Table 1 are not given in the above mentioned classification so they require a special consideration. Specifically, factors Linking Six Sigma to customers, Customer focus, Linking Six Sigma to business strategies, Understanding of Six Sigma methodology, and, Organizational readiness, do not appear directly in Khan's classification but it is clear that, by their nature, they belong to the group of soft factors. The conclusions from the observed studies regarding soft factors are as follows:

- In Indian manufacturing industries [11], from the five most significant factors influencing implementation of Six Sigma, four are the soft factors: Management involvement and participation, Linking Six Sigma to customers, Understanding of Six Sigma methodology, and, Leadership for Six Sigma.
- In Korean electronics industry [12], the significant soft factors are: Customer centric and Management leadership. The other success factors belong mainly to the group of hard factors.
- In Brazilian industry in general [13], the four most significant success factors are the soft factors: Linking Six Sigma to the business strategy, Commitment of the top management, Environment of trust, ethics, integrity and respect for people and Training i.e. cultural change.
- In Indian software industry [14], three of the five most important success factors are the soft factors: Management commitment and involvement, Linking Six Sigma to business strategies, and, Understanding of Six Sigma methodology.
- In Greek manufacturing industry [15], four of five most important factors are the soft ones: Understanding of Six Sigma methodology, Effective internal communication, Linking Six

Sigma to customers, and, Management involvement and participation.

- In service industry in Singapore [16], it has been found that all of the five most important critical success factors are the soft ones: Top management commitment, Cultural change, Organizational readiness, Customer focus, and Education and training.

As previously mentioned and can be seen in Image 1, there are many critical success factors on implementing Six Sigma in one company. Every company has its own explanation why some factors are important and why the others are not. In the table above, results extracted from several studies are analyzed in order to separate and analyze the importance of the soft and the hard factors. Considering top five critical success factors from each study, it was shown that more factors are the soft ones, even in manufacturing industry, as well as in the service industry.

In the next part of the paper, the analysis of the most influential soft factors is presented.

### Management involvement and commitment

Those who have implemented and practiced Six Sigma agree that the most important factor is continued top management support and enthusiasm [17]. Six Sigma must be driven by the people in the highest level of the organization. In Six Sigma success stories like Motorola, GE, and AlliedSignal, the CEOs are the ones who have made it possible. All of them support, participate and are actively involved and dedicated in company-wide Six Sigma initiatives.

What is important to mention is that willingness of the management to actually implement and continue to follow Six Sigma methodology is crucial.

From the factors listed in Table 1, Management leadership is highly related to the Management involvement and commitment, and Environment of trust, ethics, integrity and respect for people could be indirectly related to this factor. As it can be seen, every country and industry includes this factor as one of the first five success factors in implementing Six Sigma projects.

### **Education and training**

One of the crucial factors for the successful implementation of Six Sigma projects is training and education. It is critical to train the employees and communicate both the "why" and the "how" of Six Sigma as early as possible, and provide the opportunity for people to improve their comfort level through training classes [18]. The belt system must be applied throughout the company starting with top management, but belt system itself is more related to the hard factors. It is essential to educate the employees but also to motivate them properly to attend the seminars on implementing Six Sigma.

This factor indirectly also considers an effective internal communication, since it is typically a result of good training in one company.

### **Linking Six Sigma to business strategy**

Six Sigma cannot be treated as yet another stand-alone activity. It is more of philosophy rather than just the usage of a few tools and techniques of quality improvement [19]. Six Sigma projects must be targeted for process and product improvements that have a direct impact on both financial and operations goals. Even if the first efforts focus on fairly narrow problems, their impact on the whole business should be clear. Therefore, link between projects, every activity and customers, core processes and competitiveness needs to be clear [20].

Generally, it is important to link the Six Sigma methodology to the current but also the future strategy and goals of the company.

### **Linking Six Sigma to customer**

Six Sigma should begin and end with the customer. Like many successful methodologies, Six Sigma projects should begin with the determination of customer requirements. It is essential to set project goals based on reducing the gap between the company's expected and actual performance, especially in terms of quality delivery time, reliability and customer satisfaction. In this sense, the understanding of markets, operations, measures used and creativity to maximize value and performance are the core elements of Six Sigma approach [21].

It is explicit that the customer centric or customer focus factor listed in Table 1 directly refers to this factor.

Primarily, the exact understanding of what the end user expects from the company's service or product is the essential goal to a company's success, and Six Sigma methodology is a method to achieving this goal.

### **Cultural change**

During any cultural change within one organization, leaders are needed to implement a change into an organization. During implementation of Six Sigma and while making the cultural change, company needs the key players, who act as agents to facilitate the change [21].

Ways of peoples thinking, assuming, believing, perceiving, thinking and acting within one organization is defined as the organizational culture [22].

On one side, organizational culture is very difficult to change, on the other side there is always a way if the employees are properly educated, trained and motivated [23].

Beside the factor Cultural change listed in Table 1, the factor Environment of trust, ethics, integrity and respect for people listed could be considered as a cultural change factor.

## **4. CONCLUSION AND FUTURE RESEARCH**

This paper aims to clarify the importance of soft and hard factors as a critical success factors in Six Sigma implementation in general. The study shows that soft factors are more important than the hard factors, even for the sectors where Six Sigma methodology has been traditionally and the most frequently applied such as manufacturing industry. Besides, it has been found that the most important soft factors for the implementation of Six Sigma projects are:

- Management involvement and commitment;
- Education and training;
- Linking Six Sigma to customer i.e. customer focus factor;
- Linking Six Sigma to business strategy;
- Cultural change.

Based on the existing experiences from Six Sigma implementation in our country [24], the future research will be focused on the analysis of critical success factors (both soft and hard ones) in Six Sigma implementation in Serbia and region. The survey will be conducted including critical success factors identified from similar studies on Six Sigma implementation, and multivariate statistical analysis will be implemented in order to process the obtained data and find the most significant critical success factors for implementation of Six Sigma in Serbian industry and the bordering region.

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### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### CAR CLINIC AS A NEUROMARKETING RESEARCH FACILITY

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**Abstract:** Auto industry is very susceptible to design, interface and other car features' preferences of consumers. Due to the lack of success of traditional marketing research methods in adjusting the product to customers' preferences the field of neuromarketing was developed. Neuromarketing is a new interdisciplinary field that applies neuroscientific methods in business decision-making regarding various marketing aspect such as product features (material, packaging...), advertisements and prices. By using methods such as Functional Magnetic Resonance Imaging (fMRI), Electroencephalography (EEG), Eye Tracking (ET), Galvanic Skin Response (GSR) and Facial Coding (FC) neuromarketing can help companies understand what consumers really feel, think and want on an unconscious level, as well as how they make decisions. A facility that uses a combination of traditional and neuromarketing techniques was also developed and named car clinic. Since research and development of a car is a very long and expensive process, testing a car's features while still in the development phase, before or after building the prototype, can reduce the costs and the risk of errors, especially in a virtual car clinic.

**Keywords:** Car Clinic, Neuromarketing, fMRI, EEG, ET, GSR, FC, unconscious preferences, brain research

## 1. INTRODUCTION

Neuromarketing is a subarea of neuroeconomy aimed at using neuroscientific methods to explain relevant consumer behavior [14]. Neuromarketing combines marketing-relevant knowledge and medical scientific methods in consumer behavior research [4]. For this purpose, processes in the human brain are analyzed and interpreted so that this gained interdisciplinary knowledge can be used in both marketing theory and practice.

The trouble with market research is that people don't think how they feel, they don't say what they think and they don't do what they say [25]. People will often give a politically correct answer that they expect the company would want to hear, rather than their real opinion [30]. That is the reason why getting insight into the brain of consumers can be a more valuable and more accurate way of better understanding the consumers, their preferences and desires.

Modern medical methods make it possible for thinking activities in the brain to be identified and localized i.e.

assigned to particular parts of the brain. These reactions can be connected with, and are therefore dependent on their causing stimuli such as marketing communication of a company - words, colors, sounds, smells, movement, advertisements, packaging, material, product design... This stimuli can lead to improving of products' positioning on the market and creating a desired consumer reaction such as attention, interest, preference, intention to buy and ultimately action - buying. It is therefore the ultimate marketing goal to influence the consumer by predicting their behavior in particular situations when exposed to particular stimuli [21].

## 2. UNCONSCIOUS MOTIVES AS REAL NEEDS

In one motive research study [18] subjects were asked to choose a pullover from the shelf. However, they were not aware that the order i.e. the position of the pullovers was changed before each testing. The results showed that subjects tended to choose the pullover that was on the right side of the shelf, regardless of the specific pullover that had been placed there. After the experiment the

subjects were asked to state the reason for choosing the specific pullovers, and not a single person mentioned the position of the pullover. This response leads to the conclusion that the real reasons for specific behavior are often unconscious, thus making it extremely difficult for people to express and even realize their true motives.

Herein lies the possibility of applying neurosciences to better understand human behavior in different situations and under different circumstances. For instance, applying neuromarketing in business can help companies to better understand what it is that "triggers" customers to choose a certain product over others. This could by large enable companies to better adjust their products, advertisements and prices to real consumers' needs rather than to the needs that they express verbally on a conscious level.

### 3. NEUROMARKETING

Only 5% of human brain activities are conscious and rational, representing rational choices that people are aware of when they make a decision. This means that the enormous 95% of human brain activities are unconscious and emotional [2]. These 95% have a much deeper influence on decisions that people make, but people are unaware of that and thus unable to feel it and express it. Since traditional marketing research methods rely on the conscious side of the brain, this could explain why 80% of new products launched onto the market fail [25]. In order to get a deeper understanding of how people choose a certain product or brand, companies can use new methods of exploring consumers' brain.

**Neuromarketing** is a new field of marketing research that uses neuroscientific methods and knowledge to get insight into the unconscious of the consumers - their brain [30]. This can help companies better understand how consumers respond to different marketing stimuli (product, price, logo, packaging, advertising...), as well as get insight into what consumers really feel and think instead of relying solely on what they say that they feel and think [3].

Neuromarketing techniques that are mostly used in auto industry are: Functional Magnetic Resonance Imaging (fMRI), Electroencephalography (EEG), Eye Tracking (ET), Galvanic Skin Response (GSR) and Facial Coding (FC).

**Functional Magnetic Resonance Imaging (fMRI)** uses a magnet and radio waves to create high resolution images of the living brain. It measures changes in the blood flow in the brain and shows researchers which part of the brain becomes active when exposed to certain stimuli [9]. In neuromarketing research subjects must lie on the table, in the large, magnetic imaging device, where they are shown different marketing materials (stimuli) through goggles. By measuring brain activity, a certain behavior pattern can be determined.

**Electroencephalography (EEG)** measures the electrical activity of the brain by using the electrodes placed on the subject's head [1]. It enables the company to determine

the level of relevance, emotional and rational motivation of the subject toward a company, brand or message. It can help predict whether the subject can identify with situations, people or values depicted in stimuli such as advertisements, product images, videos or computer simulations. EEG can detect even the most subtle or rapid stimulation from an advertisement, which can then be used to improve the advertisement itself and in therefore increase consumer engagement and consequentially sales [11].

**Eye Tracking (ET)** is a method that assesses the subject's visual attention in every millisecond of exposure to an advertisement, image, video, message or physical product, to determine which stimulus has drawn the most attention [1]. It can be in the form of an eye camera or a device that is connected with the EEG device. In the latter case this synchronized signal from both EEG and ET devices can track, measure and estimate how much time the subjects spent and how they felt when they were looking at each element of the tested material [11]. This can help companies predict how much attention consumers pay to each element, and thus improve every element in order to increase the desired effect - again, consumer engagement and sales.

**Galvanic Skin Response (GSR)** is a small device placed on the subject's finger, that registers variations in galvanic skin responses and by doing so measures the level of arousal ("micro goosebumps") that is triggered by a product, advertisement or message [11]. In other words, it measures stress responses through subtle changes in the skin, such as temperature and sweat [30]. This can help companies predict whether consumers got excited and driven to action (buying the product) when they touched the product or material.

**Facial Coding (FC)** is a method of analysing facial expressions that subjects make when they are exposed to specific stimuli such as product, advertisement, color or logo, and detecting emotions that these facial expressions evoke in subjects.







**Image 1:** Neuromarketing Research Tools: 1. Electroencephalography (EEG), 2. Galvanic Skin Response (GSR), 3. Eye Tracking (ET), 4. Functional Magnetic Resonance Imaging (fMRI)

#### 4. AUTO INDUSTRY

Car production from development to market launch phase is a very expensive, complex and long process. For instance, in German auto industry the development of a new car model from the first concept until the launch onto the market lasts for seven years on average and costs several hundred million dollars [28]. There is an ongoing competition between German and Japanese competitors for ever shorter product development cycles.

Car market is a global market with very intensive global competition, which makes it hard to achieve high consumer loyalty. Consumers nowadays want personalized, tailor-made cars in order to feel special and unique. Car manufacturers are challenged to offer individually different designs and other car features as quickly as possible, while still maintaining cost efficiency [23].

Another important trend in auto industry is the increasing use of electronic features in cars, such as automatic distance control, parking assistance, brake assist... The original purpose of these features is to make driving more comfortable and safer, but the company should research to what extent the consumers really want, need and understand the technology in the car [5]. Consumers may get confused by so many buttons in the car, so sometimes less can actually be more - more value to the consumer.

#### 5. CAR CLINIC

Car clinic is a specific marketing research method established as a facility with the purpose of car testing during and after the development phase i.e. prior to its mass production and commercialization [22]. Car clinic offers the possibility of testing a brand new car or an improved already existing model of a car by different potential customers i.e. target groups [10]. Companies who favor car clinics say that they want to know what consumers think about a car before they start manufacturing thousands of them [4].

There are two types of car clinics - the static and the dynamic one [6]. In the static car clinic chosen subjects are invited to a neutral location under great secrecy to test i.e. look, experience and assess the car prototype compared to competitor cars. In the dynamic car clinic the experience of purely looking and feeling the comfort is expanded to the driving experience. Direct contact with the car can give the company great insight into the subjects' experience, emotions and behavior [15].

Marketing research in a car clinic usually begins two to three years before launching the product onto the market and can follow the entire development process, starting from the concept, prototype construction and equipment testing up to the advertisement testing prior to product launch [10]. Methods used in car clinics include traditional marketing research methods such as questionnaires and personal interviews, as well as neuromarketing methods [20].

On one hand, personal interviews with each subject can give significant insight into their opinion, comments and suggestions. A particularly important research method is a prototype test drive. The subject can give extremely significant information to the company regarding the performance, equipment, comfort, materials and design of the car. This information is then used to improve and adjust the car prototype and therefore make the final car model better suited for the consumers. In addition, this research method can lead to cost reduction since the adjustments are made during or right after the development phase rather than after spending large amounts of money on development, mass production, marketing, commercialization, marketing research and only then product adjustments [11].

On the other hand, the advantage of neuromarketing methods is getting the information on true feelings of subjects when presented with a drawing, a prototype, a simulation or an advertisement of a car, rather than getting verbal statements of the subjects, that may or may not have been carefully thought of or honestly given. For instance, EEG can measure brain activity and show what car design is favored by the subject, whereas Eye Tracking can show which parts of the car are looked at the longest. Neuromarketing research can not only measure how much time the subjects needed to find and understand how to use specific buttons in the car (such as air condition), but it can also measure how the subjects were feeling while searching for and trying to understand how to use different equipment. This particular research method can be very useful since technical engineers do not necessarily have the same perspective on the level of difficulty of using the technology as the consumers do. This way technology interface can be better adjusted to consumers' abilities and preferences.

As a result, car clinic offers a way of better adjusting every aspect of a car to customers' real preferences, as well as decreasing extremely high development and production costs in auto industry. This will lead to increased customer satisfaction and decreased number of

errors - produced cars that customers do not really want and will not buy.

## 6. VIRTUAL CAR CLINIC

Testing in a car clinic is done on a car prototype, but this prototype is actually already determined to a large extent, especially in its essential features such as basic functions. Therefore, changes of the car can only be made to a limited extent. Therein lies the opportunity for car clinics to also be formed by using virtual reality [27]. Virtual car clinics have a very significant advantage - they can be established in the early stages of product development, before prototype construction, with only rough drawings of the new car [10]. Virtual reality enables the company to make images, 3D simulations and even short videos of the car being driven by people in different environments and locations. This can connect people closer with the car and make them feel as if they were driving the car themselves. This is the advantage of a virtual car clinic that is supposed to outweigh its disadvantage of being unable to offer the full consumer experience since it is not 100% possible to transfer the actual feeling or the scent of the real physical car by using virtual reality [10].

By using virtual reality glasses, cars can be viewed in a virtual showroom on a turntable that spins to view the car from all sides and angles. Each subject can change and choose their preferred exterior or interior features such as colors, materials, lighting or cockpit design. Cars can even be taken for a virtual test drive. All of these options can help the company determine the consumers' preferred prototype idea, so that the company can build it in reality.

Research in a virtual car clinic can help the company determine the preferred design of consumers faster and more accurately, and then proceed to the development phase of that specific design. As a result, virtual car clinics can lead to increased research flexibility and lower costs for automotive companies [13].



**Image 2:** Advantages of virtual car clinics








































## 7. EXAMPLES AND RESULTS OF NEUROMARKETING RESEARCH IN CAR CLINICS

Toyota Motor Europe is one of the companies that has realized the importance of the effect that the first impression of the car can have on the purchase decision. This realization has led to the conclusion that a car has to "feel right" to the consumers, excite them and emotionally engage them [11]. To develop such a car, the company used a combination of neuromarketing research tools and traditional marketing research methods. First they equipped 40 participating test subjects with the EEG device (headset), a small GSR device on the finger that measures galvanic skin response and eye tracking equipment to measure their emotional engagement and eye movement i.e. direction and parts of the car that attract the highest attention of the subjects' eyes. Afterwards they used traditional marketing researching methods (questionnaires and interviews) to understand how subjects felt and thought about the stimuli. The research was conducted in 2 stages. In the first stage the subjects were looking at car images on the computer, whereas afterwards, in the second stage, the subjects were allowed to enter the car and touch the materials.

Since the Toyota car prototype was still confidential at the time when this research was being conducted, the company included car models of competitor companies: Volkswagen, Ford, Renault, Citroen, Peugeot, Hyundai and FIAT. The results of the neuromarketing research in the first stage of the research showed a clear difference in the emotions and liking among these cars. Regarding the exterior features, the Volkswagen car model had the highest general score, whereas the Ford car model was the least liked car. On the other hand, the interior features of the Ford and Volkswagen car models evoked very positive emotions, in contrast to the Renault car model which caused decreased excitement of the subjects. Furthermore, the research showed in detail which exterior and interior elements of each car were perceived as the strongest and the weakest. This gave a great insight into the consumers' mind and helped Toyota improve its car prototype before construction and production, reducing the risk of errors. This valuable information was not possible to get from traditional marketing research methods since the liking scores of each car model given by the subjects on a 7-point scale were almost identical. This shows that people were unable to verbally express and distinguish their liking on a conscious level.

		Overall exterior	Front view	3/4 front view	Side view	3/4 rear view	Rear view
 (a)		-9	-48	0	-14	-6	0
		2,9	2,7	3,7	4,9	3,9	2,4
		5,14 	4,66 	5,09 	5,16 	5,16 	4,73 
 (b)		-2	-21	-4	14	0	0
		3,2	3,5	3,0	4,0	3,9	1,8
		5,59 	4,86 	5,20 	5,66 	5,18 	4,89 
 (c)		2	0	3	0	0	0
		3,7	2,3	4,0	4,2	2,9	4,8
		5,59 	5,41 A 	5,39 	5,32 	5,73 AB 	5,52 AB 

**Image 3:** Metrics - exterior views of different car models

		First exposure	Second exposure	Speedometers	Steering wheel	Driver's door	Central console	Gearshift	Hand-brake	Passengers' door view	Radio	Graining
 (a)		0	0	NEG *	NEU	NEU	NEG	NEG*	N/A	NEU	NEU	NEU
		1,7	5,4	LOW	HIGH	LOW	HIGH	HIGH	N/A	HIGH	HIGH	HIGH
		4,39 	4,80 	4,59 	4,43 	4,48 	4,34 	4,45 	4,27 	4,50 	N/A	4,61
 (b)		21	0	N/A	NEU	POS	NEU	NEU*	NEU*	NEU	NEU	NEU
		3,8	3,6	N/A	HIGH	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH
		5,48 A 	5,77 A 	5,27 A 	5,68 A 	6,36 A 	5,68 A 	5,39 	5,32 A 	5,34 A 	N/A	5,41 A
 (c)		0	0	POS*	NEU	NEU	NEU	NEU*	NEU*	NEU	N/A	NEU
		2,2	5,1	LOW	HIGH	HIGH	HIGH	LOW	LOW	HIGH	N/A	HIGH
		5,27 A 	5,43 A 	4,93 	5,23 A 	5,05 A 	5,18 A 	5,36 A 	4,91 A 	5,23 A 	N/A	4,98

**Image 4:** Metrics - interior evaluation of different car models

In the second stage of the research no conclusion could be drawn on the preferred material by the consumers since their answers were dispersed when they were asked to choose a favorite. However, the same research with neuromarketing equipment clearly showed favorite materials on an unconscious level. When the subjects were just looking at the subjects, the only material that caused a positive reaction was the Peugeot car model.

When the subjects touched the materials afterwards, the Volkswagen and the Hyundai car models were the only two models that evoked positive emotions. What these materials had in common was a pattern similar to animal skin. This discovery was extremely valuable to better adjust the Toyota car prototype to consumers' real preferences.



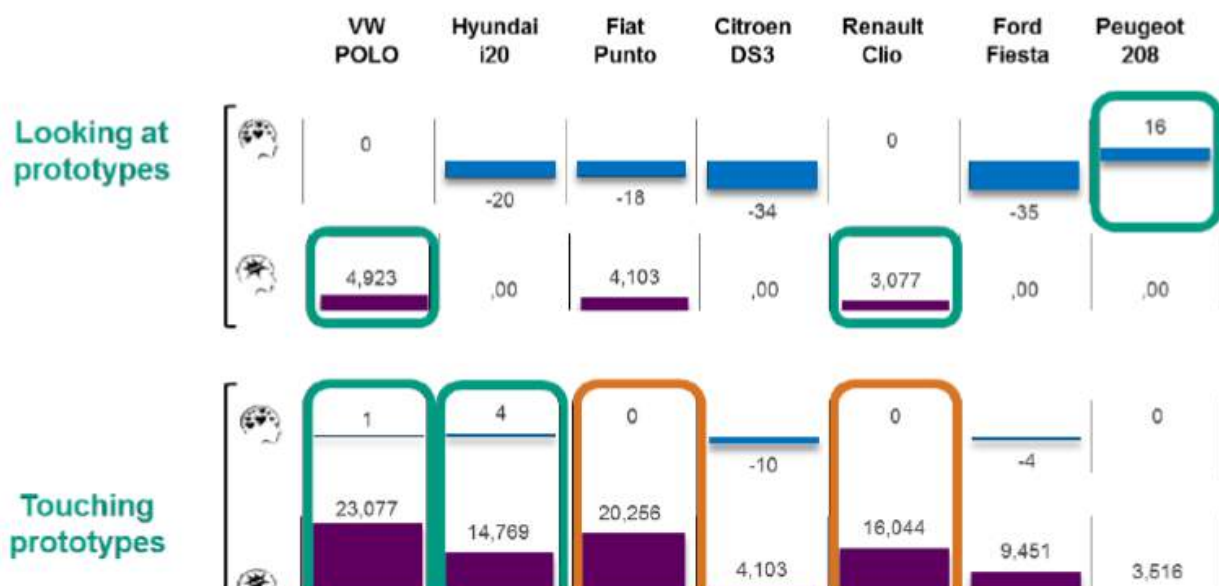


Image 5: Metrics - dashboard materials testing

**Hyundai** conducted a neuromarketing research in which it asked 15 men and 15 women to view a new car in 2011 [4]. They were equipped with the EEG device and were asked to look at the following parts of the car: the bumper, the windshield and the tires. The results from monitoring their brain activity showed which aspects of the car exterior should be changed to better adjust to the consumers' preferences which would result in purchasing decisions and increased sales.

**Chrysler** first used Eye-Tracking to discover where in the car consumers looked for navigational devices and then it used fMRI to improve the navigational devices themselves [32]. In addition, Chrysler used fMRI to study the brains of consumers when exposed to images of different car designs, and discovered that consumers were more likely to purchase a car whose front resembled a human face [9].

Since car clinics can also be used for advertisement testing, a remarkable example provides the **Volkswagen's** advertisement for the car model Passat, which was shown during Super Bowl in America in 2011. This advertisement has provoked the strongest emotional response that the marketing research company Sands Research has ever detected [12]. It has achieved the highest "neuro-engagement score" ever and it has

maintained a high emotional response from the beginning until the end of the commercial. The advertisement shows a young boy in a black costume of the Star Wars villain Darth Vader, trying to use "the Force" on different things in the house [26]. Finally, after almost giving up, he tries his "magic" on the Volkswagen Passat car and the car opens (actually, his father opens it by remote control), so the boy is thrilled that he does have magic. Viewers felt a strong emotional connection, were very engaged, strongly recalled the advertisement, and specifically recalled the brand Volkswagen from the advertisement. This advertisement was a very powerful predictor of end-market performance since it largely increased purchase consideration and led to a tremendous 26% sales increase of Volkswagen, achieving its best market share in 30 years [29]. However, traditional marketing research showed different results. Subjects said that the main idea of the advertisement was about "fun to drive" or "surprisingly powerful", which was not the intention of Volkswagen [30]. Had the company based its decision solely on traditional marketing research, this advertisement would never have been launched. Neuromarketing research has revealed that on an unconscious level this advertisement would be an absolute winner, which subjects could not realize and express verbally on a conscious level.

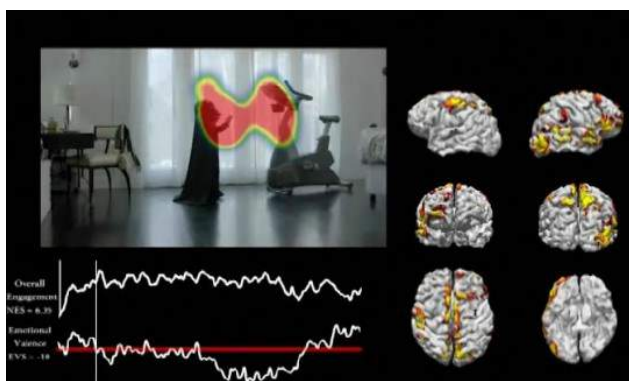


Image 6: Volkswagen Darth Vader Super Bowl advertisement - EEG and Eyetracking

Another neuromarketing research on Super Bowl advertisements determined that the advertisement for the car model Suzuki Kizashi provoked higher emotional engagement and had a bigger positive impact on car sales than the car model KIA Optima in 2012 [17]. After airing these advertisements, Suzuki sales increased by incredible

150%, whereas KIA sales merely increased by 6% [17]. Traditional marketing research showed completely opposite results, naming the KIA advertisement absolute winner. But neuromarketing research determined how people actually felt about these two advertisements, and it also predicted both of the cars' real sales results.

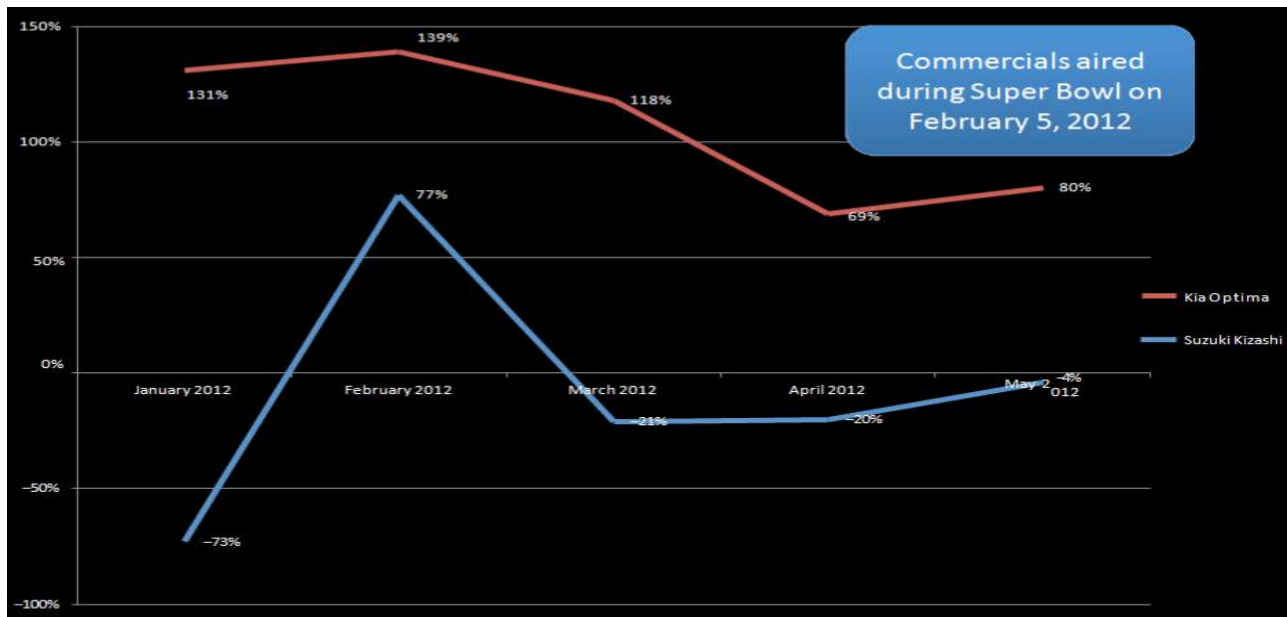


Image 7: Kia Optima vs. Suzuki Kizashi - Year to Year USA Sales Change By Month

## 8. POTENTIAL PROBLEMS WITH CAR CLINICS

One of the biggest disadvantages of car clinics is their cost. Establishing a car clinic can cost over 100,000 dollars [10]. In addition, neuromarketing devices are extremely expensive as well. For instance, fMRI device costs around 1 million dollars [8] and fMRI testing on 20 subjects costs around 15,000 dollars [1], EEG device costs around 8,000 dollars [31] and EEG testing on 30 subjects costs around 50,000 dollars [7], whereas Eye Tracking device costs around 20,000 dollars [31] and ET testing on 10 subjects costs around 500 dollars [8]. Car manufacturing companies may accept these costs since a car clinic offers a unique insight into the brain and true feelings of the consumers that represent its target group. Not rarely does it happen that designers and managers have one concept of a car, but the consumers' experience and feeling happens to be completely opposite.

Furthermore, road tests should be conducted on secured and protected roads, so that the competition and the journalists do not publicly disclose the information on the development and testing of a new car.

Since neuroscientific research has shown that human brains are far more alike than they are different, a neuromarketing research requires about 10% of the number of test subjects required by traditional marketing research methods [24]. Existing car clinics in the world recommend that the minimal number of subjects participating in a car clinic research be 50, if possible 100 [10]. In order to make the research successful it should be

ensured that subjects who are chosen for car testing in a car clinic are neither journalists nor employees of competitor car manufacturing companies. This can be done by using preliminary interviews and questionnaires which help determine the economic, educational and social background of potential subjects, as well their previous experience with certain types or brands of cars [10]. Another important aspect of choosing test subjects that should be determined in these preliminary tests is their overall affinity towards new things. Test persons should be early adopters i.e. the type of consumers who enjoy new things, products or technologies, and are willing to be the first to try a new and unknown product [16]. If conservative consumers are chosen as test subjects, it is very likely that they will not be so enthusiastic about any feature of the car, not necessarily because of the car itself, but rather due to their personal risk aversion.

## 9. CONCLUSION

Neuromarketing research aims at getting insight into consumers' brain, their real, deep, unconscious preferences and desires. This enables companies to understand how consumers really feel and think rather than what they say, as consumers have often given verbal answers which they expected that the company would want to hear [19]. With the help of neuromarketing methods companies can identify cause and effect i.e. which stimuli trigger which type of response, which can help them make products and advertisements that will provoke the desired reaction.

Results of car clinic research presented in this paper clearly showed that the combination of traditional and neuromarketing research methods in car clinics can improve car features early during the development phase, thus decreasing errors and failures in later stages of car mass production and commercialization [11]. Car manufacturers can use the information from the research in car clinics to design cars that are easier to use, more appealing and able to develop a bond with the consumer which can lead to stronger consumer loyalty.

There is no right or wrong marketing research method. While neuromarketing technology can get companies insight into the consumers' brain and their unconscious preferences, it is still very much in the exploratory and developing process [30]. Furthermore, neuromarketing is not the key to the consumer, but rather a powerful instrument that used together with traditional marketing research methods can contribute to getting one step closer to achieving the ultimate marketing goal - influencing the consumer by predicting their behavior in particular situations when exposed to particular stimuli, as well as making products that consumers really want [21]. Therefore, neuromarketing can be considered a guide to the consumers' brain.

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

## TAX COMPETITIVENESS OF THE SERBIAN ECONOMY

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**Abstract:** Transition and accession to the European Union made Serbia to reform almost all spheres of its economy and society making significant institutional reforms. Low production and devastation of Serbian economy, destruction of industry, etc. placed Serbia very low on the scale of competitive economies. It was necessary to do reforms of various sectors to restart industry, attract 'fresh' capital and grow living standard. Beside all, significant reformatory steps had been undertaken in the tax system, especially in the sphere of corporate taxation; many tax incentives and other measures had been introduced with an aim to attract MNEs and other investors to place their capital in Serbian industry. Arrival of foreign investors pushed up the economy, but after the initial success negative effects hit Serbia – extraordinary budget costs, slowing down economic growth, etc. These made Serbian Government to take different approach – to keep in the system only those measures that would bring benefits to the economy as a whole and won't create negative expenditures. It realized that 'offering too much' is not guaranteed success. In addition, it was necessary to abolish certain measures as the date of the negotiation for the EU accession was approaching. Today, several incentives exist in the sphere of corporate taxation, and together with free zones, possibility to obtain State aid, and network of 58 double tax treaties make Serbian tax system and economy competitive in comparison with neighbouring countries, without creating harmful effects.

**Keywords:** Serbia; tax system; corporate taxation; tax incentives; competitiveness

### 1. INTRODUCTION

The last decade of 20<sup>th</sup> century was marked with the end of the 'big Yugoslavia' and getting independence of the former Yugoslav republics. Each of them, searching for its own place on the European and world map, had to undertake reforms of many sectors. Slovenia was the most developed, with the highest living standard, and it got the EU membership in May 2005, as the first ex-YU republic. The second ex-YU EU member is Croatia (since July 2013). Other former Yugoslav republics were disposed to more negative factors that influenced slow economy growth, devastation of economy, low production, high level of unemployment, low living standard, etc. Among four republics that are still outside EU, Serbia is expected to get into as the first next one. Although the process of

negotiation for the EU membership has already started, the accession road placed lot of complex requirements and high standards that Serbia has to satisfy to become a member of the EU family. After UN sanctions, economy blockade, civil war, NATO bombing, political change, etc. beginning of 21<sup>st</sup> century put Serbia on the cross-road: if want to become a modern open market economy, it has to end earlier practice implemented in different spheres and must undertake reforms of the whole economy. However, donations and credits from abroad were not enough to finance all changes that had to be done. The destroyed production and manufacturing needed influx of huge money to be restarted. The Government was aware that it has to make good conditions to attract foreign capital to be invested in a small country such as Serbia: to build infrastructure, to

make administrative procedures less complex, to adopt legislation that will offer foreign investors better treatment than those provided in neighbouring countries, especially countries from Balkan region. Among reforms in different industry sectors, reliable public and local government, legal certainty and political stability are preconditions to bring 'big' investors in one country. Many processes in front of the Criminal Tribunal for the Former Yugoslavia in The Hague and constant political instability in the Kosovo have negative influence on making decision to invest in Serbia (which is the reason why Serbia has to put more effort to attract investors, comparing with other countries from region). Although these factors made Serbian reforms complex, faced with many difficulties, and realized through longer period than planned, the good thing is that it influenced Serbian government to be in the constant search for the good/optimal solutions, to constantly improve the existing ones and trying to be better than others. After difficult and painful initial reformatory period, undertaken measures started giving positive results. One of the spheres where significant changes had been done is the sphere of tax and fiscal system, which is unavoidably related with economy growth and competitiveness. The whole tax system has been reformed: certain tax forms had been abolished, existing ones had been improved to become compatible with tax forms of market economies, and some new forms had been established (e.g. value added tax, VAT). In addition, the tax administration has been significantly reformed and adapted to satisfy requirements of the new and innovative tax system and market economy.

Having in mind that corporations, especially multinational enterprises (MNEs), own the biggest capital, from the aspect of the tax competitiveness and influence on the investment decision, the most important are those in the sphere of corporate taxation. Since 2000, Serbia significantly has changed legislation on corporate taxation. In this paper, I will focus on the corporate taxation and changes undertaken with an aim to attract companies investing in Serbian economy. Those changes are closely related with Serbian road to the EU and its efforts to become stable market economy. Having in mind above mentioned, I consider the part related to Serbia in two periods: period of reforms and introduction of tax incentives (before initiation of the negotiation process) and current period with tax incentives established after the negotiation has started. At the end of the paper, I will make conclusion taking into account experiences of neighbouring (former) transitory economies that are now members of the EU, especially Croatia, which experience is very similar to Serbian.

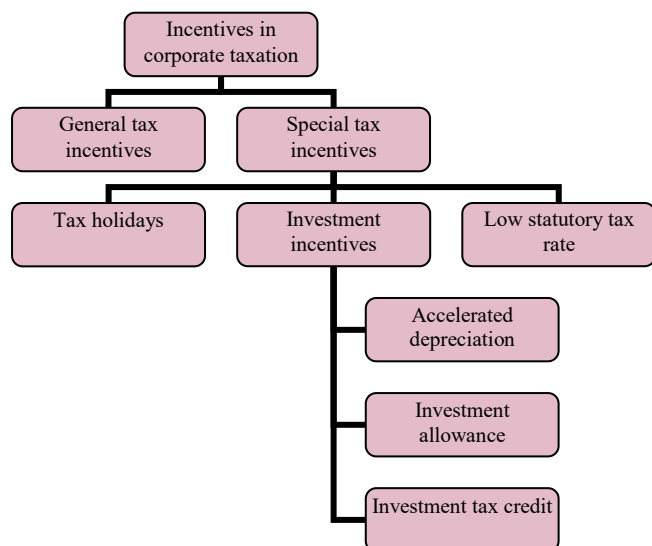
## **2. CORPORATE TAXATION AND INVESTMENT**

With an aim to attract capital in their industries, small transitory economies are doing tax reforms, mainly in the sphere of corporate taxation, introducing various forms of tax incentives. The same is happening in developing countries. Although factors such as: political stability, geographical position, good accessibility and nearness of the water roads (especially, see and ocean), good infrastructure, educated workforce, richness with natural

resources etc. have predetermined impact in making investment decision, globalization and possibility to cross national borders quickly, digitization and conducting almost the whole business on-line, general competition between countries in different sectors, made countries to compete in attracting foreign direct investments (FDI) – countries are trying to offer as much as possible more beneficial treatment of FDIs (Easson, 2004; Šimović, 2008; Blažić, 2006). However, this possibility is limited in two ways: one is the external limit set by international community (also, by EU in the Internal Market) and the other one is internal limit – effectiveness and efficiency of introduced tax incentives. The first limit is related to the OECD and EU fight against harmful tax competition (which has started in the last decade of 20<sup>th</sup> century) and current fight against aggressive tax planning (by MNEs) and aggressive tax competition (by countries) under BEPS project (OECD, 1998 and 2013; Commission of the European Communities, 1997; European Commission, 2012; Kieckhefeld, 2004). The second limit relates to the effects that implementation of tax incentives produce in one country – often, granting generous tax allowances produce contra-effects: instead to contribute to the economy growth of the host country, many tax allowances (tax holidays, in particular) create high costs and losses for national budget. Mostly, this is the reason why countries are precautionous when establishing and granting tax incentives for investments.

Beside incentives established specially for the purpose to attract investments, low statutory corporate income tax rate may be considered as a form of tax incentive. Although it is not a precondition for big investors' arrival, it can be a 'signal' that certain country is a good destination for placement of capital. Usually, transitory countries introduce corporate income tax at the rate below of 20% or around 20% (Šimović & Žaja 2010). However, 'the real picture' of the tax burden is given after taking into account all tax incentives introduced in one country: various tax incentives that one company may ask for can significantly lower the statutory tax rate, even make it zero or almost zero.

Tax incentives may be classified in two big groups: general tax incentives and special tax incentives, which further may be classified in several subgroups. General tax incentives are those granted to any company which satisfies prescribed conditions. This is the reason why they are not of special importance in making investment decision (low statutory rate is an example of the general tax incentive). On the contrary, special tax incentives have great influence on investors, especially on large companies. Here, the most important are investment allowances and investment tax credit, and period for which they can be granted. Not only transitory countries, but also developing ones are prone to establishing sectoral allowances (e.g. sectoral targeting), especially for investing in pioneer and extractive industries (Easson, 2004). Today, the IT and digital technology sectors are examples of the sectors to which developing countries are granting various allowances, and incentives in extractive industries are characteristic of undeveloped countries rich with natural resources, but with very low living standard and low economic activity.



**Image 1:** Tax incentives in corporate taxation

Although international organizations (especially, UN and OECD) are cautious with the use of tax incentives, mostly because of harmful tax effects, small economies use them. Speaking about transitory economies of South-East Europe one should make distinction between period of pre-accession to the EU and period after becoming an EU member. While countries are on the accession road, they are trying to attract as much as possible capital that will speed their economic growth, which is the reason for establishing different types of incentives, especially tax incentives. As the membership date is approaching, the tax incentives policy is changing *via* narrowing the scope and number of FDI incentives, mainly because of EU fight against measures that will harm fair competition and functioning of the Internal Market. The same tendency has occurred in Serbia.

### 3. TAX INCENTIVES IN SERBIA

#### Period before beginning negotiation with EU

After 2000, when the political regime in Serbia has been changed, actual Government started economic reforms, including fiscal reform. Many tax forms introduced during the periods of communist and socialist regimes were abolished; forms that were kept in the system were innovated and improved, but also new forms (such as VAT) were introduced. However, comprehensive reforms were not enough to put Serbian economy “on its own feet”: the economy was destroyed, almost all factories were closed, unemployment was high, living standard was low, the infrastructure was destroyed in 1999 during NATO bombing and needed rebuilding. Donations from international organizations and foreign countries could not bring enough funds for financing all restoration projects. The Government was aware that only influx of huge capital could push up economy – small number of domestic investors possessed capital that could not cure all shortages of the system. And it decided to create climate that would attract FDIs, MNEs in particular. One of the mechanisms for attracting FDIs that Serbian Government has chosen were incentives in the sphere of corporate taxation. Period before initiation of the

negotiation procedure for the EU membership characterized implementation of the four tax incentives’ forms: 1) accelerated depreciation allowance; 2) tax holidays; 3) tax credits and 4) investment incentives (Stojanović, 2010). The last form was mostly used by MNEs: foreign investors were searching for destination to place their capital under convenient conditions. Serbia needed funds to reconstruct and move its industry and infrastructure, grow living standard and to lower high rate of unemployment, and to make further reforms of institutions that would prepare itself for the beginning of the negotiation with the EU (which has started in 2014). Constant need for funds made Serbia granting very beneficial tax treatment to the owners of big capital. MNEs such as: FIAT, Lukoil, Yura, etc. have invested in production in Serbia, establishing subsidiaries. Other MNEs (of different sizes) followed the model of mentioned companies, invested in Serbia and established factories in devastated areas, hiring Serbian workers, using tax allowances offered for certain amount of invested capital. There were two significant tax allowances – „the big tax allowance“ and „the small tax allowance“. The first one consisted of tax holiday for the period of ten years starting the year when the first profit was made (the main condition for approval was investment of more than 600 millions dinars in company’s assets used for the production in Serbia, followed by the condition of employment of 100 new workers). The second tax allowance was granted for the investment of six millions dinars in company’s assets located in the area of special national interest; it was comprised of the five-year tax holiday starting the year of making first profit. Beside statutory incentives, the biggest investors sign investment agreements with Government, where the special (tax and other) treatment and other benefits are arranged for determined period (period of investment and certain later period). Investment agreements are typical for small economies, and especially for exploring natural resources. However, under these agreements foreign investors often arrange very beneficial treatment for himself (e.g. fiscal stability clause), which may have negative effects for the economy of the host country (Balim, 2014). This is the reason why UN, within its Conference on Trade and Development (UNCTAD), is taking care and supervising what is happening in the investment sphere in the world and what are the consequences for the developing and undeveloped economies. Currently, Serbia has in force several investment agreements. As far as the author of this text is informed no negative consequences risen for Serbian economy.

#### Current period

High budget costs of granting generous tax allowances made Serbian Government to cancel many of them. But not only ineffectiveness of established tax incentives, also approaching of the negotiation date with the EU influenced change of tax incentives’ policy. The investment tax allowance was kept in the system, but only as the allowance for “big investment” (investment of at least one billion dinars). After a long period of different treatment, positions of foreign and domestic investors

have become equal – the main legal act for attracting investors has been changed – instead of law that favoured foreign investors, in 2015 the Law on investments was adopted. In this way, Serbia has stopped with earlier discrimination of national capital and national investors, implementing one of the fundamental freedoms in the EU – equal treatment of capital no matter of the origin. Like in the EU member-countries, with the new law the form of financial support from the national budget, State aid, has been introduced in Serbian legislation. Depending if the company makes investment of the special national importance or importance for local community, certain amount will be granted as a State or local aid. Establishing this type of the financial support is direct influence of the EU legislation – in each EU country State Aid is a form of support that will help enterprises and entrepreneurs to keep competitive position in Internal Market, without disturbing it. Also, it is a measure regulated in the founding treaties (Stojanović, 2010).

Having in mind measures undertaken in the EU and international community in relation with harmful tax practices, aggressive tax planning (and competition) and BEPS project, Serbia introduced higher rate of corporate income tax – instead of earlier 10% tax rate, in 2013 the rate has lifted to 15% (withholding tax rate is 20% when Serbian resident pays certain income /usually, passive business income/ to non-resident).

Although, regime of granting tax allowances has become more restrictive comparing with period before starting negotiation with the EU, actual tax incentives together with free zones make Serbia very attractive destination for investment. Particularly, it is the case with areas of free zones, where companies and entrepreneurs benefit from tax allowances (no VAT, customs duties and other charges on import of the products in free zone) and simple administrative procedures.

Described situation in Serbian tax incentives' policy is similar to the situation in other transitory economies of the South and East Europe, particularly in former Yugoslav republics. Croatia is the example that can be compared with Serbia: before started negotiation procedure with the EU, Croatian Government was granting many tax allowances to foreign investors, but as the date of negotiation was approaching the legislative course was changing. Right before starting negotiation many forms of tax incentives were cancelled; the scope of those that kept in the system was narrowed and conditions for their granting have become stricter (Šimović, 2008; Šimović & Žaja, 2010). The EU membership influenced Croatia to change even more tax incentives' policy making conditions for their granting more difficult to satisfy. However, although it is an EU member for almost four years, Croatia has kept a great number of free zones (12) where business enjoys very beneficial tax and administrative treatment. In addition, the Croatian Law on investments prescribed rules for granting State Aid under certain conditions. Even more, since 2017 statutory corporate income tax rate has been lowered. Mentioned may lead to the conclusion that, although the EU countries are under the pressure of the European Commission and other EU institutions when establishing legislative regimes that not completely follow the EU

standards, global trend of lowering corporate tax burden is happening, in the Internal Market.

In addition to the aforementioned, network of double taxation treaties is good indicator to invest in certain country. As of 1<sup>st</sup> January 2017, Serbia has in force 58 double taxation treaties, which position itself as a destination providing beneficial treatment to investors of those countries. It has signed treaties with countries whose enterprises are the biggest investors in Serbian economy: Germany, Austria, United Arab Emirates, etc.

#### 4. CONCLUSION

Period of globalization, free movement of capital, rapid expansion of digitization and on-line business that do not recognize national borders, but also actual economic and financial crisis strongly hit worldwide economy. Countries at all continents have been hit with the crisis' consequences. Although the most developed economies are mostly affected with shortages of financial means and many financial scandals involving MNEs, the worldwide recognized banks and other financial institutions, they are bearing the consequences of the crises better in comparison with small economies. In globalized world, where MNEs are owners of the biggest capital which can freely circulate around the globe, need for financial funds made countries to be very innovative creating tools which would make their economies more attractive for investments and more competitive in comparison with other countries (specially, neighbouring ones). Although tax incentives, as important tools for making good investment climate, are highly criticized by the OECD and EU (as a harmful measure), they still exist and are implemented in small economies. Transitory economies are good example of tax incentives evolution – right after the break of the socialist regime, these countries established very generous policy of granting tax incentives for FDI; after these countries started negotiation procedure with the EU, the number and scope of tax incentives rapidly dropped. The same is happening in Serbia. Not only accession to the EU Internal Market, but also high costs of granting generous tax allowances shown as their inefficiency and ineffectiveness, influenced changes in policy of their granting. No matter of good and bad effects of the tax incentives, of proponents and opponents of their establishment and implementation, tax incentives still exist in the systems of many economies. Together with network of double taxation treaties and less bureaucratic administrative procedures, good infrastructure and network of roads, relatively good political situation and approaching of the EU membership, Serbia positioned itself as a good destination for investments. According to the recent UNCTAD data, period after breaking out financial crisis for investment in South-East European countries was not so beneficial. However, from 2015 investments started growing. Data for Serbia show that from 2014 to 2015 inward investment grow from 27.1% to 35.4% of gross fixed capital (UNCTAD 2016), which is certainly a good indicator of growth and improvement of investment climate and competitiveness of Serbian economy

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### GENERIC MARKETING STRATEGY ON THE MARKET SERVICES

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**Abstract:** *The purpose of the paper is to present the result of studies and research on strategies in services sector. The starting point is the review of traditional approaches to the essence of services as market products, including the so called Scandinavian School of Services. An author considers as an alternative in: intangibility versus process nature of services. Next part of a paper contains the revision of classical approach to product in the context of the mainstream of marketing theory, including Philip Kotler's teaching. Later, the idea of marketing mix in services sector is revised. An author assumes that strategies in services sector need to be compliant with both the nature of the very service sector and specifics of small enterprises. On such bases some typology of strategies is developed. Special focus in the final part of the paper is on the problems of time horizons of strategies in services organization. The results of studies should be useful in the process of teaching marketing students and also as an inspiration for service enterprises.*

**Keywords:** *services, physical products, dynamic concept of product, niche strategy, competition strategy*

#### 1. INTRODUCTION

Services marketing evolved in mid 70' of last century as field different from goods marketing. The basic premise for interpretation of services marketing as a separate managerial concept were specific features of the very services. Evolution of both services marketing and strategic marketing provokes thesis that generic strategies are to high extent the same for physical goods as for services companies.

#### 2. AN ESSENCE OF SERVICE

Marketing as a theory evolved basically as a concept concerned with markets of physical goods (Shostack, 1977, pp.73-80). These were especially consumption goods markets, like: cosmetics, beverages etc. The reason for this was that those markets used to be difficult for companies to deal with, because of high level of competition and because of irrational factors contributing to consumers' choices. Services were not the main point of interests of marketing experts because of some practical reasons:

- services were traditionally local products. So as a result, producers of services were less exposed to natural marketing problems that used to trouble big mass goods producers: touch with consumers and the knowledge about consumers.
- services were performed by smaller producers who traditionally were less interested in employing specific scientific managerial concepts.
- the importance of the whole services sector in an economy was discovered quite late.

When possibilities of adopting the theory of marketing were found, the main focus of authors was on non-materiality or intangibility of services as the most important feature making services different from goods (Rushton and Carson, 1985). Intangibility used to be listed as the first feature of services before such feature like:

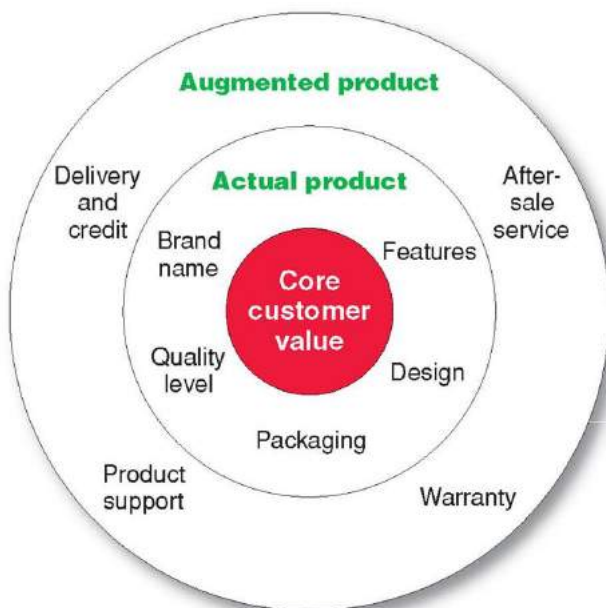
- utmost heterogeneity,
- direct touch of producer and the buyer,
- simultaneous production and consumption,
- utmost perishability (Zeithmal et.al., 1985, Gronroos, 1982 and 1997, Rushton, 1985).



As wrote Zeithaml et al. (1985) intangibility is universally cited difference between goods and services. It is intangibility and other features that looked to be fundamental condition for formulation specific marketing strategies: partnership or relationship strategy, influencing season ability of demand, communicational strategies stressing material context of services etc. It is remarkable that even if as Kotler et.al. (2007, p.9) declare that thinking in marketing moved from a strategy that conceives of either a product or a service to one which sees both product and services dimension in any marketing offering, they still assume the difference between services and goods. In their proposals any offering may consist of goods and services associated. So that offering is a set of goods and services. What will be shown in the next chapter, in fact the very difference between goods and services disappears.

### 3. THE STRUCTURE OF A PRODUCT

That theory of marketing was predominantly concerned with physical goods was evident in the development of theoretical concept of a product. To be precise, very popular, original concept of the structure of product by Levitt allowed for the inclusion of both goods and services as products (Levitt, 1980). Unfortunately later concepts of the structure of products, like, first of all, the concept of levels of product proposed by Kotler (Kotler 1988) were concerned mostly with goods. It is interesting that Kotler idea of levels of product, for long has enjoyed common acceptance. If fact the concept represents important disadvantages.

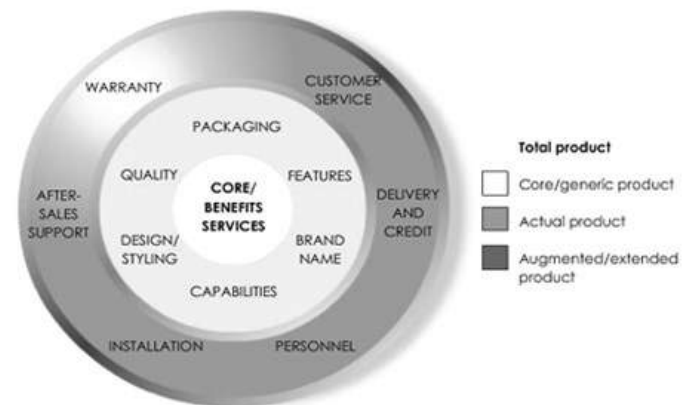


**Image 1:** Three levels of a product

Source: Kotler Ph: *Marketing Management. Analysis, Planning, Implementation and Control*. Prentice Hall, New Jersey 1988 s.445

One disadvantage was that particular product attributes were expected to appear at different levels that evolved in time passing. For instance Kotler suggested that some product attributes like brand name or packaging, would be deliberated later than other product attributes. The other disadvantage was that the proposed attributes were specifically concerned with physical goods, not with any offerings (installations, packaging etc.).

More logical and objective concept of a product was one considering products as bundle of attributes (Solomon and Stuart, 1997, p. 294). The very process of creating the product is in fact nothing but elastic composing of bundle of attributes. The practical suggestion coming from Kotler's idea was that a creator of a product is not thinking about product attributes like product or brand name, installation, delivery etc., when it launches new product. So an alternative to Kotler's proposal (img.1) should be the idea of a structure of a product shown at the image 2. The concept proposed can be named dynamic concept of a product.



**Image 2.** The dynamic concept of a product

\*- attributes subjecting to modifications with time passing  
Source: Prymon, 2011

Enquiry into the nature of products leads to conclusion that intangibility is not what makes services different from goods, because any products are a bundle of elements both tangible and intangible. Observation of any goods turns attention to their intangible nature- whole psychological context of goods (for instance product image, brand image etc.).

Practical experience of successful services companies today, show that it is material aspects of services that are crucial for successful strategies. For instance, in the past they believed that services are not concerned with distribution because it is impossible to store or transport what is non-material.

Today in hotel business, fast food chains it is, it is perfect logistics that ensures competitive advantages.

What is really important as a feature of services is the process. Process is real core of a product-service (Lehtinen, 1983). Competitive advantage can be found on today's services markets in improvising the process. In such prospering service companies like Irish Ryanair, British Travelodge, British Weatherspoon, the process is the core.

### 4. MARKETING MIX FOR SERVICES

Marketing mix is on one side, just a bundle of strategic tools and a source of strategic inspirations on the other. The concept is sometimes interpreted in simplified manner, as a set of instruments. In fact marketing mix represented once a kind of intellectual revolution. The idea was that what consumers want from a company is not mere product with its obvious functions. Instead, they



want a set of utilities. So, it was the core of the concept – utilities or values, not the list of instruments. One of pioneers of idea of marketing mix, McCarthy defined marketing mix as the controllable variables that the company puts together to satisfy a target group (McCarthy and Perreault, 1990 p. 728). The whole idea subjected with time passing to partly artificial development. One of the most popular idea concerned with services marketing- 7 P' proposed by Boom and Bittner (1981). Probably the most known impact of services marketing on marketing mix, is concerned with the so called fifth P'- people.

Though the role of service company's staff is very important, the very inclusion of fifth P was not revolution. From the very beginning personal selling, broadly interpreted, used to be included in promotion or communication mixes. The role of a personnel is very important, as a part of promotion of both goods and services. Other thing is, that in narrow interpretation, personal selling is sometimes reduced to activities by salesmen or to acquisition, as a method of selling. The next, the so called sixth P, physical evidence is really useful form of marketing mix innovations.

Not as much intangibility of the very service but big load of intangibility, necessitates some special approach to communicating the service.

The last – the seventh P- the process, is not really separated part of marketing mix but represents the core of the product as a crucial element of marketing mix. Simply if product is a service so product mix consists basically of the process.

So it can be said that the idea of seven elements of marketing mix in services market was not really new concept. The very idea of 7 P' was criticized by services marketing expert Cowell (1981). He indicated the 7 P' can be included within the idea of 4P'.

Some more practicable proposal about new eight element of marketing mix was proposed Lovelock (2001). He proposed to include "productivity and quality".

## 5. SERVICES SECTOR AND SMES

If services create specific sector within economy they also in part belong to the group of small and medium sizes enterprises. It is necessary to look for services firms from the view point of strategic characteristics of SMEs.

Provided that services company is simultaneously a type of SMEs, does it need typical of big company long term strategies? Are there any reason for smaller service company to base its activities on long term concepts?

If a strategy is highly influenced by internal and external conditions, so there is a need to compare those conditions concerning both big and smaller companies. Differences between companies of different sizes with respect to internal conditions could be evaluated using following criteria:

- resources disposable,
- the level of elasticity,

- size of a company: simplicity /complexity of management,
- ability of gaining synergy either between activities or between assets,
- general business motives.

*Resources disposable.* It used to taken for granted that the an advantage of big company are bigger resources. In fact the size of resources should be measured against the scale of potential strategic goals. So there could be some equilibrium between companies of different sizes. Of course, looking from the view point of market goals, no doubt that some goals are beyond the scope of small company's resources.

*The level of elasticity.* It used to be taken for granted that smaller organization or more elastic than bigger one. However no evidence for this. Wang et.al. calculate that only 5% to 10% of SMEs are „gazelles”, it is dynamic enterprises (Wang et.al., 2007). The rate of bankruptcies is probably higher for small companies. What can be added is that elasticity may require to be supported by special resources that are not available for small company. What should be mentioned here is that direct comparison between longevity of big and small companies is hardly possible because of different fates of both types of companies of their closures. In the case of smaller companies it is justifiable to assume that an owner of failing enterprise will start "something new".

*The size of a company.* The size of a company can make managerial problems. For instance the very choice of strategic options would require to set compromise between various groups within a big company. So small size of a firm could be an advantage. Smaller company is not under the pressure of many groups of stakeholders typical of big companies. Also the process of strategy implementation can be easier.

*General business motives.* The role of strategy can, to the extent, be resultant of general business motives of a company. For regular company the assumption can be made that its general motive is, if not classical profit maximization, it is growth. In broader sense it can be growth of value for stakeholders, including customers. For small companies it is also possible to assume growth as a motive. However as point Wand et al., majority of owner-managers do not pursue profit/growth maximizing goals. This is explanation for the lack of strategic planning in many SMEs (Wang et al., 2007). As an alternative for profit/growth can be personal fulfillment goals. As state Jennings and Beaver (1997), personal financial fortune is not as significant as the desire for personal involvement, responsibility and the independent quality and style of life.

*Ability to gain synergy effect.* This factor is favorable for bigger company. Some goals strategic goals can be easier accomplished by a company that can use synergy effects and for a time, at least, to leverage some ventures by potential earned on other ventures.

Regarding external conditions, differences between big and small companies can be observed using following criteria:

- the level of influence on an environment,
- resources needed to influence an environment,
- abilities to enjoy effects of scale,
- ability of enjoy experience curve,
- power in relations with environmental actors.

*The level of influence on environment.* It is especially stressed that big company is more influential upon an environment. However the very influence should not be taken for granted. Assuming strong competition in oligopolistic market, no reason to believe in special comfort for big company. It is just bankruptcy rate in the most developed countries that show the scale of the problem.

*Resources needed to influence an environment.* It is resources that can be necessary to influence the market, that creates an advantage of big company.

*Effects of scale and experience curve.* The effects of the scale and experience curve allow for financing long term strategic ventures in big companies. For small companies there are no equivalents for such advantages. More specifically, what can be real problem for smaller services companies could be high costs.

*Power in environmental relations.* Finally what can be added is that bigger companies have better opportunities for dealing with the market risk. It is more possible for big company to secure a kind of monopolistic position. This is, especially, better opportunities to lobby, in order to gain some exclusive rights in the market. Also some long run contracts make some comfort and after all justify long range strategies.

## 6. MARKETING STRATEGIES FOR SERVICES COMPANIES

So what is an answer for the strategy in small and medium size services enterprises? It is commonly practiced to consider typical classifications of strategies as applicable also to SMEs. It could be, for instance, Porter's strategies of cost leadership, differentiation or concentration (Porter, 1999) and Ansoff's strategies concerned with product-market choices (Kipley and Lewis, 2007).

All such strategies apply to services sector however are less applicable providing conditions of SMEs.

Traditionally they thought that specific strategies for services sector was: partnership and relationship marketing (Gordon, 1999). It is true, however today no doubts that these strategies are applicable to any company. Smaller and local services companies have however special conditions to rely on such strategies. Other marketing services strategy that was adopted from goods market is standardization strategy. This strategy is necessary in the light of heterogeneity of services. It helps to control quality and plays important communicational role for consumers. It seems that what should be common for strategies for both big and small companies, is opportunity of gaining competitive advantage that comes from the value for consumers. Since the process is the

core of the value in services sector, so fundamental strategy should be process based strategy. Details of these service processes are potential sources of strategic advantages.

Taking into account conditions of smaller services companies, following generic strategies should be recommended (see Prymon, 2014):

- the niche strategy. This strategy looks to be accessible for many firms and one that requires shorter time horizons. However, the niche is not safe in long run. For instance after years of competition between big chains of gas stations with small individual gas stations, small shops stopped to be asylum when chains invaded with chains of small gas stations. The same situations could be observed in such services like: self service Xeroxing points, tax advising, car rentals etc.

So niche strategy is safe if a company is capable of offering really unique value, including unique personnel. In part this strategy is also natural in markets in which bigger firms cannot economically enter or are reluctant to enter because of unattractive risk-return considerations (Brouthers et al., 1998).

-the horizontal integration strategy. This strategy is designed to join resources of smaller organizations within the same sector. These resources may be reduced to promotional budgets but also cover many other assets like supplies (equipment, parts etc). Horizontal integration can create more power in relations with partners. For instance in tourist business it can be an access to wholesale tourist market.

In car rental market it can be common logistics, common supplies of cars. These accumulated resources can help firms to compete with big companies.

- the vertical integration strategy (Kotler 1988). This is cooperation of independent firms within the framework of value chain. The chain strategy is formulated by bigger companies. Since then what remains for smaller companies is adopting a kind of symbiotic strategy (Varadarajan and Rajaratnam, 1986, Adler 1966).

- the coo petition strategy (Asaro, 2012; Morris et al., 2007). Such strategy includes cooperation with companies that, generally, are competitors. This strategy can include both servicing other bigger organizations and joining existing chains. It is possible that some assets of small service company is valuable for bigger companies.

If strategies applicable for small services companies are similar to those of any SMEs, the question is about services companies regardless of their sizes.

The most general assumption about contemporary sources of competitive advantage is creation the value in cooperation with stakeholders, first of all customers. It seems that any more specific strategies can be built from the view point of this value or values.

Traditional propositions concerned with strategies in

services sector were developed on the assumption of specifics of services. It is especially direct touch with customers that encouraged ideas of interrelationship marketing. Some authors like Gordon, believe even that what is the core for marketing theory –marketing mix should be replaced by relationship marketing (Gordon 1999, p. 336).

If interrelationship strategies are useful in services, their applicability is not reduced to services. New communicational tool make it more realistic for giants to developed direct links with customers. On the other side close touch with customers is not longer advantage of services companies. Direct personal contacts of companies with customers are frequently substituted by digital contacts. So situation of enterprises becomes more similar regardless of what is business: goods or services. Nonetheless, wherever a services company has contacts with customers it should cooperate with them.

What is however the problem with interrelationship is unfounded assumption about high elasticity of a company. Since the most distinct feature of services as products are processes, so the most fundamental strategy for service company can be process based strategy. As was stated at the beginning of a paper detailed analysis of service processes can be the source of new competitive advantages. No doubt that it is in services sector that the value for consumers is created mostly through basic services processes.

High perish ability of services and high impact of seasons on demand for services. This was the reason to propose the of elastic influencing the demand. This strategy requires combination of elastic pricing of logistic in order to keep sales high without wasting the company's potential. This strategy can directly lead creation of value. For instance effectively managed services can became available for customers who before could not afford buying those services.

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## 7. CONCLUSION

It becomes more and more clear that basic concepts used in services sector should be based on well interpreted general marketing theory. What is really specific about service enterprises is that most of them are of small or at best of medium size. So generic marketing strategies for services firms should follow strategies of SMEs. The very nature of services can lead to proposals to pursue process based strategies and lasting influencing the demand.

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## ICSD 2017, BELGRADE

### FACULTY OF MANAGEMENT, METROPOLITAN UNIVERSITY

#### THE EFFECTIVENESS OF DIRECT MARKETING MEDIA

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**Abstract:** *The goal of every company is to realize effective and efficient operations, as well as marketing management, thus making one of the most important decisions to select the one, or those direct marketing media which are most suitable for contacting both existing and potential consumers, and which would most effective, therefore most efficient in accomplishing the marketing and economic objectives of the company. The paper explores the effectiveness of direct marketing media, which involves measuring the reactions of customers to promotional activities carried out through the media of direct marketing, in order to understand which direct marketing media is most effective, in order to provide guidance as to what type of media is the most profitable investment of the marketing budget, with the aim to achieve optimal results of communications and sale.*

**Keywords:** *direct marketing, promotion, promotion ads, media, consumers, effectiveness*

#### 1. INTRODUCTION

The role of marketing is to allow exchange with consumers in which they get the goods and services they need, and the company gets adequate compensation for it. In order to achieve this objective, the consumers' needs, attitudes and opinions need to be in focus constantly. It would be ideal when consumers receive only the message that they are interested in. Of course, this is not possible, but there are methods that reduce target groups in order to come near to this ideal. One of these methods is direct marketing.

Direct marketing is one of the most dynamic areas of marketing and one of „the instruments (forms) of integrated marketing communication which builds and maintains good relations with present and potential consumers, in order to reach and maintain consumers, by ensuring they are satisfied, as well as creating loyal consumers and value to the company“ [1]. Direct marketing can contact their consumers directly, without marketing channels. Marketing activities are different to every individual consumer depending on them as

individuals. According to Bob Stone, direct marketing is an interactive use of media, with the purpose of encouraging reactions of costumers in such a way that it may be tracked, analyzed and archived in a database in order to be applied in following promotional campaigns [2]. For the implementation of direct marketing, various media are applied (direct mail, telephone, newspapers and magazines, catalogues, television, Internet, mobile phone), and „each media type has its own advantages and disadvantages from the viewpoint of opportunities, reputation, scope, selectivity, threshold of visibility, possibility of renewing messages at fixed time intervals, and their costs of reaching target segments“ [3].

The goal of every company is to realize effective and efficient operations, as well as marketing management, thus making one of the most important decisions to select the one, or those direct marketing media which are most suitable for contacting both existing and potential consumers, and which would most effective, therefore most efficient in accomplishing the marketing and economic objectives of the company.

## 2. SUBJECT MATTER, OBJECTIVE AND METHODOLOGY

The paper explores the effectiveness of direct marketing media, which involves measuring reactions of customers to promotional activities carried out through the media of direct marketing.

The aim of this paper is to point out the effectiveness of direct marketing media. The analysis of the research shows which direct marketing media are most effective, which in turn guidance on what kind of media are most profitable investment of the marketing budget, in order to achieve optimal „results of communications and sale“ [4].

In the research we used transversal studies (cross-sectional) of the empirical character. The research was conducted in the town of Subotica, in the period from 3rd to 10th March 2017. Target groups were citizens of Subotica, from 20 to 60 years old. According to the method of selection of respondents, it is a quota sample. The chosen respondents were aged 20 to 60 and were employed and placed in groups of 22 members. The age was chosen since people who are 20 to 60 years old are employed, and it was assumed that people with personal income make decisions on purchasing and more often buy products/services. For the data collection, the method of testing conducted in writing (by filling in the internet questionnaire) was used. The questionnaire included a set of questions regarding demographic data (age, gender) and thematic issues (from which the author wanted to find out facts concerning habits of citizens of Subotica about media). By analyzing the data about which media are favored by citizens of Subotica, i.e. which they are prone to and what the effects of certain media are. The sample consists of 88 respondents, who are divided into four equal groups of 22 respondents (according to age; one group are respondents 20 to 30 years, another 31 to 40 years old, third 41 to 50 years, and the fourth group respondents 51 to 60 years old). For the purposes of research, a descriptive technique was used - a questionnaire, which was specially prepared for this research. It is an internet questionnaire ([https://docs.google.com/forms/d/1z\\_nx4Wae-rGq4pFuS87clFV-sjyACipdUZfq4ey9pI0/viewform](https://docs.google.com/forms/d/1z_nx4Wae-rGq4pFuS87clFV-sjyACipdUZfq4ey9pI0/viewform)). The link was sent to respondents. The questions were in the form of a statement where the offered answers were adapted to the Likert scale from 1 to 5. Questionnaires that have been completed, were controlled in order to check the structure of the respondents and their numbers. For data processing and interpretation of the results, the SPSS program for data processing was used, with descriptive statistics and comparative statistics ( $X^2$  test).

The choice of media is heavily dependent on the target audience targeted by direct marketing. The important questions that we wanted answers to were: Do the media reach the target audience? What are the media habits of the target audience? Do the media have an impact on the target segment? Which media are effective?

Direct marketers meet certain categories of target audience who are more prepared to respond. Willingness to reaction to media is a natural characteristics based on which certain

consumers give primacy to some media, or, favour some media more than others. For example, there are consumers who use all the advantages provided by the Internet, and there are those who never use it (whether because they do not have a computer or because they are computer illiterate). It can be said that each media has a black spot which contains unattainable audience (e.g. someone does not have a phone, some people do not read newspapers).

## 3. HYPOTHESES OF THE RESEARCH

According to research on the subject of habits of Internet users in Serbia, through the ad network ZepterADS [5], research of „Google“ named "Consumer Barometer" in cooperation with "IAB Europe" and "TNS Infratest" [6], based on results of global research Wave8 [7], as well as the research of the agency „Zenith Optimedia“ [8], and according to forecasts of „Zenith Optimedia“ [9], based on research this agency from 2016 [10], as well as on the research of the Statistical Office of the Republic of Serbia, 2016 [11], the research of the agency Ipsos Strategic Marketing [12], research Offices for social research [13], and according to authors Bauer and Lasinger [14], **the first hypothesis** is: Direct marketing media which is most effective is the Internet, the promotional ads and products-services which are available on the Internet are most read, or most ordered in Subotica.

**The second hypothesis H2:** There is a statistically significant difference between respondents of different categories according to age in relation to the frequency of buying a newspaper, magazines, of paying attention to promotional ads in print media, thoughtful listening to promotional jingles on the radio, frequently watching TV shop, using computers and e-mail, because it is assumed that respondents in the older category have a habit of buying print media opposed to younger respondent categories, and that older respondents are more focused on reading and learning content (monitoring) than younger respondents. Also, as this **sub-hypotheses**, states: There is a statistically significant difference among respondents of different categories according to age in relation to the frequency of purchasing „checked“ products, because it is assumed that older respondents are more cautious in buying and that they are less prone to experimental shopping as opposed to younger respondents.

**The third hypothesis H3:** There is a statistically significant difference between respondents of different categories according to the gender in relation to the frequency of paying attention and reading promotional ads in print media, thoughtful listening to promotional jingles on the radio, frequently watching TV shop, using computers and e-mail, its frequency satisfaction of going to shopping.

**The fourth hypothesis H4:** There is a statistically significant difference among respondents regarding the frequency of giving positive responses to promotional messages through various media in relation to the frequency of reading the content of these messages.

**The fifth hypothesis H5:** The assumption is that the respondents, who agree to purchase the product without having to previously see it, touchit , try it out, have much simpler decision including the purchase over the Internet, there is a statistically significant difference in responses of respondents regarding to the frequency of agreeing to purchase the product without having to previously see it, touchit , in relation to the frequency of buying products promoted by e-mail, on social networks. A **sub-hypotheses** states: There is a statistically significant difference in responses regarding to frequency consent to „blind“ purchase in relation to the frequency of feeling satisfaction by going shopping, because it is assumed that those who enjoy shopping and want to see the product in „live stream, are not more inclined to purchase „blind“.

**The sixth hypothesis H6:** Due to the assumption that those who enjoy shopping are not inclined to purchase in any other way through technology, and that they give a positive reply to received letters, e-mails, order products from catalogues, through TV shop, web sites, Facebook, in poor measure, alternative hypothesis is that there is a statistically significant difference between the respondents, that is, there is a regularity in the respondents' answers in terms of the frequency notion of going shopping with real satisfaction in relation to the observed dependent variables in relation to the effectiveness of the respondents in the role of buyers.

#### 4. DIRECT MARKETING MEDIA

Promotion with direct response appears in various media, among others, in newspapers and magazines, through direct retrieving tradicional mail, catalogues, newspaper supplements and leaflets. This type of promotion is designed for direct response, as order, inquiry or request for a visit. In order to get some kind of answer, frequently phone numbers which allow free calling or using coupons as instruments to answer are used.

Electronic marketing is implemented with the use of electronic media and corresponding techniques and technologies. Direct e-marketing is an interactive subsystem of electronic marketing that uses one or more electronic media to achieve a measurable response and/or transactions. In addition to the telephone, radio, television and other traditional electronic media in (direct) e-marketing, there are more modern electronic media used, such as: mobile phones, Internet with its instruments: web pages, e-mail, social networks, Google AdWords.

#### 5. THE RESEARCH RESULTS (DESCRIPTIVE AND COMPARATIVE STATISTICS)

According to respondents, the older ones have a habit of buying newspapers, unlike the younger respondents. Based on the obtained percent of respondents, 31.8% of all respondents never buy newspapers, 22.7% of them rarely buy newspapers, while 9.1% of them often buy them, then 20.5% always buy newspapers. *There is a statistically*

*significant difference between respondents of different categories in terms of age, compared to the habit and frequency of purchasing newspapers* (Pearson Chi-Square, Sig=0.003<0.05). Male respondents stated that they often buy newspapers in bigger percent compared to female respondents (13%:4.8%).

The highest is the percentage of respondents who rarely buy magazines. It is a significant percentage of those who sometimes buys magazines (22.7% of them), while 13.6% of them said that they always buy magazines. The most prevalent responses of respondents regarding the purchase of newspapers are never, and related to magazine rarely, which shows that the respondents are more inclined to purchase magazines compared to newspapers. As for the age structure of the respondents, younger respondents do not have the habit of buying magazines, unlike the elderly (those 41 to 60 years old). *There is a statistically significant difference between respondents of different categories in terms of age in relation to the habit or frequency of purchasing magazines* (Pearson Chi-Square, Sig=0.001<0.05). As for purchasing magazines, the greater is the percentage of men who always buy magazines (17.4%:9.5%). However, bigger is the percentage of male respondents who never buy magazines (21.7%:9.5%).

According to the frequency of paying attention to parts in newspapers/magazines where the promotional ads are placed, it can be concluded that older people are more paying attention to promotional ads compared to young. *There is a statistically significant difference between respondents of different categories in terms of age in relation to the frequency of paying attention to parts in print media where products/services are promoted* (Pearson Chi-Square, Sig=0.042<0.05). Female respondents in significant percentage always pay attention to parts in newspapers/magazines where products/services are promoted, compared to male respondents, where none of the respondents declared that they always do that.

A large percentage of respondents (70.5%) never cut coupons from newspapers/magazines and do not send them in hope that they will get an award, while only 4.5% of respondents always do that. As it could be expected, female respondents more often cut and send coupons in hope that they will get an award, in relation to male respondents. Also, there is a much larger percentage of male respondents which never send coupons, than female respondents (87%:52.4%).

There is a small percentage of those who never read the content of leaflets (4.5%), while 40.9% always read the leaflet when it is in their hand. The frequency of reading the content of flyers is higher as the age of respondents is higher. Even 80% of respondents aged 41 to 50 said that they always read what is written on the leaflet when it is in their hand. A large percentage of female respondents read what is written in the leaflet (52.4% always do it), unlike the male respondents (always 30.4%), and 8.7% male respondents never read flyers. Mot a single tested tested woman said that.

The highest percentage of respondents is those who rarely read letters (tradicional direct mail), 29.5% of them. However, it is not a negligible number of those who always (4.5%) and often (15.9%) read letters with offered products. In the category aged 20 to 40 years, most of the respondents never read tradicional direct mail, while most of the respondents aged 40 to 50 rarely read letters (50%). The significantly greater percentage of female respondents read direct mail, while even 43.5% of male respondents said that they never read such letters. *There is a statistically significant difference between the respondents' answers regarding readings of promotional received letters in relation to gender.* The effectiveness of tradicional direct mail is very poor, in terms of sales effects. Namely, those who have never received a positive answer to a letter are even 65.9% of respondents, while those who correspond rarely are 25% of the total number of respondents. *There is a statistically significant difference (Sig=0.000<0.05) in responses related to the frequency of positive responding to received letters in relation to the frequency of reading of promotional letters,* that is, those subjects who frequently pay attention to content of letters about promotion frequently respond positively (order the offered product).

There is relatively poor effectiveness of sales with catalogues. In fact, even 25% of respondents never order through catalogues, while 34.1% of them rarely buy in this way. Only 2.3% of them said that they always buy like this. Of all the categories, the respondents 20 to 30 years order products through a catalogue most frequently (9.1% respondents of this category). The greater extent of male respondents buy products from catalogues (4.3% of them always do, 13% often do). On the other hand, 34.8% of male respondents said that they never buy, unlike female respondents, of which 14.3% said they never buy from catalogues.

A large percentage of those who sometimes and often (by 27.3%) and always (38.6%) buy products which are used and praised by their friends. It is interesting that even 90% of respondents aged 41 to 50 years always buy „proven“ products *There is a statistically significant difference between respondents of different categories in terms of age in relation to frequency of purchase of the „proven“ products* (Pearson Chi-Square, Sig=0.015<0.05). Most of the respondents, both male and female, often buy „proven“ products.

Approximately 40% of respondents are happy to cooperate in survey by telephone (9.1% always, 9.1% often, and 18.2% sometimes agree), while the remaining 60% of respondents are less prone to this type of cooperation (36.4% rarely and 27.3% never have time). Respondents aged 20 to 30 years have the least time to be interviewed by phone. Most of the male respondents do not have time for this kind of cooperation (39.1% male respondents said that they never have time, whereas 14.3% of female respondents said so). A large number of respondents never use the service of call centers (54.5%), 29.5% of respondents rarely use them, only 6.8% often use them, always 4.5% of respondents always use them. Women are more prone to use the service of call centers. Even 65.2% of male respondents said that they never use

the service of call center, whereas 42.9% of female respondents declared the same. There is a small percentage of those who always buy offered products or services by phone (2.3%), while 6.8% of respondents sometimes react positively, 29.5% of them rarely, and even 59.1% never purchase in this way.

The largest number of respondents never respond positively to message in inbox on the mobile phone (43.2%), 25% of them rarely do that, 18.2% sometimes, and small percentage of those are interested in more detail about the promoted product/service (4.5% often, 9.1% always). Within the category of 20 to 30 years, there is the largest number of those who have not reacted positively (63.6%). Within the category of respondents 41 to 50 years old, most numbered are those who are often and always interested in more detail (always 40%, 10% often). Most of female respondents positively respond to promotional message on mobile phones, or are interested in more detail about the promoted product.

A large number of respondents listen to the radio while doing something else (31.8% of respondents always, 27.3% often listen to radio). Respondents aged 41 to 50 years, in the largest number, always and often listen to radio. There is a double greater percentage of male respondents, compared to female respondents, who always listen to the radio while doing something else.

Those who do not listen to promotional jingles carefully account for around 40% (25% of them never, but 15.9% of them rarely listen to them). However, only 6.8% of respondents always listen to promotional jingles carefully, and 22.7% of them often do. Respondents aged 20 to 40 are in the largest number of those who rarely listen to promotional jingles carefully, while respondents aged between 41 and 60 years in the largest number carefully listen to jingles. *There is a statistically significant difference between respondents of different categories in terms of age in relation to frequency of carefully listening to promotional jingles on radio* (Pearson Chi-Square, Sig=0.029<0.05). Female respondents in greater extent carefully listen to promotional jingles on the radio (always 9.5%, 28.6% rarely, 28.6% often), as opposed to male respondents.

The results show that 6.8% of respondents often watch TV for more than 4 hours a day, 11.4% always watch it, while 27.3% sometimes watch it, 18.2%, rarely do and 36.4% never watch television for more than 4 hours a day. Respondents aged 51 to 60 years in the biggest percentage (25% of this category) pleaded that they always spend more than 4 hours watching television daily. Respondents aged 20 to 30 years spend rarely spend more than 4h a day in front of the TV (even 72.7% of respondents in this category). *There is a statistically significant difference between respondents of different categories in terms of age in relation to the frequency of daily television watching for more than of 4h* (Pearson Chi-Square, Sig=0.001<0.05).

Respondents dedicate little attention to the TV shop (no one pleaded that they always or often watch it, and only 9.1% of respondents said they sometimes watch TV shop).



However, 61.4% of respondents never watch TV shop, 29.5% rarely watch it. Of all the categories, respondents aged 20 to 30 years in the largest percentage never watch TV shop (90.9% of this category). As respondents were older, there is a smaller percentage of those who never watch TV shop. *There is a statistically significant difference between respondents of different categories in terms of age in relation to the frequency of watching TV shop* (Pearson Chi-Square, Sig=0.046<0.05). The percentage of male respondents who never watch TV shop (65.2%) is bigger compared to female respondents (57.1%).

There is very weak effectiveness of TV shop. In fact, only 6.8% of respondents sometimes order through TV shop (respondents aged 31 to 40 years and from 51 to 60 years), even 72.7% of respondents have never commissioned a product, and 20.5% rarely order through TV shop. Respondents aged 20 to 30 most rarely buy this way (90.9% of them have never bought anything like this). *There is a statistically significant difference (Sig=0.000≤0.05) in responses related to the frequency of ordering a product over TV shop in relation to the frequency of watching it*, that is, those subjects who frequently watch TV shop, frequently have a positive answer (order products).

A large percentage of respondents use computer and e-mail (72.7% of respondents always, 15.9% often, 4.5% sometimes, 4.5% rarely, and 2.3% never). Respondents aged 20 to 40 in largest percentage (90.9% in both categories) always use computer and e-mail. A large percentage of respondents aged 41 to 50 years always use computer and e-mail (80%), while only 33.3% of the category from 51 to 60 always do. As subjects get older, there is a smaller percentage of those who use computer and electronic mail, which was expected. *There is a statistically significant difference between respondents of different categories in terms of age in relation to the frequency of using computers and e-mail* (Pearson Chi-Square, Sig=0.007<0.05). Male and female respondents use computer and e-mail in a large degree. For slightly more, male respondents always use computer and e-mail (78.3% of them), and 66.7% of female respondents always use computer and e-mail.

A small percentage (4.5%) said they often buys products promoted via e-mail (this percentage is from respondents 20 to 30 and from 41 to 50), 22.7% of them said that they sometimes do, 38.6% rarely do, 34.1% never do that. The highest percentage of those who never buy in this way are the youngest categories (54.5% of them). There is a small percentage of male (4.3%) and female (4.8%) respondents who often buy products/services which are promoted in this way. A somewhat greater number of male respondents (43.5%) who never buy what is promoted via e-mail as opposed to female respondents (23.8%).

A large number of respondents visit sites on the Internet for information about products/services, 34.1% of them always do, 31.8% often do it, 13.6% sometimes do it, only 11.4% rarely do it and 9.1% never do that. Respondents aged 20 to 30 in the largest percentage visit web pages,

while the largest number of respondents aged 51 to 60 have never visited websites for information with the intention of buying. Male and female respondents equally visit websites for information about products/services (male respondents: always 34.8%, often 30.4%; female respondents: always 33.3%, often 33.3%).

Based on the results, 11.4% of respondents always buy over the Internet, 15.9% often do, 31.8% sometimes do, 22.7% rarely use this possibility of modern shopping and 18.2% never order products/services over the Internet (the biggest percentage of those who never do that are respondents aged 51 to 60). Those who do not find this method of buying unfamiliar are respondents aged 20 to 40, who pleaded that they always order this way. *There is a statistically significant difference (Sig=0.004≤0.05) in the answers of respondents regarding the frequency of ordering products over the Internet in relation to the frequency of visiting websites for information about products/services*, that is, as respondents frequently visit websites they frequently react positively (order products). With regard to ordering products which are available on the Internet, there is a bigger percentage of male respondents who commission this way (13% of them always do, 26.1% often do) than female respondents (9.5% often do, 4.8% always do). Most of the female respondents never commission products via the Internet (23.8%) compared to male respondents (13%).

More than half of the respondents enjoy shopping, .ie. 36.4% of the respondents stated that for them shopping is always a great pleasure, 18.2% of respondents said they often enjoy shopping, and 34.1% of them sometimes do. Respondents aged 41 to 60 belong to those who enjoy shopping (nobody replied never and rarely). In the largest percentage compared to other categories respondents aged 41 to 50 (40% in this category) pleaded that they always enjoy buying, and the biggest percentage of those who never enjoy shopping are respondents aged 31 to 40 years (18.2% of them). As it could be expected, a very large percentage of female respondents love shopping, and for them it is a real pleasure (61.9% of them stated that for them shopping always means a great pleasure, 19% of them often do, while no one female respondent pleaded that for her buying is never a pleasure). On the other hand, 13% of male respondents said that buying never causes a feeling of satisfaction for them. *There is a statistically significant difference in the respondents' answers regarding to the satisfaction of going shopping by gender*. that is, female respondents more frequently have a feeling of satisfaction when they go shopping compared to male respondents.

A small percentage (4.5%) always agree to purchase a product without having to previously see it, touch it, try it, talk about its characteristics of with the seller, while 18.2% of them sometimes do it, 34.1% rarely do it and 40.9% never agree to buying products without previous personal insight into its characteristics. The first category of respondents (from 20 to 30 years old) is (according to the results it is the only category) inclined to perform such purchases, as opposed to the II, III and IV categories of respondents. The highest percentage of respondents who never buy without previous personal insight into the

physical product are the oldest respondents. *The assumption is that the respondents, who agree to purchase the product without having to previously see it, touch it, try it out more easily decide to shop over the Internet.* Sales of products through the Internet in most cases still presents only a form of additional sales in most cases, meaning that this type of sales would not survive unless there are retail stores where the products which are present in the virtual stores, as well, can be observed. So this way of buying is used by those who are already familiar with the products and with the company (existing consumers who make a repeat purchase of the same or another product of the same company). However, some consumers decide on the first purchase of a product on a web site if the product is cheaper, to be less exposed to risk when buying. About 44% of male respondents never buy without personal insight into the characteristics of the product (38% of female respondents never do that). *There is a statistically significant difference ( $Sig=0.003\leq 0.05$ ) in the answers of respondents regarding the frequency of consenting to purchase a product without having to previously see it or touch it, compared to the frequency of buying products promoted by mail,* that is, those respondents who frequently agree to purchase without first seeing, touching, trying out products, frequently agree to purchase the promoted product via e-mail.

According to its frequency of using the social network Facebook, the largest percentage are respondents who always use Facebook (61.4%), 11.4% of them often do that, 4.5% sometimes do, the same percentage rarely do, while 18.2% of respondents never use this social network. The highest percentage of those who always use Facebook are the youngest (90.9% of this category of respondents), which was expected. The highest percentage of respondents aged 51 to 60 (41.7%) never use this network. There is a higher percentage of female respondents who always use Facebook (66.7%), often (19%), unlike male respondents (56.5% always, often 4.3%).

There is a large percentage of those who never commission products/services through Facebook (63.6%), but a very small number of respondents is always ready to order through this social network (4.5%) and those respondents are aged 20 to 30. Most of the respondents in the category 51 to 60 years never order products/services this way (91.7%). It is a slightly larger percentage of male respondents who agree to purchase this way. *There is a statistically significant difference ( $Sig=0.001\leq 0.05$ ) in the answers of respondents regarding the frequency of consent to purchase products without having to previously see them or touch them, compared to the frequency of purchase through Facebook,* that is, those respondents who frequently agree to buy without first seeing, touching, trying the product out, frequently agree to purchase products through this social network.

Summing up the previous analysis of the results, according to the structure of respondents by gender, it can be concluded that *female respondents show greater interest in the media of direct marketing than male respondents.* Specifically, female respondents devote greater attention to reading print media (newspapers, magazines, leaflets,

direct mail) and collect pieces of newspapers/magazines with interesting offers, cut coupons, order products if they are contacted by phone, are interested in the product/service for which they receive promotional messages by cell phones, carefully listen to promotional jingles on the radio, frequently watch TV shop, readily purchase products without having to previously see them, touch them, frequently use Facebook, in comparison to male respondents. Male respondents order products through catalogues and the Internet (website, Facebook) more frequently.

With regard to the presented analysis and taking only positive answers into account (to sum up), here are the results of effectiveness of direct marketing media:

- When respondents are reading newspapers/magazines, 56.9% of respondents pay attention to the parts where products/services are promoted. Only 18.1% of respondents send coupons from newspapers/magazines with the hope to win a reward. A large number of respondents read leaflets when they are in their hands (88.6%).

- Regarding printed direct mail, 43.1% of respondents read received letters with products offered.

- Regarding sales with catalogues, 40.9% of respondents buy products from catalogues.

- Few respondents (9.1%) order products and/or become users of offered services when they are contacted by telephone. The effectiveness of mobile marketing is greater, that is, 31.8% of the respondents positively respond to promotional messages on mobile phone, i.e. they are interested in more details of the products/services that are offered.

- While doing something else, 79.6% of respondents listen to the radio and 59% of them carefully listen to promotional jingles on the radio.

- A small percentage of respondents (6.8%) purchase products on TV shop.

- Regarding the possibilities offered by the Internet, only 27.2% of respondents buy products and/or use services which are promoted by e-mail, and 59.1% of respondents buy products/services available on the Internet. However, only 20.4% of respondents buy products/services by Facebook.

Based on the results of the conducted research, it can be concluded that *television (in the form of the TV shop), print direct mail and telemarketing are direct marketing media with weakest effectiveness, while sales by Internet is the most effective way of selling.* As it was assumed, it turned out that the Internet is one of the most effective media for direct marketing.

For precise conclusions, the following table 1 shows the smallest and the largest value, as well as the mean of responses for questions in the survey which are related to the sales effects of direct marketing media.

By the answers to questions relating to the effectiveness of direct marketing media in the form of mean values (column mean), it can be concluded that *the most effective medium of direct marketing in Subotica is Internet,* since it is the largest mean value 2.8 which represents the effectiveness

of the media, which is related to ordering products/services available on the Internet. The table confirms the conclusions already presented that the medium with lowest effectiveness is television (in the form of a TV shop), printed direct mail and telemarketing, given that the mean

value of them is 1.34, 1.43 and 1.53 respectively (maximum value is 5). Based on this we can see that *TV shop has the weakest effectiveness*.

**Table 1:** Minimum, maximum and mean values of responses related to the sales effects of direct marketing media

Questions	Min.	Max.	Mean
I give a positive answer on arrived letters (I order offered product).	1	3	1.43
I buy products through catalogues.	1	5	2.30
I listen to what is offered and buy one of the offered product, that is, become a user of a service which is offered via telephone.	1	5	1.53
I order products which are offered through TV shop.	1	3	1.34
I order products/services which are available on the Internet.	1	5	2.80
I buy products/services which are promoted through e-mail.	1	4	1.98
I order products/services through Facebook.	1	5	1.73

**The first hypothesis H1 is confirmed.** As assumed, it turned out that Internet is one of the most effective media for direct marketing in Subotica. The results of this research should be used in terms of multiple application of direct marketing by the Internet in order to achieve the effects desired by companies.

**The second hypothesis H2 is confirmed.** By the results, it is shown that older respondents are more inclined to purchase a newspaper or magazines and pay more attention to promotional ads and their content, they carefully listen to promotional jingles, frequently watch television and TV shop compared to younger respondents. And it was established that the older respondents use computer and electronic mail less, which was also assumed. As this *sub-hypothesis is confirmed*, it was found that older respondents are more inclined to frequently purchase „proven“ products.

**The third hypothesis H3 is nearly confirmed.** It was found that *there is a statistically significant difference in responses regarding reading received promotional letters in relation to gender and respondents answers related to the satisfaction of going shopping by category of respondents by gender* (the female respondents more frequently have a feeling of satisfaction when they go shopping than male respondents). Based on the analysis it was concluded that female respondents show greater interest in direct marketing media than male respondents. Male respondents more frequently order products by catalogues and Internet (websites, Facebook) than female responders.

**The fourth hypothesis H4 is generally confirmed.** It was established that *there is a statistically significant difference in responses concerning the frequency of keeping parts of newspapers with an interesting offer in relation to the frequency of paying attention to the parts of newspapers/magazines where products/services are promoted*, i.e. those respondents who frequently pay attention to the parts of newspapers/magazines where products/services are promoted, frequently keep interesting parts of newspapers/magazines. Then, *there is a statistically significant difference in responses regarding the frequency of positive responses to received letters in relation to the frequency of reading these promotional letters*, that is, those respondents who frequently pay attention to the content of letters with promoted products frequently positively react (order the offered product). *There is a statistically significant difference in responses regarding the frequency of positively responding to promotional messages in relation to the frequency of readings these messages on a mobile phone*, that is, those respondents who frequently pay attention to the content of messages with promotions of product, frequently positively react (they are interested in more details). *There is a statistically significant difference in responses regarding the frequency of ordering products through TV shop in relation to the frequency of viewing the same*, that is, those respondents who frequently watch TV shop, frequently react positively (order products). *There is a statistically significant difference in responses regarding the frequency of ordering products over the Internet in relation to the frequency of visiting websites for information about products/services*, i.e. those respondents who frequently visit websites, frequently react positively (order products).

**The fifth hypothesis H5 is nearly confirmed.** There is a statistically significant difference between respondents. *There is a regularity in the respondents' answers regarding the frequency of consent to „blind“ purchase in relation to the observed dependant variables regarding effectiveness, and in relation to ordering products available on the Internet, purchase of products/services promoted by e-mails and ordering through Facebook*. But, it was determined that *there is no statistically significant difference in responses regarding the frequency of consent to „blind“ purchase in relation to the dependent variables (positive replying to received letters, shopping from catalogue, buying „proven“ products, commissioned via TV shop, frequency of feeling pleasure in going shopping)*.

This can be explained (that there is no statistically differences) with the weaker effectiveness of the following media: direct mail, catalogues, TV shop, which is confirmed by the research. **The sub-hypothesis** within this is **disproved**. It was established that *there is no statistically significant difference in the answers given by respondents in terms of the frequency of consent to „blind“ purchase in relation to the frequency of feeling pleasure in going shopping*. This can be explained by the fact that going shopping creates a feeling of satisfaction to those who want to spend their free time enjoying in observation of actual

## 6. CONCLUSION

Direct marketing has become an integral part of the ordinary course of business. This way of communication is not a short, but long-term activity in order to develop a stable, direct relationships with the consumers in order to get loyal consumers, which are the largest value for the company. This instrument of integrated marketing communication enables improvement of sales, better contact with consumers, smaller cost of promotional campaigns, as well as other positive effects. Contacting consumers without intermediaries enables lower costs of contact, but also the information obtained as a result of directness are better and safer, which are all prerequisites for the creation of competitive advantage. Direct marketing has highly processed segmented audiences, personalizes the communication process, it is easy to control and at the end, it can evaluate activities at individual or corporate level. Direct marketing of print media slowly disappears. The marketing of direct mail slowly takes the form of e-mail marketing, the classic marketing through printed catalogues goes into Internet marketing (e-mail and web sites), and newspapers and magazines will have a stronger presence in electronic form.

The author is aware of the limitations of this study. The choice of media for sharing promotional messages is based on the preferences of the target audience of some media (in this case, citizens of Subotica as the target audience), while

products, even not buying anything. Possibly, there are some other factors that influence „blind“ shopping, and that may be lack of time.

**The sixth hypothesis H6 is refuted**, because it was determined that *there is no statistically significant difference between the respondents and there is no regularity in the respondents' answers regarding the frequency notion of going shopping with real satisfaction in relation to the observed dependent variables related to the effectiveness of the respondents in the role of buyers*.

other factors which influence the choice of media, such as the product which is promoted, promotional message and costs of media are neglected. The author of this paper was led by the thought of Kesić who says that the most important factor for choice of media is the identity of the target segment and its characteristics [4]. Statistical error is 10.4%, but this is a pilot research, with the aim to collect data and guidelines for further, more serious research, with the intention to repeat the same topic in a similar, but amended way, with a much larger sample in the Republic of Serbia.

Testing the effectiveness of direct marketing media is critical to achieving efficient operations, because in addition to achieving strongest possible effects in terms of reaching the target group, it is necessary to take the costs into account. The research has shown that *the most effective direct marketing medium is the Internet, and TV shop has the lowest efficiency, in Subotica*. Based on the analysis of the conducted research, it is possible to design an optimal direct marketing campaign, which means allocation of marketing funds to the intended number of direct marketing media according to the criteria of their effectiveness, and the characteristics of the target group, i.e to invest more money in more effective media than those which reach weaker effects (provided we want to invest in them), as well as developing an optimal direct campaign via linear programming, which is a task for further research of this type in Republic of Serbia.

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#### LOBBYING OF ORGANISED INTERESTS: THE CAPACITY AND RESOURCES OF PRIVATE BUSINESS INTEREST ORGANISATIONS

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**Abstract.** *Interest group influence on policy making continues to be a fundamental issue for understanding the legitimacy of interest groups' relative power. In order to better understand their impact on policymaking we study a particularly influential and persuasive social group, the economic interest group. The paper looks into the capacities and source of power of organised business interests, mainly their internal strengths. The global view is taken, covering democratic pluralist societies in which lobbying is an established institution, with special note on the European Union. Four aspects of internal power sources of business interests are discussed: group size; organisational agility; resources - namely finances, relationships and information; and the phenomenon of the regeneration of the groups influence. The research also looks into the opposing interest groups who could potentially develop, use and nurture the same capacities. The paper concludes that the most effective internal assets of this interest group are its size and the regeneration of power, which are difficult to replicate by other organised interests. Further research recommendations are proposed.*

**Keywords:** *Lobby, organised interests, transparency, interest groups, corruption, influence, European Union, incrementalism, revolving door, NGO*

#### 1. INTRODUCTION

The balance of influential social groups in a society has been a consistent topic of study of modern political, legal and social sciences. In order to achieve a democratic and social equilibrium in a given environment it is useful to understand how the current influential social groups exert their impact on lawmakers. One of the vehicles for establishing and preserving the power relations between such influential social groups and the decision makers in a modern day democracy is the institution of lobbying. The economic interest group lobbying is the focus of this paper. In contemporary market economies they have

occupied the most prominent position in the law making and influencing arena.

As economic interests are embodied in numerous forms, we will research organised private business interests. In order to better understand their clout and to prioritise on the dominant resources we look into their internal capacities and source of power. Four types of internal capacities are examined: are relevance of size of the interest group, the organisational agility, several key resources and the regeneration of their influence. An attempt is made to correlate them to the interest groups power and to the way they are utilised. The paper looks into how the same capacities are missing with some of the

opposing interest groups who are competing for influence, and whether they could potentially develop, use and nurture the same resources.

The terminology in the sphere of defining lobbying has always been debatable. The term lobbying has been marred with negative connotations of undue influence, which warrants an unfair advantage on the interest groups that have the means to conduct it. Nevertheless it is still globally used both in theoretical research and professional life. On the other hand the phrase 'interest representation' and term "advocacy" have received almost none of the limitations. In this paper terms, 'lobbying', 'interest representation' and "advocacy" are used synonymously and interchangeably.

## 2. LEGITIMACY OF LOBBYING OF INTEREST GROUPS

For a democracy it is important to have legitimate government and this means involvement of as many as possible groups in the political process and in the elections. Both formal and informal citizen participation is thus relevant, especially as the numbers of politically involved groups and citizens is falling. Some reverse trends have been spotted in the realm of technology-aided environments, and by digital media, [1] but overall the governments are eager to stimulate inclusion in politics, especially for the elections.

Despite the fact that a democracy is always interested in legitimizing itself, in *realpolitik* national or international governments vary in their openness to outsider social groups and their influence on decisions. If the decision makers need support and assistance in drafting regulation they will be open, and vice versa, they tend to be keeping the process to themselves. That does not usually prevent the individual public officials to source advisory and relations with outside lobbyists. In certain cases the decision makers find that their regulatory function should be outsourced, so are explicitly fostering cooperation with outside bodies making them an integral part of their decision making process. Partial outsourcing of a regulative function alike the WTO with its standardisation bodies [2] explicitly simplifies negotiations and exchange with all other interested parties, facilitates the negotiations leading to the adoption of a certain decision.

Interest representation and lobbying *per se* is a needed complement to a contemporary government. It is considered a legitimate form of interest representation. The legal systems have become extremely multifaceted, hyper-regulation has become prevalent and the legal and policy processes have grown in length and intricacy. Governments are lacking the resources to fully research the issues and staff the bodies that deal with legislation preparation, in order to be able to holistically encompass all aspects of new or altering decisions. The myriad of bureaucratic procedures is burdening citizens and imposing levies and taxes on businesses. Contemporaneously, individual citizens and groups in a society are in a constant need of representing their own interests, for which they have been granted full

democratic legitimacy by the governments. Be it a neighbourhood group protecting their environment from the opening a waste landfill in their backyard, a trade union which advocates for a higher basic salary of its workers, or a company lobbying for less excise duty for certain products, they are in constant need for representation. [3] Some groups have more resources to exert their influence and if they are smaller groups that prompts the disproportionality and legitimacy question.

It has become close to impossible for the organised interests to keep an eye on the current and upcoming regulation, understand it, affect it, prepare position papers and advocate their interests without the need for expert knowledge. Therefore interest representation, or advocacy and lobbying, has become a whole new area of expertise, growing in reach and importance globally. It is conducted by lobbying professionals and consultants from within organisations and sourced externally. They serve as guides, intermediaries and interlocutors [4] in the labyrinth of legislation and policies. Lobbying has also become a form of political consulting for the public side, the decision makers, whereby informed entities, companies, groups, and NGO lobbyists propose solutions and can point the way out of complicated regulatory situations, granting further legitimacy to lobbying *per se*. [5]

The lobbying profession has thus grown into an influential force. Being constantly engaged in interest representation especially of large business, and connected to powerful lawmakers, the interest representation industry has become a power in itself. Thus it has been faced with a critique that questions its growing impact on swaying of public policy and on the societies in general. The core democratic legitimacy of interest representation has not been questioned, as it is one of the legacies of modern democracies, but its implementation as a tool for the disproportionately influential social groups. The core of the criticism thus should not be the "vehicle", or the "method" which the lobbying process is, but the privileged relationships that most influential groups have with the politicians and administration. The lobbying method is the same when it is applied to numerous legitimate NGO causes, so it is the organised interests which are disproportionate to their legitimate position in a society.

Business interests as the actors in the lobbying arena and the methods employed to achieve their lobbying goals have been criticized. In academic and other literature, and especially in the media, opinions have frequently been voiced about excessive influence of particular organised interest groups and how they contribute to lack of confidence in the rule of democracy, social injustice and overall economic performance. [6] The kernel of the critique is the disproportionate influence of such interest groups especially the dominant organised private interests that aim to affect policy decisions.

The business interests are the largest investors in law making influence and the lobbying process. Their lobbying is seen as a reciprocally useful form of exchange



of knowledge with the decision makers in order to advance the corporate interests. Yet, the lobbying process is often used to advance such disproportionate interests in a way that public decisions that affect a large population groups can be swayed for the benefit of a small group. Such lobbying process is often opaque, lacks transparency, where both participants, the lobbying interest group and the public officials, are accessories to the same deed.

In order to understand the influence of the most dominant interest group in the industry of lobbying, business interest group, this paper looks at their internal source of strength.

### **3. THE CAPACITY AND RESOURCES OF BUSINESS INTEREST GROUPS**

The most significant social groups measured by the impact of their influence on public policy have been private economic interests, based on an enumerable amount of research in the US, UK and the EU. The rankings of investments in lobbying by the business echelon from the public records and registries have been consistently showing top positions since the 1980s. [7]

The institution of the lobbying process consists of a power relation and exchange between the organised interest group and the public office representatives. It is a mutually beneficial liaison, instigated mostly by the interest groups, but also by the government officials using a formal or an informal method. The imperfect routine of decision making in the everyday activities of governing and administration is mostly rooted in the theory of incrementalism [8]. The policy makers are daily confronted with numerous divergent stakeholders, with opposing positions and priorities; where data, especially legible and analysed one is hard to obtain in an efficient way, and where constant deadlines add to the complexity. Decisions are often made on the basis of “successive limited comparisons”, making the policy choices in relation to what has been done before, moving in small increments from one situation to the next. This opens up the space for support from the outside agents, but not completely freely. The space for influence of public policy is still limited in staff, time, issues and attention therefore it is a constant rivalry between interest organisations and groups to occupy it. The prevailing evidence states that it is mostly occupied by the businesses.

In this paper we aim to understand the internal source of influence of business interest groups. This paper focuses on business interest organisations including domestic and foreign corporations, various commercial and business associations, professional and occupational groups, and business oriented research bodies and think tanks. This dominant organised group increasingly influences policy and decision processes nationally and internationally. [9] Their impact on public policy has been a topic of interest for many disciplines. As in the 1980s, at the present time on many lists of registered lobbyists companies are the most recurrent. This is also the case on the pan-European

level. Over 60% of all the lobbyists in Brussels are advocating for private companies and their interests. For example, the UK's most dominant lobby organisations in Brussels are from the business field, namely the Lloyds Banking Group, British American Tobacco, Rolls Royce and BP. [10] In the United States the companies [11] are also by far the biggest lobbyists. The trend of growth of corporate lobbying from 1981 to 2004 in the US was approximately 50% and by somewhat more precise measurement from 1998 to 2010 the recorded growth was 85%. [12]

The relatively new studies of lobbying aspire to understand their presence in the arena, as to explain their relative power. Power we will take to be of Dahl's definition, a relation among people. [13] The importance of interest groups is usually measured in part by internal and partly by external factors. Internal factors determine the significance of interest groups, what impact they have and what their power is to introduce the desired changes in policy. The theories of behavioural and institutionalised pluralism [14] explain pronounced differences in the impact and reputation of organised interests through a combination of their capacity and resources, the attention they can draw from the relevant actors, as well as the motivation of their members. [15] This paper will look at the internal factors, the capacity and resources of private business interest organisations.

Interest representation takes place where decisions are made. The two most prominent centres of lobbying activity, Washington and Brussels, indicate towards similar results and trends. Research carried out in the US shows that more than two-thirds of Washington politics participants originate from economic roles and interests. Out of a diverse group of economic interests like local and foreign companies and varied associations, individual corporations and companies are the most prevalent. [16] The European Union (EU) lobbying ecosystem is also considered relatively open to interest representation. The approachability of the EU institutions is based on the principles of both participatory and deliberative democracy theories. They foster the involvement of a large number of stakeholders in the discussion about the common good that concerns all, so the deliberation is not limited only to decision makers. [17] Such space is thus used by a growing number of business related organisations, and the most significant development in lobbying in Brussels over the past few decades is an appearance of a pluralist arrangement where industry is considered as a partnering policy factor. [18]

Governmental institutions in the EU contribute to the trend of allocation of power towards the business interest. They have a noteworthy and often unrecognised capacity on their part to influence the dynamics of the interest group structure. This impact happens through the process of new legislation and regulations, as well as through budgetary apportionments and the establishment of programmes, agencies, and committees. Through these mechanisms policy makers could invite interest groups to certain policy areas over others, affecting the character of the prevailing constellation of active interest groups. [19]

### 3.1. The Size of the Group

One internal aspect of source of power and influence of business related organised interests is the size of the group. By group we mean either an individual company, a business organisation like the US Chamber of Commerce, Business Europe or Food Drink Europe, or any issue alliance that represents business related organised interests, including think tanks, e.g. Institute of Economic Affairs, London. Research has shown that smaller sized groups that exert influence through lobbying have greater success. [20] Although the democratic pluralist theory supports the idea and practice that larger groups should be better and more extensively represented than small groups, [21] the interests and the members of such groups are usually not adequately connected, aggregated and organised.

The sizeable citizen groups are typically an unorganized amorphous majority. The prevailing attitude of its members or supporters is such that they expect that somebody else “fights for them”, for the cause or values that they care about. Such causes are nature without toxic waste, banning fracking, enough potable water, renewable energy, or gender equality. The expectation that somebody else will take care of such important issues that a lot of people subscribe to is the usual phenomenon of the “free ride”. The individual enjoys a benefit accruing from a collective effort, but contributes little or nothing to it. The citizens associated with such large groups might have several small NGOs representing those ideals, but do not take part in their activities. Despite the fact that the numbers of NGOs and their membership has risen in the Most of the citizens do not have an immediate direct interest, rather they focus on their own daily commitments and routines, thus lacking in available time, enough resources or knowledge to congregate into an effective group.

The apathy of supporters in such large groups leaves a big space for other organised and focused interests to assume the space and work with the decision makers. This space is promptly filled with business interests who dedicate the time and other resources to lobby. Their small size, connectedness and ability to engage the resources much faster is one of the most significant foundations on which their strength is built.

The EU arena is also concerned with the size and efficiency of the organised interests including business related ones. The EU is one of the minority of governing bodies that has opened up a large space for various opposing interest, including the civic sector and NGOs. If we only focus now on the business, the EU decision making process deals with the business organisations on a regular basis, but are concerned with their relative size and presence. Most large European companies have reached a desired “insider status” from the European Commission based on their size, the extent of their cross-border production, information they provide and their period of presence in Brussels. [22] Regardless of the EU preference for “large companies” to represent an industry,

such individual companies may employ thousands of individuals, in relation to the rest of the population, they still epitomize a marginal number of citizens, while the decisions which come out of such relations affect everyone, e.g. environmental standards.

### 3.2. The Organisational Agility

In addition to their small size, business related interest groups consist of interdependent and coordinated parts, fit for united action and perform tasks in a planned and systematic way. Whether they are individual companies, where such capacity is most prominent, or business type organisations, they possess the much-needed organisational agility. Therefore organised interests are more often than not well calibrated, focused and agile to move, reorient or regroup to achieve such prominent reach and influence.

Organised business interests and companies are prepared for active advocating of their interests through mobilisation of capital, knowledge and expertise. In the US, the transnational corporations (TNC) are consistently active in all the lobbying channels, often employing more than 100 lobbyists, working on over 100 regulations at any one time, [23] hence establishing close working ties with the Congress and other levels of government. Their organisational agility allows them to scale the activities throughout time. They possess the material resources to carry out long and extensive, yet focused and consistent lobbying campaigns.

The business interests hone individual and organisational knowledge, and employ informed and skilled experts to implement it. Companies methodically conduct research into their sphere of influence, covering all three crucial aspects: the technical side of the issues to be discussed, the decision making process and the chief decision makers. The knowledge and data management is also their strength. Systematically they are creating privileged contacts with the decision makers, both formal and informal; deciding on the choice of numerous strategies including whether the process should be simplified or complicated [24]; mapping, analysing and planning elaborate stakeholder engagements; preparing documentation and positions; gathering industry, business or scientific argumentation; holding team based or individual meetings and summits; conducting expert negotiations using trained staff, and studiously following through sometimes lengthy legal processes that span over several years.

The economic interest organisations employ a full array of lobbying strategies. For implementing these strategies they need consistency, efficient communication among the parties involved and topical expertise. The choice of lobbying strategy can be a formidable task and a moving target. The strategies in the domain of lobbying can be divided into two main groups: strategies relating to participants and strategies relating to the process. [25] The strategy intensity can have four basic levels, and it starts with the parties holding regular negotiation

meetings, the next level being a public pressure campaign of various intensities [26], and further level being media exposure and public activism. Only organisationally able entities can withstand the challenge of choosing and fully implementing complex strategies. It also gives them the opportunity to scale in size, often it is more advantageous to act in alliances. Alliances arise in a bustling lobbying and policy arena, taking the form of permanent alliances ad hoc, formalised or non-formalised ones. Alliances and coalitions do not always arise from totally identical interests, sometimes they are created from completely opposite interests, which require organisational agility to conform and reorder.

In the advocacy field the business interest organisations are faced with often opposing interests represented by a whole array of civic organisations, NGOs and charities types of organisations. They epitomise groups with diffuse interests, the ones that are not so well organised and do not have equal power although they advocate some of the most profound values for mankind. The organisational capacity of this group has for decades been subpar to the corporations. Due to their diffuse membership and sometimes millions of supporters they lack the dedication of all of their members, and often effective direction and coordination.

The trend of growth of the industry of lobbying in the non-governmental sector in the last few decades is noticeable and frequently measured, grass root activism is on the rise, general media presence and activism is more recurrent and intense and has become more organised and professional. [27] Yet in the United States it is still only half the size of the corporate, private sector. The impact on policy change is still smaller. The EU arena is also filled with non-governmental organisations and they have a special favourable status with the European Parliament and the European Commission. Nonetheless, the imbalance of resources on the EU level is also visible between NGOs and other interests. [28]

The fact that the number of NGOs and other civic and non-profit organisations has risen during the 20<sup>th</sup> and 21<sup>st</sup> century followed by the rise in membership gives some foundation to expect improvements on this front. There is a growing number of efficiently organised NGOs, so this particular strength of business groups could be challenged in the future.

### 3.3. The Resources

The next source of power and influence is the nimety of resources that organised business interests possess. The laic literature and mass media most frequently debate about the financial resources employed in interest representation. The popular notion is that money of special interest groups buys politicians and laws. The citizens who are concerned about the corruption in politics state in polls that MPs and other public officials are not behaving ethically, with even less favourable opinion about the lobbyists, judging their ethical standards to be even lower than of the politicians.

However, in a democratic, pluralist environment where lobbying is developed and fostered financial resources are not sufficient to achieve the goals. Organised interests use lobbying, and not direct finance, to exert influence employing a palette of resources. So the power of lobbyists in relation to politicians derives from several groups of resources. In this paper we concentrate on three fundamental groups: finance, relationships and information. [29]

Direct financial payments have a critical role in the environment of interest representation and lobbying. Mostly they are given to parties and individual politicians during election campaigns, either by own initiative or upon a request from the political side. Lobbyists in the US consider PACs, political action committees, to be an impactful vehicle in the overall political process, especially if they carry a significant financial weight. [30] Any direct payments or gifts to individuals for political favours are a direct abuse of the power relationship, and constitute corruption. That is not lobbying. The fact that transparency is often absent from the lobbying process gives ample opportunities for misapplication of this power relation.

The business interest groups give financial donations with the aim of influencing, directly or indirectly. Finances are also involved through advocacy campaigns, in order to fund the expenses such as staff, research, documentation preparation, media publicity and message dissemination.

It is a well-established fact that more financial investment in lobbying reaps more lobbying hours. Yet the effectiveness of only financial investment cannot be guaranteed, as lobbying hours do not necessarily spell victory. The prerequisites for effectiveness are several. The financial investment in lobbying by the private corporate interests is thus more impactful as they synergise finances with the other two resources, relationships and information. There is evidence of growing influence of the civic NGO sector where the power they exerted required significantly less funding, but had still amounted to a success.

The other resource of business interests is relations. Advocacy is founded on relations. They are based on credibility and trust. The relationships stem out of both professional and private bonds forged between the interest representatives, lobby organisations and policy makers. The relationships simplify the process of policy influence, allow for strategic information sharing, and can be more or less transparent. Consequently business interest organisations invest into creating and maintaining such valuable relations. Their approach to creating the relations is based on measurement of relative influence of individuals and their potential impact on the policy making process. Thus the planning, organisation, monitoring and revision of the power relationships is continuous, optimised and goal oriented.

Companies that are carrying out professional interest representation programmes also possess the third type of resource: information. Resource dependency is a

fundamental aspect of the power relations between the lobbyists and the decision makers. [31] Mostly topical technical information is needed in a lobbying process. The government entity might be lacking in data or staff to carry out a full research into the issue, so they welcome or even instigate the knowledge exchange. Thus, they choose work with what they deem to be credible organised interests that can provide such resources.

The case of the EU is especially striking. The contribution of the lobbying process to the EU political set up is rooted in both the deliberative and, increasingly after the Lisbon Treaty, in the participatory democratic theory. The participation is especially reflected in the opportunity for all social and economic actors to officially address the EU bodies, emphasising its accessible and anti-elitist system. In addition to filling the space in the legitimacy question that plagues the EU institutions *per se*, the lobbyists are intensely working with the EU policy makers on the basis of mutual resource dependency. [32] Individual companies in the EU have the possibility to establish a positive reputation in the European political process to the extent to which they can establish their trustworthiness as a provider of reliable, sector-specific, and pan-European information. [33] This is especially so with NGOs that can offer valuable data and support. Still, the business interests and TNCs have used more resources to build up the knowledge and skills to yield influence in the EU political environment. Their ability to organise and pursue wider or issue-based interests is significant; thereof the coordination aptitude of such groups has notably risen and impacted the political environment in the EU.

Having considered the above capacities of business interest organisations that are the source of their lobbying strength, it is precisely the evident growth and success of the lobbying industry that points to the fact that numerous and varied resources are needed to be conjointly applied to carry out relevant and effective interest representation programme, not only the finances. Companies employ several dozens of lobbyists, e.g. Comcast, the biggest Internet operator in 2014 in the US, had over 100 individual lobbyists engaged from over 40 different lobbying offices on a myriad of their cases. [34] Also, AT&T employs a small army of registered lobbyists to advocate for it on Capitol Hill, in the White House and at agencies such as the Federal Communications Commission. The company has spent more than \$28m on federal lobbying in 2017 and 2018, according to Congressional filings. [35] If it were only the finances that could solve the influencing needs, the persuading arena would be much more predatory, no professional lobbying industry would have developed and democracies would be in a rather different place. Downright “paying for laws” or “buying politicians” has not proven to be the dominant nor such an efficient way of conducting influence and achieving goals for corporations. Subsequently, in many lobbying arenas such abuse is less directly present than expected. The conclusion is that lobbying is a more efficient way for companies to achieve political influence than only paying for laws or buying politicians or opting for other unethical or borderline illegal influencing activities, or illegal, like trading in

influence or corruption. [36] Combined and well organised use of all three fundamental resources is the key to understanding their source of impact.

### 3.4. The Regeneration of Influence

The fourth of the internal strengths of business interest organisations that we have focused on is the regeneration and multiplication of power. The already achieved dominant influence of companies gets regenerated and strengthened through ever closer and continuing relations with the lawmakers. The relationship acquires mounting strength and power over time, based on already achieved benefits and strong positions, so the significant domination and influence by the logic of things is regenerated into an even higher plateau of domination and influence. Regeneration of influence is an internal but also external resource that gives the corporations the privileged momentum, which is hard to replicate and defeat by any other competing social group. This source of power has the potential to keep the opposing interests at bay for an indefinite period, unless the other partner on the influencing pitch – the governing body – decides to change the usual way of functioning. It would require an immense political and economic structural alteration to move the private business sector from its acquired position and open the ground for more proportional and legitimate representation of all the interests in a society.

The intensive relations that are created between the business interest groups and state officials get another regenerative distinctive enhancement. The phenomenon of the revolving door is yet another agent that contributes to the regeneration of influence of business in the society. After completing their mandate the government administrators, politicians and other public function office holders are increasingly opting for implementing and using their knowledge and contacts for a living. They do it by transferring into the industry of lobbying, almost exclusively for corporate interests.

Despite the obligatory “cooling off” period, whereby the politicians are banned from moving into the industry where there might be a conflict of interest, the practice is omni present. Based on a study conducted in the United States in 2011 it was found that in the period 2001 - 2011 as many as 5,400 former congressmen and staff, after leaving Capitol Hill, entered the business of lobbying. Their lobbying target was the Federal government, their ex employer. [37] Influential lobbyist companies like Bell Pottinger in the UK have had a business practice to “lend” their staff to some of the state agencies or institutions or to their friends in the government, but still keep them on their payroll. Examples of the revolving door are apparent in all industries, for example in the health industry when in the UK, Ian Dalton, a highly ranked official of the Ministry of Health moved into the growing health business of the private firm British Telecom Global Health. [38] Such practice exerts even bigger influence and contributes to constructing more privileged connections while collecting intelligence about the law making process and potential issues along the way.

Revolving door has been present since the 1990s and due to the obvious unethical behaviour and the direct conflict of interest there have been increasing demands for better transparency and improved regulation of the activity of lobbying. [39] The frequent practice of revolving doors is not only present in the EU Brussels and Strasbourg, in the United States and the United Kingdom, which gets somewhat more media reporting but also on the continent, namely in Germany. [40]

The phenomenon of the revolving door, almost exclusively connected to the business interest advocacy, in the last decade has been identified as one of the areas, which carries a large risk of corruption. [41] This source of power of the corporate interests is extremely difficult to tap into by outsiders. The civic and NGOs receive a minute fraction of revolving door benefits, because the politicians aim for companies as their landing ground while wearing the golden parachute. Out of the four sources of power of business interests examined in this paper it is the regeneration of influence, especially via the revolving door scheme, that is most difficult to replicate by other social groups.

## CONCLUSION

The topic of interest group influence on policy making continues to be a fundamental issue especially in the context of understanding the legitimacy of different groups' relative power. For societies to have a balanced social system and legitimate representation it is necessary to understand how the most influential social groups wield their impression on policy making. The paper looks at one of the vehicles for creating and preserving the power relations between business interest groups and the decision makers, the lobbying process. Organised private business interests have been researched with the stress on their root of influence, their internal capacities. Four types of capacities are presented as the most significant: size of the interest group, organisational agility, their key resources and the regeneration of their influence. We examined the four types of resources, in an attempt to correlate them to the interest group's power, portray in which way they are utilised. The research also looks into the opposing interest groups who could potentially develop, use and nurture the same capacities.

The conclusion from the research points to the tendency of corporate interest to constantly grow in strength and influence, creating an even bigger imbalance in the lobbying arena. The other social groups with often opposing interests to corporations, namely the civic organisations, NGOs and other non-profit type organisations represent a much wider population group, which automatically warrants them greater legitimacy, but have only a fraction of influence. In relation to the rest of the population, corporate and business interests epitomize a marginal number of citizens, thus lacking in legitimacy, while the decisions which come out of their relations with policy makers often affect everyone, e.g. environmental standards, food security, public health issues. C. Lindblom asserted that democracy and big corporations have difficulty fitting with each other, so this imbalance is

a reflection of his assertion. The business interests have been continuously growing in size and influence, using their capacity and resources, leaving other more legitimate social groups behind when it comes to intensity of preference and attention by the lawmakers.

The first feature of this interest group the paper discussed is its size. The corporations and their organisations are significantly smaller in comparison to much larger interest groups with diffuse supporters or membership, like the environmental groups or gender equality NGOs. The small size of the business interest organisations, their connectedness and ability to engage the resources much faster is one of the most significant foundations on which their strength is built. It is an intrinsic feature of this interest groups, which allows for a huge advantage in influencing the laws.

Apart from the size of the interest group, out of the four capacities discussed, another, which is unrealistic to be replicated by other groups, is the regeneration of influence. The other two examined here, the organisational agility and the resources: finances, relationships and information are within reach of the other social groups, albeit in a reduced ratio. The regeneration of influence of businesses is not only a logical construct, where strength builds on strength, but a reality in modern societies. The momentum reached by the corporations is spiralling out of the gamut and capacity of any other competing social group.

The EU distinguishes itself to have an accessible and anti-elitist system of political involvement, open for numerous contrasting interest organisations, including the civic sector and NGOs. They have a positive standing and are granted increasing budget allocations. Still, legislative and administrative institutions in the EU are also inclined to apportion the influence towards the business interests. Most large companies operate with an increasingly privileged "insider status" impacting the lobbying and political environment in the EU. The relationship is based on mutual resource dependency between the business and the public officials. The legislative and executive bodies have the capacity of guidance and shaping the dynamics of the interest group structure but such mechanisms are not fully in place. Furthermore, there are trends pointing to the more frequent practice of revolving door and abuse in power relations, which is aptly documented yet with no repercussions.

Further studies recommendations could include the research into effects of full transparency of power abuse, and its effect on the potential public debate, involvement and if and how it could affect more activism.

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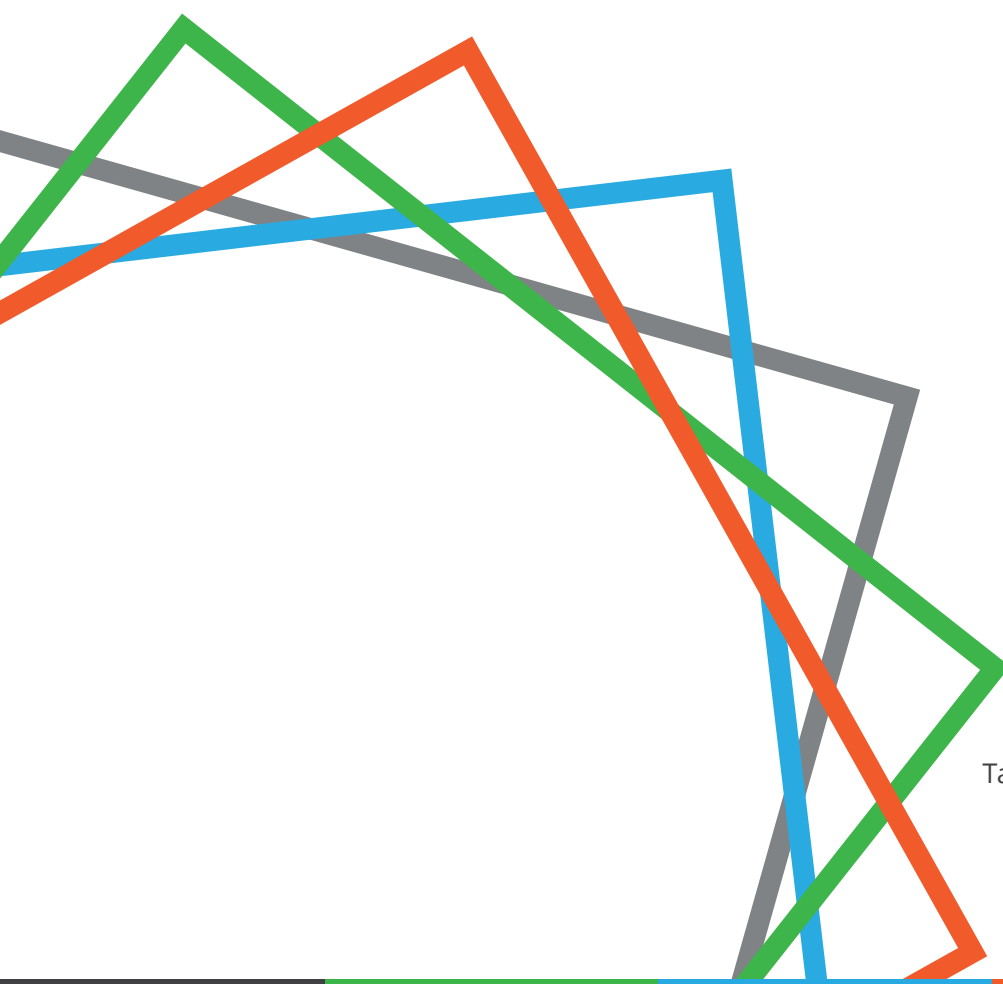
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