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KEYNOTE SPEAKER



Ph. D. Mario Spremić

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Mario Spremić is a Full Professor at the Department of Informatics, Faculty of Economics & Business, University of Zagreb, Croatia and guest lecturer or visiting professor at some international institutions (Imperial College London, Faculty of Economics, University of Ljubljana). He received a B.Sc. in Mathematical Sciences (in 1996.), M.Sc. in IT Management (in 1999.) and Ph.D. (in 2002) in Business, all from the University of Zagreb. He joined Faculty of Economics & Business (FEB Zagreb) in 2000, with the previous corporate experience as a computer programmer, project manager and executive manager. Mario has taken additional education from MIT Sloan School of Management and EFMD Executive Academy. He has participated in many corporate-based projects. Mario has a broad experience in international accreditations of higher education institutions, leading institutional processes towards achieving EPAS, EQUIS and AACSB accreditations. He is acting as an EPAS accreditation reviewer worldwide and NAKVIS accreditation reviewer in Slovenia. His main research interest areas are digital transformation, digital economy, ICT governance, cyber security and information system audit and is a frequent speaker at various corporate and international events.

Challenges of digital transformation: case studies and research results

The lecture will explain the most important trends in digital economy and discuss game-changing and digital or die scenarios imposed by use of digital technologies in different industries. Many companies use different types of digital technologies, like basic digital technologies (mobile technologies, social networks and communication platforms, cloud computing, sensors and IoT, big data), but also emerging digital technologies such as drones,

robotics, augmented and virtual reality (AR and VR), face and speech recognition, deep learning algorithms, cognitive technologies (AI), additive manufacturing (3D printing), wearable technologies, holograms, etc. Companies of all types and sizes, no matter of industries they compete in, should consider how to use all these digital technologies in order to innovate business model, conduct thorough digital transformation and respond to prevailing game-changing and digital or die scenarios. Several case studies of successful digital transformation will be explained and results of novel research in the area will be presented.

Key Words

Digital technologies; digital transformation; business model innovation; research: case studies.

KEYNOTE SPEAKER



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Predrag Brlek was born in Varazdin and live in Zagreb, Croatia. He accomplished Doctoral Study at University of Zagreb, Faculty of Transport and Traffic Sciences in the field of Technology of traffic and transport and his doctoral thesis was 'Method of sanation of dangerous spots on roads with the use of geo-referenced video'. He took part at many conferences and has a more than forty technical and scientific publications in the field of traffic security, traffic planning and sustainable mobility which qualified him for obtaining a title a scientific associate in scientific area of technical sciences. His working experience started at Institute of Transportation and Communications Zagreb where he passed all phases from an expert associate through the leader of studies and projects to the director. In seventeen years he participated as a leader or author-contributor in more than a hundred traffic projects or studies. He worked at Polytechnic Nikola Tesla in Gospić as senior lecturer in Department for Road Traffic and he is visiting lecturer at Faculty of Transport and Traffic Sciences, University of Zagreb. In the past two years he works as assistant professor at University North at Department of Logistics and Sustainable Mobility and is head of Logistics and mobility section. He is the University North's leader of two Interreg projects in the field of sustainable- and electro-mobility, „Low-Carb“ and „E-MOB“ as well as the swiss-croatian cooperation project „Take a Brake!“ in the field of traffic security.

Economic aspects of sustainable mobility systems of the future

With the great development of traffic, especially personal road traffic, humanity faced major problems in affecting the environment and human health. Noise, vibration, pollution air and water are the most negative

consequences of traffic to the environment and indicate that existing transport systems are not sustainable. For this reason, traffic development must be in line with the principles of sustainable development, where, besides the new technical solutions within the intelligent transport systems (ITS), new business principles and new life principles are included. The paper presents the role of ITS, especially corporate (C-ITS) in sustainable mobility and its socio-economic impact.

Key Words

Transport system; sustainable mobility systems.

SOCIAL RESPONSIBILITY: CORPORATE ACTIVITIES ENCOURAGING VOLUNTARY MICRO-DONATIONS BY CUSTOMERS IN EUROPEAN COUNTRIES

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Abstract

This study attends to the question of how corporate activities and social responsibilities of an organization can cater to society through micro-donations by customers and how customers can be satisfied with donating and making a change in society. At first, this paper reviews the concepts of CSR and corporate citizenship and then delves deeper into understanding what is ethically and economically required by corporates to encourage the customers to donate to contribute to society. The study indicated that it must be examined how micro-donations affect different target groups. The proposition is that customers who have never donated in the past due to their financial situation rich or poor, young or old, would have the opportunity during shopping to make a micro-donation and feel good about contributing towards the society.

Key Words

Individual Social Responsibility; social corporate activities; micro-donations.

1. INTRODUCTION

The balance of ecological, social and economic interests is a prerequisite and is also named as “Triple Bottom Line” with the three p's: planet, people, and profit. Here it is important to note that the resources of nature are not unlimited, all three p's are considered by companies and taken seriously and only together enable a sustainable future. Sustainability is the foundation of all actions and basis for the implementation of Corporate Social Responsibility (CSR). The differentiation to CSR, however, is that sustainability is a basic idea, without concrete instructions and reviewing authority.

The company is active as a “good citizen” actively for social concerns and does this e.g. through donations, foundations, or through simple sponsoring. It recognizes its role in society, accepts it and engages in the associated responsibility for the community. A frequent resource invested is also the workforce, which contributes to employee involvement, technical know-how, and organizational competence to social enterprises through corporate volunteering.

Looking at the donation market there is always seen only the one perspective and the one goal: It is all about the money and the simple goal is to maximize the final amount donated. But looking at the second side of this market besides the final collected sums, the industry that is living from doing this as well as the beneficiary in the end, there are millions of people who donate the money. These people are unofficially seen as “cash-cows”, with the goal to get as much money from them as possible. These people donate money to do good, but also indirectly to feel good themselves. This detail though is underrated because the entire donation market is existing to make the beneficiary happy. So far it is not the main goal to make the donator feel better as well.

2. LITERATURE REVIEW

2. LITERATURE REVIEW

2.1 Social Responsibility & Corporate Citizenship

Social responsibility is the voluntary contribution of the economy to sustainable development, which complies with existing legal requirements and promotes and implements additional voluntary goals. The European

Commission, in its Green Paper, defines the term as follows: "... an approach that provides enterprises with a basis for voluntarily integrating social and environmental concerns into their business activities and interactions with stakeholders." Here CSR is not understood as a substitute for legal regulations, but instead, it is the voluntary entrepreneurial commitment to act responsibly and sustainably, along the entire value chain of a company. It must be anchored in the core business, and its own corporate culture and management practice must be adapted accordingly.

The core goal of CSR measures should be less marketing and more purpose-oriented charity. In practice, this is certainly difficult to keep apart and goes in the case of success mostly hand in hand. CSR is the voluntary commitment in the normal course of business. Corporate Citizenship (CC), on the other hand, describes the social commitment of a company outside its actual area of activity. Corporate citizenship concerns everything that goes beyond the daily as well as normal business activity in the sense of a common good-oriented commitment.

In consideration and analysis of the existing Corporate Social Responsibility and Corporate Citizenship instruments and activities, three things particularly stand out: on the one hand there is no highly developed donation activity regarding micro-donations and on the other hand there are no donation activities in which commerce and customers interact with one another. In addition, the entire donation market seems to be made for people with above the average amounts of money. In order to become more practical, we want to take a closer look at the terms used by companies, but also customers, and how these terms are differentiated. A concept that stands above everything is sustainability. On the one hand, it aims to secure the basic needs of all people and future generations, on the other hand, it requires preserving the lasting viability of our planet, including all ecosystems.

2.2 Ethics vs. Economy

MAX WEBER describes "economics" as follows: "Economically oriented actions are those that are intended to foresee and satisfy a need for desired products or services. The economy should represent a peaceful exercise of power which is purposefully and rationally planned and is oriented at those economically oriented actions."

Two aspects are concealed in this definition of "economics ". On the one hand is economics a fulfillment of desires for products and services, on the other hand, it is also something "peaceful", which means it is not forceful

or violent (WEBER's Intention) but should be executed ethically and morally correct. This would mean that the economy and ethics must be compatible. In the following, the question of the relationship between ethics and economy will be discussed further. Is ethics truly compatible with the modern economy? Before trying to answer this question, it is necessary to address the initial problem. "Business ethics, rightly conceived, is just good business."

This basic belief, prevalently found in the American literature, suggests, that a company is more successful the more ethical its actions. Such point of view doesn't take into consideration however the problematic relationship between ethics on one side and economy on the other. It carries the potential risk to reduce the complex relation between morality and profitability to a harmonious convergence. Such convergence doesn't exist in the real world of economics. It is desirable but cannot be presumed.

HOMANN sees within the complex connection between morality and profitability four areas of action, which he has brought together in the matrix shown in Figure 2.2A. Therefore, cases II and IV suggest the ideal case, whereas the cases I and III show differentiated aspects of ethics and profitability. The latter two also depict a dilemma situation.

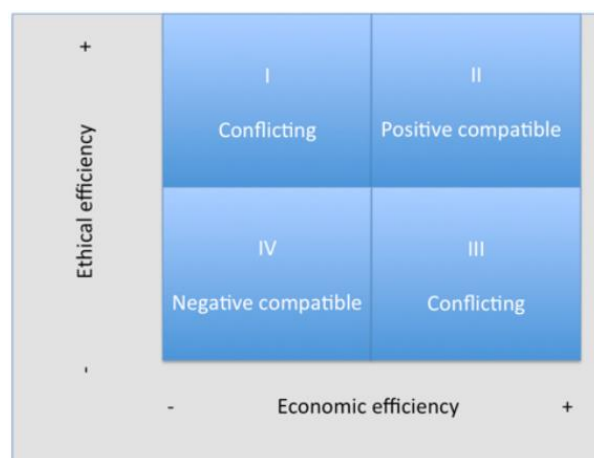


Figure 2.2A: Four-quadrant scheme

Field III prefers the economic efficiency while field I favor the moral one. HOMANN illustrates a weakness regarding the observation period. It can be assumed that this model can only be a depiction of a very short time frame. In this case, it seems possible to combine economic and moral efficiency. That's why the HOMANN approach was extended by HANSEN. Like the

scenario technique, the two-dimensional HOMANN model becomes a three-dimensional one, which additionally considers “short term” and “long term” aspect.

SCHMIDT points out: “The fact that a company confirms its values and makes them transparent means self-commitment. The moment when values are communicated, actions and decisions based on those values become enforceable.” It turns out that there is a connection between the value of a company and the company values which puts success in relation to the value of a company, its reputation (appreciation of a human being or an organization), its social, economic, ecological responsibility and its fundamental values. The image in Figure 2.2B depicts this relation.

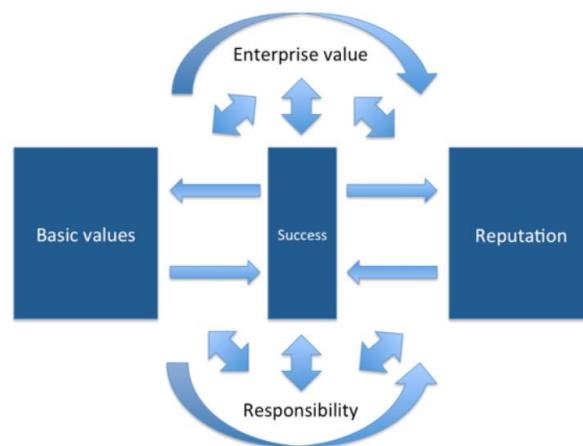


Figure 2.2B: Corporate ethics model: reciprocal influences

Based on the connection shown above it can be summarized that long-term success is a result and a prerequisite for the realization of the entrepreneurial fundamental values and objectives. Therefore, it is fair to assume that ethics and economy are compatible with one another.

2.3 The term “economic citizen” and the corporation as a “good citizen”

The term “economic citizen” should be defined first. Further, it should be theoretically considered when a company can be defined as a “state citizen” or “good citizen” and which implications are associated with it. Then it will be discussed, what it means for a company - also, an organization - to act as a “good citizen” considering the distinctions made prior. A private corporation is seen as an organization within an economic system.

The enterprise as such is defined as a complex, open system, that maintains various and complex relations with its environment. This means that the transfer systems can impact the enterprise system, and vice versa can the actions of an enterprise impact the transfer systems. PETER ULRICH takes a definition of an “economic citizen” a step further. In his opinion, the term “economic citizen” describes a citizen as an economic subject and at the same time as a moral individual who doesn’t separate his economic actions from his civic responsibilities but rather integrates those two into one another.”

The general social function of organizations lies in finding solutions for social issues by reducing the complexity and coordination the human actions to reach the objective. Different approaches can be found in the literature, that describes the organization on the one hand as a structural medium, which exerts the “intermediary function” between the individual and the society and on the other hand allow the organization a partial autonomy and independence, that goes beyond the sum of actions of singular organizations or individuals. Based on the last statement it is possible to make individual and organizational actions comparable. In GESER, five distinguishing features are found:

1. The ability to standardized and complex actions,
2. Objective specificity,
3. Objective stability,
4. Transparency of the internal structure,
5. Diversification of the action fields.

GESER assumes that an organization is more self-reliant through higher internal transparency and the objective specificity (individual as well as a citizen) and can participate in various interactions simultaneously. This ability provides the organizations with an opportunity to impact the norm structure in a society. Additionally, the combined professional knowledge along with the higher productivity provides organizations a chance to use the existing resources to achieve its own formulated objectives and remain compliant with the social standards without creating an additional rules structure. The internal organizational processes can be better controlled this way.

Organizations achieve a higher level of assurance compared to individuals based on internal structure transparency and business processes. GESER concludes in this context that organizations are to be “perfect actors” and therefore the idealistic action approach can be used to analyze the actions of organizations considering rational behavior. A conceivable social

consequence could be, that on one side organizations create social order, in which every individual would have to look for his own living space, and on the other side, they would be confronted with high normative behavioral expectations. “In the intensification on the casual liability, it is expressed, that organizations are increasingly used as attribution addressees for especially prerequisite and rigorous normative behavioral expectations and they are expected to continuously improve their actions.”

COLEMAN, who, contrary to GESER, defines organizations as corporate actors that are connected through the sole purpose of resource pooling, points out, that a complex internal structure makes it merely impossible to track the responsibility for any action to a single individual. He also states that in his opinion no moral appeal can be directed at a corporation compared to an individual. The actions of an organization can, therefore, be only impacted by sanctions. Based on the increased specialization of tasks knowledge and information differences within departments also increase and could possibly result in an uprising principal-agent problem.

The theoretical considerations presented here can also be found in the daily practice of enterprises, for example when they are held accountable for their faulty actions in front of consumers, NGOs or media. It is particularly relevant if the cause can be traced to a specific department, yet it bears consequences for the enterprise. Those facts can have the following meaning: if the company is viewed as an independent actor that is fulfilling its private economic function, then it can be also viewed as an independent citizen, who belongs to a civic community. It can be assumed that a company must face higher expectations from the society regarding its normative behavior due to its higher degree of rationalization if it is attempting to integrate into society.”

In this context, it is fair to pose the question of how far the “normative” behavior goes beyond the self-imposed commitment. It seems obvious that the “norm compliant” civic behavior is more based on virtues and not on prohibitions. The extent to which a company can be obligated to comply with the normative behaviors required from the society depends for once on the norms confirmed in the location (region) and on the already established norms and standards. WOOD/LOGSDON assume that it is a question of the company definition - whether from the “multi-domestic” or a globally integrated perspective. On the other side, state that an organizational definition of a corporation is impacted by its departments. The market prevailing in the corporate sector determines, in the opinion of the authors,

the position of the parent company and its subsidiaries and affects the organizational structure (globally, nationally or internationally).

2.4 Micro-Donations by Customers

The current donation market took a development towards a few people donating a relatively significant amount. This is certainly since older people have more financial resources and are willing to donate a part of it. This setting, however, excludes large parts of the population. Because who would like to donate for example 3 EUR/RON if the other donors distinguish themselves through their large donations. Donations respectively doing something good with the money is elitist and a priori excludes particular social classes from participating due to the design of the market to possibly maximize every individual donation. The larger the donation, the better.

This conception, however, is controversial, because the objective should rather be to make the market accessible to as many people as possible by giving them an opportunity for social engagement. Firstly, it is important so that more people could generate larger sums and secondly, it can be assumed, then a donation of any amount creates a positive feeling for the donor.

Analyzing the social sector and especially the donation market, it shows that the donating market is more money-driven and more capitalistic than most of the corporate companies.

3. RESEARCH METHODOLOGY

In order to understand the significance of the smallest amounts for citizens, a survey in oral form was conducted with 300 citizens in Germany and Romania. The survey in Berlin, Germany, took place from January 15th to the 18th of 2018, the one in Bucharest, Romania, from January 19th to the 21st of 2018.

During the survey, the participants were presented with a laminated copy of possible answers to every question, so they could easily and quickly identify an appropriate answer for them. Those were particularly helpful in questions of age, income and donation behavior to guarantee the authenticity of questions as well as to protect the participants from the public pressure. The survey contained 16 closed-ended questions, which started off with 4 questions about socio-demographic background and continued with 12 assessment questions about their views on pocket change

and the opportunity to do good with it. To simplify possible answers only closed-ended questions were used.

4. RESULTS & DISCUSSION

The previously introduced survey results of 300 people from Germany and Romania present various conclusions regarding human behavior and attitude towards small pocket change amounts. At the same time, they clearly show enormous potential. Differences between genders, age groups, income levels and origin of the participants were identified.

4.1 Donating money to do something good for a non-profit organization AND Donation of 5 Cents/Bani knowing 1 million other citizens would each donate 5 Cents/Bani for a good cause.

As previously shown, most people who have never donated in the past, could, however, imagine doing so alongside one Million other people donating an amount of 5 Cents/Bani for a charitable cause. This demonstrates, that most people are missing access to donation possibilities. Demonstrating them a very simple way to donate a small amount convinces the people who have never donated before or would not have done it anyway. This very easy approach to the donation market is very important since it is extremely crucial to be able to reach the first-time donors and this group would eventually repeat their donation again. Finally, there is always the first time for everything and this very simple opportunity to donate, which is also as such, opens a donation market to the previous non-donors in a very easy way.

All age groups are represented here with a similar donation willingness, whereas it is especially apparent that the young respondents have no donation experience but are willing to participate in a collective one. The lack of wealth or income or the insufficient access to the donation market, possibly also due to the lack of knowledge, are likely the main reasons why these age groups have not donated in the past. Illustrating of simple possibilities to take the first step is accepted with appreciation. This also shows the same strong representation by the respondents based on their income level. The “lower class” is the leader of not having donation experience and being willing to participate in a collective donation of 5 Cents/Bani.

In summary, it can be said that especially young and poor interviewees have not donated before, but in the majority would participate in a collective

donation action of 5 Cents/Bani. This is much different comparing them to the older and wealthier participants and is a clear statement to how those target groups can be motivated to make their first-time donation.

4.2 Bending down to pick up 1 Cent/Bani on the street AND Donation of 5 Cents/Bani knowing 1 million other citizens would each donate 5 Cents/Bani for a good cause.

As we have already demonstrated, most people are not willing to bend down on the street to pick up small coins. The worth of the coins seems apparently very insignificant. The timely and physical effort of bending exceeds the benefits. Those respondents, who would not bend down to pick up coins on the street, would however in their majority donate 5 Cents/Bani. This shows that the “worth” of the coins is not recognized while lying on the ground, but as soon as those coins are “assigned” a task, their worth increases, and their benefits are appreciated. Especially the older participants would not bend down, are however willing to donate such small amounts. This result is possibly caused by the fact that older people do not necessarily like bending down to pick up something. Reviewing the allocation based on the age groups, it can be stated that a significant majority that would not bend down to pick up the coins would consider donating in collective action.

Within the income groups, it is apparent that the “middle class” says significantly often that they would not pick up the money from the street but are willing to donate alongside others a small amount of 5 Cents/Bani. The “lower class”, on the other side, is showing the lowest numbers here, however if we look at it more precisely, we will notice, that the “lower class” shows the most frequency of bending down to pick up the coins and would also be willing to collectively donate 5 Cents/Bani. We generally identified a very high willingness to participate in a collective donation of 5 Cents/Bani. This is particularly apparent within the group of respondents who have never really paid attention to the small change lying on the street.

4.3 Something good can be done with a 5 Cents/Bani donation AND Donation of 5 Cents/Bani knowing 1 million other citizens would each donate 5 Cents/Bani for a good cause.

As previously extensively shown, there is no strong appreciation for small coin amounts. Not everyone would bend down to pick the money lying on the ground and the willingness to donate the smallest amounts is not widely spread. 5 Cents/Bani seem to the respondents to be too small of an amount

to have any significant relevance to be donated. The “worth” of the money is not worth the effort.

This consideration changes completely as soon as the small amount gets a different or rather a new meaning. Because once those 5 Cents/Bani are not an individual donation to a charitable cause but are rather donated collectively alongside with one Million other people, this smallest donation receives a larger meaning for the respondents and ultimately for the society.

Almost seven out of ten participants state that would not donate 5 Cents/Bani, would, however, participate in a donation of the same amount once it is done by one Million other people. This expansion of consciousness is decisive for the participants to support the donation. It is not instrumental what happens with the donation afterward. It is rather defining to be a part of something big - even if we are talking about a share of only 5 Cents/Bani. With older age and increasing income the willingness to donate also increases. This can be explained by the fact that older and wealthier people would rather donate than younger and poorer ones.

Regarding the age: it is possible that there is a different understanding of a collective effort once you are older. Additionally, we must state that especially younger respondents demonstrate the smallest support with 60% when presented with the question combination. Looking at it more precisely, it becomes apparent that twice as many participants below 24 years of age are willing to donate 5 Cents/Bani than the older ones and support the idea to donate that amount with one Million other people. Regarding the income, we can see a similar relation as previously shown for the age groups.

It also must be mentioned that a very small group of people is willing to donate 5 Cents/Bani as an individual donation and would not do that once it becomes an act of one Million others. This might be because those people are not necessarily interested to do something with many other people. Those respondents feel more comfortable to socially engage apart from peer pressure. This group is however rather small with only 3%. Also, the group of those, who would neither donate 5 Cents/Bani alone nor in a large group, is represented with 14%. This group seems somewhat insensitive to this kind of donations and will not be further regarded in our research as well as the previously described group.

This expertise is crucial for the whole donation market. A single donor should never feel alone. He must always perceive himself as a part of a big movement. A single donor must feel that his donation regardless of its

amount is a part of something significant and without him an the important puzzle would be missing.

4.4 Donating money to do something good for a non-profit organization AND Feeling good after the small donation.

Most surveyed people stated with 41% to have never donated in the past, but who would feel good about making a collective donation? This supports the statement that initially as an insignificant considered donation can result in positive emotions and the amount of the donation is less important than the fact of donating as such. The potential first-time donors are sensitive to the “donation experience”, whereas the amount of the donation is not necessarily important. This means by implication that non-donors can be turned into first-time donors by few Cents donations. How and whether those actions would be repeated, will be analyzed and answered at a later stage of this research. It is rather meant to say that a barrier has been overcome and the first donation action was taken.

A smaller part of the respondents with 33% has never donated before and would also not experience positive emotions by doing so. Those people are not the target audience of this research and we will not be focusing on this group any further. This can also be applied to 11% of those, who have donation experience but who also do not have a positive feeling by making small donations. Almost 15% of the respondents have donated in the past and would also experience positive emotions making micro-donations. Here, it must be assumed that any donation amount causes a feeling of happiness and therefore makes the donation amount insignificant. First and foremost, the donation activity as such is important.

Looking at the answers based on the age group allocation, it is apparent that especially young participants, almost half of them to be precise, have never donated previously, but would experience positive emotions donating 5 Cents/Bani. That 48,6 % represent the largest group compared to 34% of the 25-54-year old's and 40% of the 55+ group. This shows that the group of “up to 24” is sensitive to the micro-donations and while performing a small donation get the feeling of doing something good. It is to assume that especially young people have limited donation experience and could become a part of the donor society for the first time through the opportunity of starting off with the smallest donation. As previously demonstrated, it is very helpful to illustrate not the individual donation of a small Cents/Bani amount but rather a collective donation action. It is important in any case, that previous non-donors experience a positive feeling after such action

which they will have by donating only a few Cents/Bani. Young potential donors have not had many opportunities in their young lives yet, possibly also due to financial reasons, to donate money. The results show however that it is not so much the financial background that turns a potential donor into an actual one. It is rather deceptive that a donation is first seen as such once it reaches a specific amount. We were able to demonstrate that a small donation can also result in positive emotions. This feeling can be the basis for the initial donation not to be the last one and would rather initiate a long-term donation activity.

This theory becomes even more apparent once reviewing the allocation based on the income groups:

- 54,3% of the “lower class” has never donated in the past and would experience positive feeling by making micro-donations.
- Within the other income groups, this opinion is represented by 32,8% of the “middle class” and 36,2% of the “upper class”.

This clearly shows that poorer people without previous donation experience would have a positive feeling by donating 5 Cents/Bani.

Summarizing, it can be recognized that especially young and poor people without donation experience in the past would have a good feeling by making micro-donations. Both groups would be introduced to donor activity through micro-donations and become part of donor society with very little money, positive emotions included.

4.5 Donating money to do something good for a non-profit organization AND Donating a small amount again after donating once.

Reviewing this combination of questions, it is apparent that more than half of all participants have never donated before, would however consider repeating their first-time micro-donation. Here, the focus should remain on the combination of two questions. However, it must be stated that more than every fifth participant has already donated in the past and would also consider making another micro-donation. Looking at different age groups, it becomes obvious that especially young interviewees with 58,9% have never donated in the past but would consider repeating a micro-donation.

In the age group “25 to 54” and “55+” this statement is represented by only 51,5% and 52,2% accordingly. This shift is even more distinctive while analyzing the division based on the income classification. 60% of the “lower class” has never donated, would however repeat their micro-donation. As

previously demonstrated, young and poor participants without previous donation experience are more likely willing to repeat their initial micro-donation. It is to be assumed that the previous barriers such as a feeling of not having enough to donate are also, meaningful here as well. However, by showing the participants a possibility to make a small donation alongside other people and being able to do good with little money promotes the simplicity of such actions which could be easily repeated.

Here, it must be emphasized that not only the small amount of the micro-donation but also the simplicity of the donation process plays a crucial role in the decision. For a small donation of that amount, people would rather not occupy themselves with the concrete use of the funds. This however also implies why people often decide not to donate because they do not have the exact knowledge of how and where they can donate their money.

4.6 Donating money to do something good for a non-profit organization AND After shopping, donating the remaining amount in cents after rounding-off, directly to charitable projects.

Considering this combination of questions, it can be noticed that

- 41,7% of participants have never donated in the past but would be willing to donate their “rest Cents” directly at the checkout register. Analyzing different age and income groups it is apparent that this benchmark number is somewhat identical in all groups with roughly 40%.
- Additionally, a further 15% of all donors are willing to donate coins directly after shopping. This results in an overall willingness to donate at overall more than 50%.

It is also remarkable, by looking more precisely at different age groups, that a large group of participants of 42,1% has neither donated in the past nor is willing to donate their “rest Cents”. This is consistent, possibly in a more extreme way once we look at the answers of the different income classes. Although, on average 42% of the respondents have not made donations in the past but would be willing to donate their “rest Cents” for a good cause directly at the cash register, the over-proportionally high number of 46,7% of the “lower class” state to have never donated and not to be willing to donate their “rest Cents”. In the other income classes, this statement is supported by 25,5% in the “middle class” and 22,4% in the “upper class”. This proves that especially young and poor participants represent a target group which is very critical, rather reserved towards donations and often has not to have proper access to the donation market. Within the other groups, 27% stated not to have the intention of donating their rest change.

5. CONCLUSION

This research has proven that corporations can be socially responsible by initiating micro-donations on the part of the customers. This would benefit the corporate, the customers, and society. Some of the key takeaways for corporations from the research on micro-donations are given below.

The customers, especially young and poor people:

- are highly interested in contributing through microdonations.
- are very difficult to reach, and the entry barriers must be kept as low as possible to gain their willingness to donate.
- mostly have limited financial resources, are however quite inclined to donate a small part of it.

Regarding donation of Cents or Bani (minor amount in donation or micro-donation), the study shows that:

- it is quick, simple and requires neither a long-term preparation nor difficult post-processing.
- even if at a first glance single Cents or Bani seem quite insignificant, many individual donations add up to notable sums.
- the “worth” of a coin of decimal value is independent of the number engraved on it but gains its relevance rather based on what every individual gets for the coin in return.
- it gives the potential donors of micro-donation the opportunity to participate in such donation.

Social changes can be motivated when:

- people come together and make small donations.
- every stakeholder involved is rewarded with a positive feeling of having done something good by donating just a couple of coins.
- people who have done something good and have experienced appreciation and a positive feeling, are most likely to do it again.

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FOUR FUNDAMENTAL STRATEGIES TO INFLUENCE AGENTS IN INTERACTIONS

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Abstract

Most current management literature uses a methodologically individualist approach to investigate influence of principals on agents like compensation, punishment, feedback and many others. But how do all these strategies relate?

Using critical realist grounded theory method a simple and pragmatic scheme reducing them to four fundamental strategies in a framework of dynamic game theory was developed.

To influence the agent, a principal can either

- a) **Change his payoffs** and make another path more attractive
- b) **Invoke their relationship** and indicate changed payoffs in the long run
- c) **Apply force:** In modern societies this strategy executed under the rule of law is defining the limits of most games.
- d) **Alter the knowledge** about the game. This is, what every email, excel sheet, surveillance camera and big data application tries to achieve and what every privacy setting tries to avoid.

Digitalization is raising the importance of this fourth strategy rapidly.

Key Words

Game theory; institutions; information economics; incentives.

ROBOTICS IN HOSPITALITY

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Abstract

The purpose of the paper is to present the use of robots in hotels and in restaurants. Data from secondary sources (scientific and professional articles, relevant web publications and videos) were collected in extent desktop research conducted in September 2019. Results of the content analysis of documents are presented in a descriptive way. They reveal several ways that robots can be used in hospitality subsector of tourism and point out some of the most known examples of hotels and restaurants that already use robots. The paper ends with the discussion on issues related to use of robotics in hospitality sector which is characterized by traditionally service sector with close personal interaction between hosts and guests.

Key Words

Tourism 4.0; innovation; technology; robots; hospitality.

DESIGNING THE PERCEPTION OF THE CITY BRAND WITH QUALITATIVE URBANISTIC ELEMENTS

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Abstract

Modern cities evolve rapidly and compete intensely to project an attractive visual image and then link it to cultural and economic activities. Qualitative urbanism elements define the quality of living in a city and directly affect human perception of space. They have an important role in the process of designing the image and the perception of the city and its brand. They produce feelings and generate attitudes. They strongly influence on the image and the perception of a city and its brand. Feelings of comfort come from a total perception of our environment and are the result of a synthesis of objective and subjective feelings. The purpose of this paper was to evaluate some important indicators of qualitative urban elements and evaluate them according to city residents' and city visitors' responses in Slovenia: context, accessibility, diversity, readability, flexibility and visual suitability. Results represent their recognition of indicators that have the strongest impact on designing the city and building perception of its brand: values, living conditions and environmental balance.

Key Words

City; perception; urbanism; city brand; qualitative urbanistic elements (QUE); context; accessibility; diversity; readability; flexibility and visual suitability.

INTRODUCTION

Designing an image of a city is a process of composing several compatible and incompatible elements, each of them importantly influencing the perception of a city. As David Lynch (1960: 1) explains in his introduction in book *Image of the City*: “At every instant in a city, there is more than the eye can see, more than the ear can hear, a setting or a view that is waiting to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of experiences”, city is a space that creates impressions and perception. Urbanism, the art of designing and organizing city space with its spatial solutions, has, besides architecture and nature itself, strong impact on city perception and co-create the so-called *genius loci*.

Cities began to compete and therefore they began to create city brands. By using city branding, they want to build a better image and create a desired perception of the city by different stakeholders, especially residents and visitors. The role of urbanism is significant in the process of giving the city its unique form, shape, and character (Urban design, no date). This is where the spatial design is adding value to the city identity and creates perception of the city and its brand.

Quantitative and qualitative elements define urbanism. Qualitative elements/determinants define the quality of living in a city. Several indicators define the qualitative urbanism elements but they do not have an equal impact on them.

THEORY

Urbanism and perception of a city

S. Reiter and A. De Herde (2005: 1001) explains: “In an increasingly urbanized society, the urban environment’s quality becomes one of the main targets of a sustainable development. Šmid Hribar et al. define, that »The urban cultural landscape as a living space offers goods at various levels and for various groups of people« (2018: 97), what includes also the majority of city society: residents and visitors (Šmid Hribar et al., 2015).

A city is a complex and multifaceted entity, and so people seek to reduce this complexity to an image that allows them to understand and relate to the city (Castillo-Villar, 2016: 265).

Sensory urbanism and perception of a city

People's sensorial experiences and understandings of their local environments are a result of sensory urbanism (Adams, et al., 2008). Sensory urbanism deals with qualitative urbanistic elements - factors, which creates human comfort in relation to public spaces and places and take a large part in the definition of a life quality offered to all citizens and city visitors. Urban public spaces need to be both, comfortable and attractive. The human perception system utilizes filters to analyze a space. It perceives only a few elements and just some of them are memorized. Individuals feel an immediate attraction or repulsion when discovering a place. Therefore, it is important to know most relevant of them (Reiter & De Herde, 2003).

City brand as an emotional representative of the city

Brand has no physical existence. It is a creation of the human mind as a set of feelings, experiences and perceived values. Perceived values (benefits) may range from functional to psychological associations (Maurya, 2012). In connection with city brand, Castillo-Villar (2016: 256) point out: "The direct and indirect experiences that people have with their urban environment produce a set of representations and perceptions of the city. Therefore, there is a physical city and also a symbolic city built in the mind of every person". The symbolic city is the city brand that is associated with the city name and logo (Vanolo, 2008).

Urban icons

Elements of a physical city that are remarkable are urban icons, often defined as landmarks. Urban icons are elements of the urban space: buildings, monuments, natural elements, mobilization elements, parks and recreational areas. They are one of the main tools of city branding to promote a unique and distinctive image of the city (Castillo-Villar, 2016). Urban icons are important elements in the city branding strategies, especially in the transformation of the image of the city (Muratovski, 2012; Bouchon, 2014; Evans, 2015).

Urbanism's impact on perception of the city and its brand

Public spaces are crucial when discussed life quality offered to all citizens. They create sensory effects that affects human perception of urban environment where individual and collective values are built (Reiter & De Herde, 2003). Feelings of comfort come from a total perception of our environment and are the result of a synthesis of objective and subjective feelings.

Modern cities evolve rapidly and compete intensely to project an attractive visual image and then link it to cultural and economic activities. Rehan (2014: 223) says: “Urban branding integrates social, cultural, economic, and environmental themes into the city“.

The theory, explaining that recall of a particular brand, enhanced by clear and meaningful associations related to the particular brand name (Maurya, 2012). This facts concern also city brands and associations with them are strongly influenced by cities’ physical evidences provided by urbanistic and architectural solutions. The more they are unique and the more they are contributing to the soul of the city (genius loci) better and stronger are the associations to the city brand.

Urban (city) branding

Urban branding is the process defined by unique physical features of the city, giving the urban space its essence. It is more than just the promotion of a positive image of the city, but it is the endeavor to change it into an urban experience (Rehan, 2014). The urban (city) branding aims mainly to: (1) communicate city image to the rest of the world as a whole (media-generated image), (2) achieve competitive advantages regionally and internationally, and (3) strengthen the image and reputation of the city and its city identity (Helmy, 2008). City branding communicates main things that should people know about certain place (Unsworth, 2008).

Qualitative aspect of urbanism

Perception and affinity of local residents are critical factors when developing a strong and competitive city brand (Braun et al., 2013; Hudak, 2015, Castillo-Villar, 2016); thus, it is necessary to understand their relationship with urban solutions in designing urban space and place. Hence, the ultimate objective of this research is to inspire urban planner and designers for shaping and designing urban space in the way that is consistent with residents and visitors’ rational and emotional values that they expect from the city.

The qualitative aspect of urbanism deals with the question of how a person perceives, perceives, and understands the complexity of space (Gosling & Mailand, 1984, cited in Nikšič, 2003: 62). According to Kaliopa Dimitrovska Andrews (2011: 43), the qualitative urban elements are context, accessibility, diversity, readability, flexibility and visual suitability. This definition is the basis of the survey.

Qualitative urban elements (QUE)

Context in urban planning means the influence of historical development, the existing image of the city and its impact on space perception. Context guides the design strategy and creates associations related to the town and the city brand what has fateful impact on the perception of the city and its brand. **Accessibility**, ~~which in urbanism~~ means access to urban physical structures (to facilities and services in them, to open spaces and activities in them), and products of the city. **Diversity** helps to create unique points of contact for the city, their instant recall and the ability to remember which significantly co-creates the city brand. **Readability** of the urban space means the degree of recognition of the city and orientation in it. It depends on the physical forms and design of the city; those, based on the principles of diversity, accessibility and context, stand out. **Flexibility** illustrates the extent to which open urban structures meet the needs of residents, visitors and other stakeholders of the city. **Visual suitability** allows users to be aware of what is available for them within the city space, and the visible branding of the city makes them to perceive the city. Urbanism affects the creation of a visible interest, which increases the positive and desired perception of the city and its brand.

METHODS

The purpose of this paper is to research and evaluate important indicators of qualitative urban elements that have the impact on process of designing a city and building its perception. We evaluate their importance according to residents' and city visitors' responses. The results represent their recognition of indicators that have the strongest and the weakest impact on perception of the city and its brand: values, living conditions and environmental balance. We used a limited number of indicators, as the research is a test research to indicate deeper and more focused researches in the future.

Methodology - Conceptual Model

The research focus on the study of qualitative urban elements and their important indicators, relevant for the residents and visitors of a city. We research the following QUE: context, accessibility, diversity, readability, flexibility, visibility and diversity. The research is qualitative. We measure the variables by using an ordinal scale. The survey carried out electronically in the territory of Slovenia, with a focus on major Slovenian cities and their

surroundings. We obtain one-hundred and ninety-seven complete surveys (out of 271).

Within qualitative urbanistic elements, we designed indicators (claims) on basis of the residents and visitors expectations regarding life in the city. Their expectations, desires, experiences, observations and opinions are one of the essential foundations of profiling the personality of the city and thus the city brand. In order to determine relevant resident and visitors' indicators, we selected a set of claims for each qualitative urban element (criterion). The questionnaires based on a five-point scale of responses and expressed their agreement or disagreement with the claims.

FINDINGS

Results of the research

Context

We were mainly interested in what the respondents think of the past-presence-future coexistence, the coexistence with nature, the conformity of urban components in relation to the inhabitants, and the impact of urbanism on the character of the parts of the city.

Of all the claims within the context element, the claim "*the heritage of the past gives the city an impactful character*" proved to be the most important, as 60% of all respondents fully agree with it and 35% agree with it.

The claim: "*architecturally harmonious buildings express respect for the city aesthetic outfit*" also stand out as an important indicator, as 72% of respondents agree with it (totally agree and agree).

The respondents unite in more than a half (60% answered) that abandoned urban areas are not time shift, as they do not contribute in building the desire image of the city. A fifth of the respondents see in abandoned urban areas a mark of a certain time and does think they represent a negative element of the city.

It is interesting to note that the responses to the claim "*outstanding architectural solutions make the city attractive*" and "*modern spatial solutions and old architecture do not go together*" are more or less in line.

Interesting is the attitude to the claim "*a city that blends with nature is life friendly*" (to blend with nature means that it does not degrade the natural resources) for 51% of respondents agree with it.

Accessibility

The respondents clearly confirm that modern trends are important in the field of the functionality of the city and of concern for health. They agree that it is not only sensible to implement them, but also need an upgrade. As much as 81% of them agree or very much agree with the statement "*a modern city should make possible mobility without a car*", and even 82% confirm claim "*if I access city-services on foot, I do something for my health*".

The claim that the "*modern city should allow for mobility without a car*" (81% of the concurrence) can be reasonably linked to the fact that "*public transport is the key to accessing important city points*" (only 6% of disagreements with this claim). A modest agreement (only 14% of the concurrence) with the claim "*everywhere in the city must exist possibilities for parking*", confirms that these claims are important.

Eighty-four per cent of respondents agree with claim "*if I access city-services on foot, I do something for my health*", and only 5% oppose it. Sixty per cent of respondents also agree with the statement "*I want to make the most urgent purchases on foot*".

About the safety in parks ("*it is safer if the parks have safety fence*"), the respondents have a different opinion, as less than half of them agree, that the parks should remain unsettled, a quarter of them waver in deciding whether this is important or not, and a good quarter considers them to increase park safety, if they were fenced. By fencing the park, access to this public area are limited.

Diversity

As many as 87% of respondents agree or completely agree with the claim: "*unique spatial solutions (parks, bridges, underpasses ...) are exciting*". Nearly eighty per cent confirm the claim "*the spatial design of city districts is a source of different perceptions and inspirations*".

The fact that the city actually affects the mood and mental state of the inhabitants and visitors confirms the high percentage of concurrence with the claim "*a city without noticeable features is a city without soul*" (72% of concurrence and complete agreement) and 57% of cases of affirmation for the claim "*a modern city is socially diverse*".

That diversity is important confirm response to claims: "*an outstanding (unusual) building gives a mark to the part of the city in which it is located*" (79% of the concurrence or complete agreement) and "*the urban incursion*

roads should have their own specific appearance" (63% of concurrence and complete agreement). Besides, they also prove that urbanism designs the city identity and thus the perception of the city brand. Its unique architectural solution defines an unusual building and stands out amongst others what often attracts attention.

Readability

Of all the claims relating to the readability of the city, the most important for respondents is *"I memorize areas of the city in connection to typical buildings, markets, parks, monuments, bridges ..."* This directly confirms the strong influence of typical spatial solutions on the orientation in the city. The level of agreement is extreme high (91%).

Sixty-one per cent of respondents agreed or completely agreed with the statement *"I feel safe in the city, if I know exactly where at any time"*.

Respondents agreed in 56% with the claim *"originally designed roundabouts are memorable city points"*, in 46% of cases with the assertion *"without ecclesiastical bell-tower and memorable buildings, orientation would be difficult"*, and in 39% of cases with the claim *"the colours of the facades are a great help in orientation"*.

Flexibility - adaptability

Claims that relate to the security and humanity offered by the city regulation were the most outstanding on flexibility. These claims are *"pedestrians provide safe access to shops, restaurants, cafes, museums ..."* (92% of concurrence); *"the city without slopes for the disabled is inhumane and obsolete"* (88% of concurrence) and *"enlightened parks allow me safe relaxation even in the evenings"* (79% of concurrence).

Arguments related to the future of cycling in cities and the freedom that this kind of movement permits also encountered a very positive response. At least two-thirds of respondents agreed with: *"the cycling city is the city of the future"* (69%), and *"large squares and broad roads impart a sense of freedom"* (66%). The respondents also claim that underground garages should replace parking lots in urban areas. From this we can conclude that the city with fewer cars would look more beautiful, more spacious and safer, which is confirmed by 71% of the assertions with the statement *"the parking lots have to be replaced with underground garages"*.

On average, those who live in the city or in the outskirts are more likely to agree with all the flexibility claims, but the rural inhabitants do not lag behind them. This is evident from the comparison of the answers to the claim "*the city without slopes for the disabled is inhumane and outdated*", with which the city's residents agree about 90% and the rural population in just over 80%.

Visual suitability

The respondents strongly agreed (91%) that "*outdoor advertising should not cover the city panoramas*" and that "*poorly maintained buildings pollute the image of the city*" (92% of concurrence or complete agreement).

The respondents agree or completely agree with the claim "*not built-up spaces create a bright and airy place*" in 80% cases.

The importance of visual suitability is also demonstrated by the claim "*colour-balanced buildings create an aesthetic place*" (68% agree), while the statement "*the purpose of the building should be recognized by its facade*" has not proved to be important at all. Half of respondents (42%) agree with the claim "*glazed front door gives the impression of openness*", but a fifth does not.

Interestingly, only 4% of respondents agree with the statement "*the concrete jungle is again in trend*" while 88% disagrees with it, which reflects the need for a city to be harmonic with nature, airy and transparent, diversified and visibly suitable.

Diversity

The convincing respondents' agreement with the claim "*urban environment is a source of thousands of inspirations*" indirectly reflects the importance of the city diversity.

The respondents rejected the claim "*flowers on the windows belong to the countryside*" (72% disagree with it), thus emphasizing one of the opportunities that the inhabitants of the city can co-create and co-design urban environment.

Extremely strong agreement (in both cases, 96%) was given to the claim "*street furniture (benches, bins, lamps ... co-create the image of the city)*", and "*diverse city centre invites people to visit streets, squares,*

embankments and parks". Almost equally strong (91%) are agrees with the statement "*discovering new urban details is always inspiring*".

A very positive attitude is also reflected to the claims that "*markets and parks come alive with the help of interesting events*" (85%), "*horticulturally arranged crossings and roundabouts are aesthetic*" (82%) and "*many different social places in the city allow for a good socializing*" (72%). In the claim that "*markets and parks come alive with the help of interesting events*", women are more convinced (90%) than men (80%).

Discussion

The results of the research shows the most important QUE indicators and set out those that have the strongest influence on the perception of city. They researched claims significantly influence orientation in the city, the attractiveness of life, the performance of services, the possibility of spending spare time, the relaxed everyday living and the mobility in the city. They need to be in the spirit of the time and have to take into account trends. A meaningful mark in the perception of the city creates unique, fashionable and solutions in harmony with the preserved cultural heritage. Urbanism solutions creates recognizable landmarks of the city regarding it as a whole and/or as its parts, realizes its internal and external goals and co-shapes the city as a brand. Urbanism with its solutions has many possibilities to raise the perceptual level of the city, its brand and increase its reputation among the inhabitants and visitors.

Synthesis of the obtained results of the survey implies concrete directions for the urbanists. The most important findings are:

- Within the qualitative urbanistic element Context, the town's heritage is one of the key elements for the inhabitants and visitors. Most (80%) of the respondents see in the degraded city areas opportunity to arrange or rearrange them. Heritage and modern spirit are supposed to intertwine in cities, which gives freedom to urbanistic and architectural creativity.
- Within the element Accessibility, there are two exposed claims, one requires mobility without a car and the other, enable as many pedestrian movements as possible. They both conform to the modern and distinctive developmental trends of cities and reflect the advanced mentality of the inhabitants and visitors of the city. Linking pedestrian access to city services and shopping with health, also perfectly matches the trend that every individual wants to take care of their health, and that active movement (in

our case walking on foot) allows this. Respondents expect a higher degree of safety in enclosed parks.

- Diversity is important for respondents and the fact that modern spatial solutions can also be warm and diversified (life-friendly) for different social types of residents and visitors, confirms the correct orientation of those urban planners who want to provide modern and advanced solutions in addition to functional solutions, which generate warmth, positive atmosphere and good mood. Most claims about the diversity of the city confirm the importance of: (a) urbanistic and architectural heritage, (b) attractive and outstanding modern buildings, and (c) typically arranged urban slopes. They significantly co-creates the character of the city.
- The city's Readability has proven to be one of the most important QUE, regardless of whether it is typical of buildings, bells, roundabouts, bridges, markets, parks ... The feeling, that the residents and visitors of the city always know where they are momentarily located, gives them a feeling security.
- Respondents are most closely linking Flexibility to security and eco-friendly mobility. Among other things, flexibility implies the future of city cycling and freedom, driven by easy and quick movement around the city by bicycle. It is also important that the parking lots move from urban areas into underground garages, which besides enabling more safety of cities provides friendly environment, cleaner air and releases more city space.
- Visible suitability is one of the most subjective urbanistic criteria. Nevertheless, it is necessary to highlight some of its elements that reflect the opinion of respondents on how these elements affect the city attractiveness, character and functionality. Outstanding issues: maintenance of buildings, outdoor advertising and un-built spaces. In the latter, they see an opportunity for the city's maximum airiness. For the younger generation, the criterion of visible suitability is not as important as for the elderly, but it is important for everyone that the urban solutions are in harmony with nature what creates an airy, transparent and diverse city.
- The respondents' answers to the element Diversity explain how important it is for spatial planners to realize that every urbanistic move is not only a functional solution to certain spatial problems, but a step closer to the aesthetic and socially friendly city, which with its diversity, eliminates boredom, invites enjoying life in its places and inspires in thousands of ways.

Conclusion

Urbanism influences the creation of various aspects of interest. Its final solutions and creations influence the perception of the city (Pompe and Temeljotov Salaj, 2014). An analysis of the results of the survey explains which qualitative elements of urban planning have a significant impact on the perception of the city and thus on the perception of the city brand. The importance of individual indicators within individual qualitative urbanistic elements vary. Inside them, the opinions of the respondents unequivocally showed what gives the greatest contribution to the quality of the city from the urbanism point of view. The key exposed properties derive from important aspects of influencing the urban environment on the quality of life in the city: car-free mobility, non-poisoned air, characteristic spatial and architectural solutions (landmarks), carefree orientation, advertising harmonious with spatial solutions and socialization opportunities. The observable weight of the research also gives rational and emotional values, derived from the answers. They emanates from the emotional perception of the city, and since most human decisions derive from emotions, it is important for urban planners to take, in addition to functional solutions, into account the psychological impact on the inhabitants and visitors of the city.

Recommendation

The most exposed, desired and today most sought-after rational and emotional values are mobility, memory, equality, image, furnishings, socializing health, inspiration, security, motivation, freedom, beauty and aesthetics. The exposed values provide an insight for urban planners and designers, so they can structure and shape their solutions aligned primarily with the researched users' expectations and a vision of the development of the city.

Inter-sector cooperation is a wide source for further researches in the field of urbanistic planning and designing as well as for marketing and branding a city.

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SUITABILITY OF NEUROLINGUISTIC PROGRAMMING METHODS IN BUSINESS COMMUNICATION

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Abstract

Neurolinguistic programming (NLP) is a methodology used in a business environment with the goal to improve the potential of employees. NLP is focused on achieving quality communication, removing barriers, building confidence and creating better interpersonal relationships. Researching NLP theory has resulted in finding a large number of methods that facilitate communication in a business environment, in order to avoid conflicting stressful situations and achieve greater business results. The paper presents scientific study of respondents in the Republic of Croatia on their attitudes towards the acceptability of the methods of neurolinguistic programming in business, which has a goal to ensure more efficient communication and better results in the business environment. An online questionnaire was constructed for the purpose of the research. There were 150 respondents that are all employed in Republic of Croatia. The hypothesis that says: 'Respondents in Croatia find NLP method acceptable for use in business environment' has been confirmed by the given results. However, the results show that the respondent's acceptance of the methods does not depend on their extroverted or introverted personality, nor on the familiarity with the NLP topic.

Key Words

Neurolinguistic programming; communication methods; efficient communication; business communication.

INTRODUCTION

The communication system consists of various aspects (exchange and processing of information, transmission of a message, contact with business partners and the like) without which an organization could not function (Jurković, 2012). One of the priorities of a business man is to get empowered to communicate in order to achieve business success. Business communication has in the past been relied to the knowledge, specially of NLP, the method of successful business (Vodopija, 2006). Neurolinguistic programming (acronym NLP) is a communication model that aims to identify and use patterns in the thinking process as a means of improving the quality and effectiveness of communication. It is focused on achieving goals, creating better interpersonal relationships, removing barriers, building selfconfidence and acting more effectively. It is used in various fields of occupation (business, education, law, medicine and psychotherapy) to identify human patterns and to influence change in responses to stimuli. Neurolinguistic programming can be used in sales, customer service, negotiation, conflict resolution, presentations, teamwork, as well as motivating others (Parvizi, 2015). NLP methods are used to influence work efficiency, success in conflict resolution and communication productivity. They serve to improve negotiation and sales skills. In the United States, NLP is a widespread methodology, with remarkable results in achieving better communication and better interpersonal relationships. Research into the theory of neurolinguistic programming finds a large number of methods that facilitate communication in the business environment, all with the aim of avoiding conflicting stressful situations and achieving better business results. NLP methods are effectively used in various areas of human activity, including team communication, client communication (sales, marketing, public relations), mediation, and facilitating and enhancing communication in conflict resolution at work.

NEUROLINGUISTIC PROGRAMMING IN BUSINESS COMMUNICATION

NLP is a practical discipline that encompasses a range of models, techniques and skills to think and act effectively. It studies how people achieve success in a wide variety of areas (the modeling process) and teaches people these patterns. The patterns, skills and techniques thus obtained are increasingly used in education, counseling and business in the pursuit of accelerated learning, personal development and more successful communication (O'Connor and Seymour, 2009). NLP has gained immense popularity over the last 25 years. Trainings were conducted at companies such as Hewlett-Packard, IBM, McDonald's, NASA, the United States Army, the U.S. Olympic Team, and numerous public school systems (Singer and Lalich, 1996

according to Witkowski, 2011). NLP methods are used to influence work efficiency, success in conflict resolution, and communication productivity. In business communication, it is commonly used for negotiation purposes. Recognizing the collaborative representation system of the people we work with, can be very valuable in achieving positive results when discussing some decisions, building teams or even selling (Dilts and Dilts, 1983). One of the key applications of NLP methods in organizational settings is to effectively set goals and strategies for maximizing results (McDermott and Jago, 2007).

NLP methods

One of the methods of NLP is the Dickens form, based on the work of Tony Robbins. It was named because it models Ebenezer Scrooge's experience in the Charles Dickens novel Christmas Story from 1843. The form aims to take control over life, changing limiting beliefs (Ellerton, 2013). Bandler (2012) calls this method a belief modification method or a pattern of belief replacement. It helps to change one's beliefs and gain more faith in oneself. Anchoring is a process in which a particular stimulus connects to a specific physiological or emotional state. The stimulus of associating with the desired state is called the anchor. Anchoring was created as a result of research by Russian physiologist Pavlov, a pioneer of behaviorism. Anchoring happens unknowingly, but it can also be developed intentionally (consciously). An anchor can be anything that causes an automatic reaction or causes an emotional state, for example, the sound of a familiar melody can elicit a smile on your face or trigger some strong negative feeling (Mladenović and Vrsaljko, 2009). NLP defines an anchor as a process that connects a sensory stimulus to a particular state of mind (Vodopija, 2006). This method can be used to change internal states, stabilize states, move elements of one experience into another, and change behavior. Using one's own states is one of the most effective ways of changing own behavior, as well as the behavior of others (Mladenovic and Vrsaljko, 2009). John Grinder and Richard Bandler developed the technique of visual-kinesthetic (V-K) dissociation in 1976. It is a method that addresses trauma and helps people cope with the stressful and painful experiences that have the consequences of limiting them in reaching their goals. The goal is to disconnect from feelings and create the experience of being outside your own body. This ability can help a person to distance psychologically from stressful, painful, or traumatic experiences and become able to respond differently in similar situations. This technique can help people who have problems with presenting, running a meeting, communicating with a team (Mladenovic and Vrsaljko, 2009). Walt Disney's strategy is another NLP tool developed by Robert Dilts. It was named after American producer Walt Disney. It is a dream development strategy that

enables them to come true. It is based on taking on three different roles involved in the process of turning creative ideas into reality - the dreamer, the realist and the critic. Dilts found that if they take on these roles in turn, people develop their ideas and plans faster and more effectively. Although this method is primarily used in business, it allows for the introduction of creativity into the work of the team (MacDermott and Jago, 2007). Taking a different observation position can be a very easy way of predicting other people's potential reactions and deciding what to say or do. It is useful for meetings. The essence of this method is to get into all three observation positions (I, the other, the observer) in order to gather as much information from as many points of view as possible (Terry and Churches, 2011). Molden and Hutchinson (2008) call this method a positioning technique for perception, and Mladenovic and Vrsaljko (2009) a technique for changing perceptual positions.

METHODOLOGY

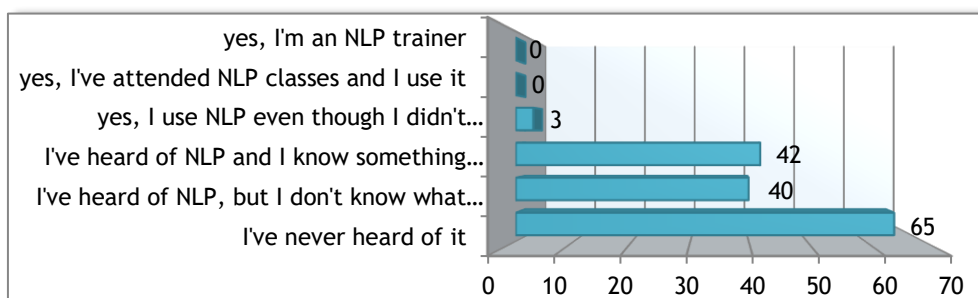
The aim of the research was to determine the attitudes of employees in the Republic of Croatia on the suitability of NLP methods in business communication and to analyze, according to the results obtained, whether the attitude of the respondents to the NLP is correlated to their personality (extrovert/introvert). Accordingly, the hypotheses were stated: 'Respondents in Croatia find NLP method acceptable for use in business environment.'; 'Extroverted respondents are more inclined to accept NLP methods.' and 'Attitude towards the suitability of these methods depend on whether the respondents had previous information about NLP.'

The survey involved 150 persons employed in the Republic of Croatia, 77 women (51.3%) and 73 men (48.7%). There are 111 (74%) of respondents that have completed higher education and 39 (26%) secondary education. There are 72% of respondents working in the public sector and 28% in the private sector. Most respondents, 100 (66.7%), see themselves as extroverted persons, while 50 (33.3%) feel that they are more introverted.

RESULTS

The respondents expressed their views and opinions by selecting one possible answer to the closed-ended questions. Most respondents are not familiar with NLP, 65 of them (43.3%) have never heard of NLP, 40 (26.7%) have heard, but do not know exactly what it is about, 42 (28%) knows a little, and three (2%) are already using NLP, even though they did not attend NLP training. Of all 150 respondents, none attended NLP training and none of them were NLP trainers.

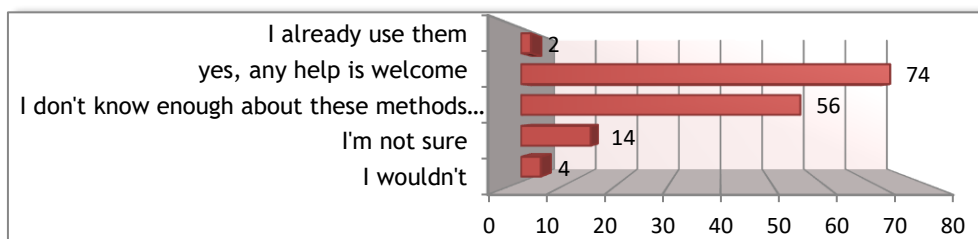
Graph 1. Familiarity with NLP



Source: own survey

Asked about possibility of using NLP methods with the aim of achieving more effective communication and better business results, the majority of respondents, 74 (49.3%), think that any help was welcome, 56 (37.3%) did not know enough about these methods to 14 of them (9.3%) were not sure if they would use NLP methods for more effective communication and better business results, while four (2.7%) would by no means use NLP methods. Only two (1.3%) are already using NLP methods.

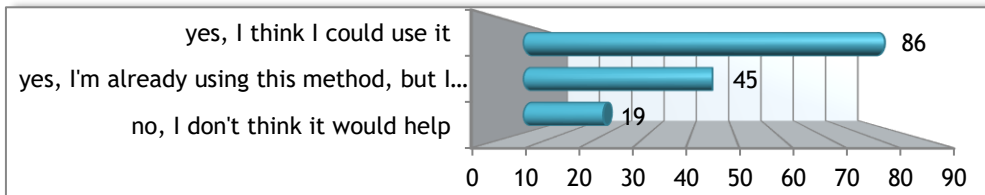
Graph 2. Usage of NLP methods



Source: own survey

One of the first methods of NLP explained in the survey is the Dickens form used to take control of life by altering the limiting beliefs that affect us. Asked if they thought this method would be acceptable for use, 86 respondents (57.3%) said they could use it, 45 respondents (30%) already used it but did not know it was NLP, while 19 (12.7%) felt that this method would not help them. There are 87.3% of respondents that have a positive attitude towards this method or they think that they could use it or already use it, and only 12.7% think that it would not help them, that is, that this method is not acceptable for use.

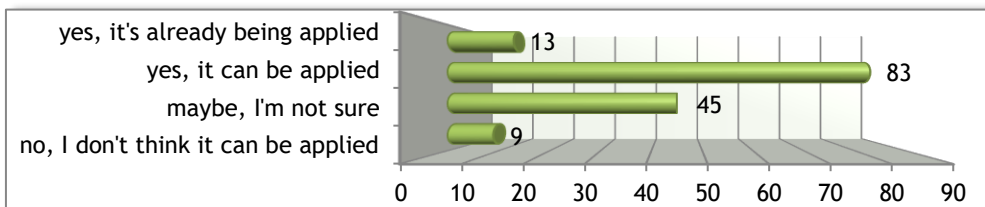
Graph 3. The Dickens pattern - acceptability of use



Source: own survey

Asked about acceptability of Walt Disney's method used in business to bring creativity to the team and involves taking on three different roles involved in the process of turning creative ideas into reality - dreamer, realist and critic, most respondents, 83 of them (55 , 3%) think it could be applied, 45 (30%) is not sure and think it might be applicable, 13 (8.7%) say they already apply it, and nine (6%) think it could not be applied. Most respondents, 64% of them, have a positive attitude towards the acceptability of this method in business communication, 30% are not sure that they can apply it, and only 6% have a negative attitude, ie they think that it could not be applied.

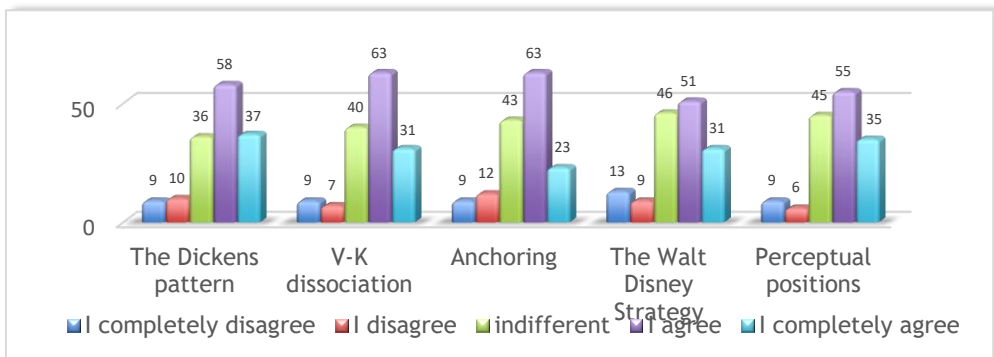
Graph 4. The Walt Disney Strategy - acceptability in business



Source: own survey

After being acquainted with the five methods of NLP, the respondents rated their views on their applicability in business communication using a five degree Likert scale, with a value of 1 indicating complete disagreement and a value of 5 fully agreeing with the statement. Respondents gave a mean score of 3.7 (agreement) for Dickens form, V-K dissociation, and occupation of various observational positions, and 3.5 for anchoring and Walt Disney strategy. A total score of 3.62 indicates that respondents considered all five NLP methods to be acceptable.

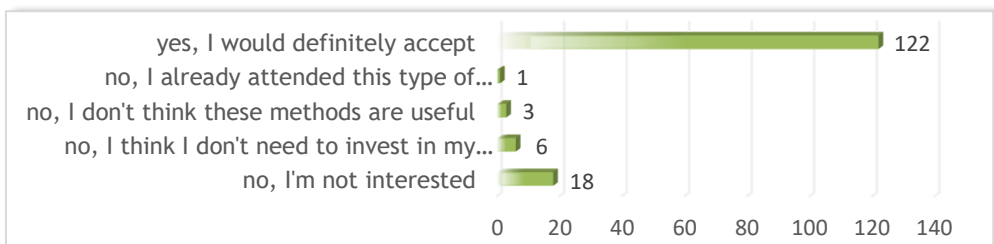
Graph 5. Respondent's view on applicability of NLP methods



Source: own survey

In order to gain insight into the respondents' interest in improving business communication using NLP methods, they were asked about accepting free provided training. Most respondents, 122 (81.3%) would certainly accept education, 18 (12%) are not interested, 6 (4%) do not think they need to invest in their communication skills, three (2%) do not believe that these methods are useful, and one respondent (0.7%) has already attended such training.

Graph 6. Acceptance of free NLP education



Source: own survey

Table 1 shows the relationship between respondents' self-esteem (extrovert/introvert) and their response to the acceptability of using the Dickens form in business. Most respondents, introverts and extroverts, consider this method acceptable for use.

Table 1. Attitude on acceptability of the Dickens pattern in business

SELF-ASSESSMENT OF RESPONDENTS	Do you think this method would be something you could use?			
	yes, I think I could use it	yes, I'm already using this method, but I didn't know it was NLP	no, I don't think it would help	Σ
introvert	29	15	6	50
extrovert	57	30	13	100
Σ	86	45	19	150

Source: own survey

The relationship between respondents' self-esteem and answers to the question about the acceptability of Walt Disney's strategy in business is shown in Table 2. Most respondents from both groups considered that this method could be applied in their business.

Table 2. Attitude on acceptability of the Walt Disney strategy in business

SELF-ASSESSMENT OF RESPONDENTS	Do you think this method could be applied to your business?				
	yes, it can be applied	yes, already being applied	it's I'm not sure	maybe, I don't think it can be applied	Σ
introvert	27	5	13	5	50
extrovert	56	8	32	4	100
Σ	83	13	45	9	150

Source: own survey

The results in table 3 indicate that, whether introverted or extroverted, respondents agree that all five NLP methods could be applied in business.

Table 3. Respondent's view on acceptability of NLP methods

	statement	the DICKENS pattern	V-K DISsociation	anchoring	the W. DISNEY strategy	Perceptual positions	Σ
introvert	I completely agree	12	11	9	10	10	52
	I agree	26	23	25	17	17	108
	indifferent	10	13	12	16	20	71
	I disagree	0	2	2	3	1	8
	I completely disagree	2	1	2	4	2	11
extrovert	I completely agree	25	20	14	21	25	105
	I agree	32	40	38	34	38	182
	indifferent	26	27	31	30	25	139
	I disagree	10	5	10	6	5	36
	I completely disagree	7	8	7	9	7	38

Source: own survey

Table 4 shows the relationship between respondents' self-assessment and answers to the question about the acceptability of NLP education. The majority of respondents from both groups would accept free NLP training, while only a few found these methods to be of no use and did not need to invest in their communication skills. There are 10% of extroverted and 6.25% of introverted respondents showing that they are not interested in education.

Table 4. Acceptance of free NLP education

SELF-ASSESSMENT OF RESPONDENTS	If your employer ensured free NLP education, would you accept it?					
	yes, I would definitely accept	no, I don't think these methods are useful	no, I'm not interested	no, I think I don't need to invest in my communication skills	no, I already attended this type of education	Σ
introvert	38	1	8	3	0	50
extrovert	84	2	10	3	1	100
Σ	122	3	18	6	1	150

Source: own survey

The existence of a correlation between the two variables was checked by chi-square test using the frequencies of occurrence of a single response in relation to the extroverted/introverted subjects. Table 5 shows the values of the calculated chi-square tests based on the data presented in Tables 1 (Dickens Form), 2 (Walt Disney Strategy) and 3 (NLP Education). Given that the results of the chi-square test show that all χ^2 are smaller than the readings, the conclusion is that respondents who consider themselves extroverted do not differ statistically significantly from those who consider themselves to be more introverted in their propensity to adopt NLP methods.

Table 5. Connection analysis of extroversion or introversion of the respondents and their answers regarding the applicability of NLP methods

FREQUENCY OF ANSWERS	the dickens pattern (Table 1.)	The w. disney strategy (Table 2.)	acceptance of nlp education (Table 3.)
CHI-SQUARE:	0,032	2,578	2,512
DEGREES OF FREEDOM (df):	2	3	4
SIGNIFICANCE LEVEL p:	0,984	0,461	0,643
LIMIT VALUE:	0,05	2,37	3,36
STATUS:	Ok.	At least 20% of expected frequencies are less than 5.	At least one expected frequency is less than 1.
Yates correction:	-	1,361	1,423
Yates p:	-	0,715	0,840
HYPOTHESIS:	0,031 < 0,05	1,361 < 2,37	1,423 < 3,36

Source: own survey

The relationship between respondents' familiarity with NLP and responses regarding the acceptability of using NLP methods to achieve more effective communication and better business results is shown in Table 6. The most respondents, 71.4% of them who are already familiar with NLP believe that any help is welcome, while 24% think they cannot answer the question because they do not know enough about these methods. Most of those who have heard about NLP but do not know exactly what it is about cannot answer the question about the acceptability of using methods because they do not know enough about these methods. Of those who have never heard of NLP, there are 43.1% who think that all help is welcome and 41.5% cannot respond because they do not know enough about these methods.

Table 6. Respondent's view on applicability of NLP methods

Familiarity with NLP	Would you use NLP methods if you knew they'd help you in achieving a more efficient communication and better business results?							Σ
	yes, help welcome	any is	I wouldn't	I don't know enough about these methods to answer	I'm not sure	I already use them		
I've heard of NLP and I know something about it	30		1	10		1	-	42
I've heard of NLP, but I don't know what it's about	15		1	19		5	-	40
yes, I use NLP even though I didn't attend NLP classes	1		-	-		-	2	3
I've never heard of it	28		2	27		8	-	65
Σ	74		4	56		14	2	150

Source: own survey

Table 7 shows the relationship between the respondents' familiarity with the NLP and the answers regarding the acceptability of using Dickens Form in business. The majority of respondents, 57.3% from all categories of NLP familiarity respondents, believe that any assistance is welcome, while 30% already use this method without knowing that it is NLP. Only 12.7% think that this method would not help them.

Table 7. Attitude on admissibility of the Dickens pattern in business

Familiarity with NLP	Do you think this method would be something you could use?				Σ
	yes, I think I could use it	yes, I'm already using this method, but I didn't know it was NLP	no, I don't think it would help		
I've heard of NLP and I know something about it	22	17	3		42

I've heard of NLP, but I don't know what it's about	25	10	5	40
yes, I use NLP even though I didn't attend NLP classes	3	-	-	3
I've never heard of it	36	18	11	65
Σ	86	45	19	150

Source: own survey

The relationship between NLP respondents' familiarity with the answer to the question about the acceptability of Walt Disney's strategy in business is shown in Table 8. Most respondents from all observed groups believe that this method could be applied in their business.

Table 8. Attitude on admissibility of the Walt Disney strategy in business

Familiarity with NLP	Do you think this method could be applied to your business?				Σ
	yes, it can be applied	yes, already being applied	it's maybe, I'm not sure	no, I don't think it can be applied	
I've heard of NLP and I know something about it	23	6	11	2	42
I've heard of NLP, but I don't know what it's about	24	2	11	3	40
yes, I use NLP even though I didn't attend NLP classes	1	2	-	-	3
I've never heard of it	35	3	23	4	65
Σ	83	13	45	9	150

Source: own survey

The results of the applicability of individual NLP methods in a five-degree Likert scale with respect to familiarity of respondents with NLP are shown in Table 9. The results indicate that, whether or not they are familiar with

NLP- The respondents agree that all five NLP methods could be applied in their business.

Table 9. Respondent's view on applicability of NLP methods

STATEMENT		the DICKE NS patter n	V-K DISsocia tion	anchori ng	the W. DISNE Y strate gy	Percept ual position s	Σ
I've heard of I NLP and I know something about it	I completely agree	16	12	8	11	12	59
	I agree	13	19	20	15	17	84
	indifferent	8	8	10	11	9	46
	I disagree	3	1	1	1	2	8
	I completely disagree	2	2	3	4	2	13
I've heard of I NLP, but I don't know it's what it's about	I completely agree	6	7	4	8	8	33
	I agree	22	16	19	12	17	86
	indifferent	7	12	13	12	12	56
	I disagree	3	3	2	5	1	14
	I completely disagree	2	2	2	3	2	11
yes, I use NLP even though I didn't attend NLP classes	I completely agree	1	1	1	1	1	5
	I agree	1	1	1	1	1	5
	indifferent	0	0	0	0	0	0
	I disagree	0	0	0	0	0	0
	I completely disagree	1	1	1	1	1	5
I've never heard of it	I completely agree	14	11	10	11	14	60
	I agree	22	27	23	23	20	115
	indifferent	21	20	20	23	24	108
	I disagree	4	3	9	3	3	22
	I completely disagree	4	4	3	5	4	20

Source: own survey

Table 10 shows the relationship between NLP respondents' familiarity and answers to the question about the eligibility of NLP education. The majority of respondents, 81.3% of them, from all observed groups would accept free NLP education, while few think that these methods are not useful or do not need to invest in their communication skills or are not interested in education.

Table 10. Acceptance of free NLP education

Familiarity with NLP	If your employer ensured free NLP education, would you accept it?						Σ
	yes, I would definitely accept	no, I don't think these methods are useful	no, I'm not interested	no, I think I don't need to invest in my communication skills	no, I already attended this type of education		
I've heard of NLP and I know something about it	37	1	3	1	-		42
I've heard of NLP, but I don't know what it's about	32	-	7	-	1		40
yes, I use NLP even though I didn't attend NLP classes	3	-	-	-	-		3
I've never heard of it	50	2	8	5	-		65
Σ	122	3	18	6	1		150

Source: own survey

The check of the existence of the correlation between the two variables was performed by chi-square test using the frequencies of occurrence of a single response in relation to the familiarity of the subjects with NLP.

Table 11. Connection analysis of the respondent's familiarity with NLP and their view on applicability of NLP methods

FREQUENCY OF ANSWERS	the dickens pattern (Table 7.)	The w. disney strategy (Table 8.)	acceptance of nlp education (Table 10.)
CHI-SQUARE:	6,569	17,729	10,956
DEGREES OF FREEDOM (df):	6	9	12
SIGNIFICANCE LEVEL p:	0.363	0,039	0,533
LIMIT VALUE:	5,35	14,68	21,03
STATUS:	At least one expected frequency is less than 1.		
Yates correction:	3,526	9,421	20,189
Yates p:	0,741	0,399	0,064
HYPOTHESIS:	3,526 < 5,35	9,421 < 14,68	20,189 < 21,03

Source: own survey

The values of the calculated chi-square tests are shown in Table 11 based on the data in Table 7 (Dickens form), 8 (Walt Disney strategy) and 10 (NLP education eligibility). Given that the results of the chi-square test show that all χ^2 are less than read, the conclusion is that respondents who are more familiar with NLP do not differ statistically significantly from respondents who know nothing about NLP in their propensity to accept NLP method.

DISCUSSION

The majority of respondents, 70% of them, are unfamiliar with NLP, and as many as 43.3% have never heard of it. Almost half of the respondents were open to the possibility of using NLP methods in order to achieve more effective communication and better business results, 49.3% thought that any help was welcome, while the rest were undecided or negative. Respondents also showed a strong interest in accepting NLP education with the aim of improving business communications, 81.3% of them would accept free education organized by the employer. In terms of NLP methods and their acceptability in business communication, 87.3% of respondents have positive attitude towards Dickenson's form while 64% show the same for Walt Disney's strategy. Analyzing the results of the research on the acceptability of NLP methods in business communication, it can be concluded that the hypothesis Respondents in Croatia find NLP method acceptable for use in business environment, can be accepted. Regarding the extroverted/introverted attitude of the respondents and the respondents' attitude on the acceptability of NLP methods in business, the research results indicate that there is no statistically significant correlation between these two variables and rejects the assumption that the respondents who are more extroverted are more inclined to accept NLP methods. The results of the study of the relationship between NLP respondents' familiarity and the attitude of the respondents on the acceptability of NLP methods in business indicate that there is no statistically significant correlation between these two variables, therefore the assumption that NLP method eligibility depends on NLP respondents' familiarity is rejected.

CONCLUSION

The results of this research indicate that employees in the Republic of Croatia are ready to invest in their communication skills in order to achieve more effective communication and better results in the business

environment. Although few are familiar with the theory of neurolinguistic programming, they are open to embracing this methods and applying them to change limiting beliefs, deal with traumas that prevent them from achieving goals, bring creativity to the team, and increase business meeting productivity. Judging by the results obtained, attitude of respondents towards adopting these methods is not affected by their knowledge of neurolinguistic programming and its methods, nor by their personality. By investigating the quality of communication, removing obstacles, building self-confidence and creating better interpersonal relationships, respondents showed that they were ready to accept NLP education provided by the employer. Despite the fact that NLP has existed for over 50 years, neither the efficacy nor the validity of the theory has been clearly demonstrated by convincing research. Research has mainly been conducted in therapeutic settings, with only a few studies on the efficacy of NLP methods in commercial settings. Although there are criticisms, the well-known positive aspects and results of UFO research show that the topic is worth further study and education in this regard.

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WHY STUDENTS CHOOSE AN INSTITUTION TO STUDY?

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Abstract

For students (and in many cases their parents) location of the institution where they would obtain their academic knowledge is extremely important. After they have already decided what to study. Public universities and especially IHEIs¹ need students to survive, therefore institutions must be aware of factors that affect students' decision.

In our study MaxDiff (best-worst scaling) was used as an approach for obtaining preference/importance scores for main attributes, that affect student's decision.

We discovered that students expect lecturers with proven experience in real economy and practical knowledge. In the pedagogical process, students await practical examples to be used frequently.

We compared results for three institutions² and found out that differences between results (analyzing 10 most important characteristics) are not significant, nevertheless "Lecturers are experienced practitioners" was the most important characteristic for students of all selected institutions.

Key Words

MaxDiff approach; quality of the program; student's preferences; score; students' choice.

¹ IHEI - independent higher education institutions

² GEA College, Doba and VŠPV

1. INTRODUCTION

For secondary school graduates and sometimes for their families, one of the most important decisions is what to study. And where.

Universities, higher education institutions, being public or private, are facing competition that is stronger, different, more complex and far more diverse than ever before. Students can study in places all over the world, sometimes even without being physically present in the classroom or even at campus.

There were two objectives of this paper: to define and categorize the most important decision factors in the process of choosing the right IHEI and comparison of the most decisive factors at three different institutions.

Our aim was to look for specific attributes that are important for students studying at business-oriented institutions in Slovenia.

Since the big bribery scandal arose in some famous colleges all over the USA in March 2019, where well known, mostly rich people were involved - to help their children to enter the selected university -, we have also addressed this topic.

2. THEORY

The Bologna Declaration was signed in 1989. Ministers, responsible for higher education from 29 European countries used the Sorbonne Conference and Declaration from 1988 as a founding brick of radical changes in European higher education. In recent years, the number of countries participating in these processes, has risen to 48 (European Commission, 2018).

Generations of students entering universities are smaller, number of institutions, programs and possibilities is growing. You can choose to study in your geographical area, study in other part of your own country, you can study at the school in another country or even different continent. Institutions can be local or international. And finally, in these days you can also decide for distance learning, usually provided by on-line technologies - these types of studies allow you to be at home (or at work) and do all the activities, including teamwork and exams, on-line.

Situation in organizing tertiary educational processes in Slovenia is quite the same³. There are several public universities and privately owned and managed institutions that are all trying to attract as many enrolled students as possible.

³ Official data on students in Slovenian public universities and schools with concession show decreasing trend in number of students since 2011 (Statistika in analize s področja visokega šolstva)

AT the end of May 2019, there were 106 institutions listed in a List of high education institutions and programs (Evidenca visokošolskih institucij in programov) and 1051 programs that a student can choose from! Competition on a 2 million market is thus extremely intense. This is one of the reasons why all the Slovenian institutions are also looking for international students, not just Slovenian.

Potential students and their parents do a lot of research on what schools offer. If institutions want to be found, appearance on the first page in Google search is a must, and providing “educational content about ... classes, references from other parents, and ways to communicate and engage with the admissions office” is necessary (Corrado, 2017). Schools are having less control over the information spread among (potential) students, but they have to understand how students use, find and share information. We must be constantly active on all (digital) platforms (Burdett 2013).

It is the same like in other industries - universities must understand what students and their parents need and expect. All the communication activities performed should be able to help students (and parents) to decide for the “right” study (Maringe, 2006), calling attention to factors that influence the decision to choose to study in an institution (DesJardins et al. 1999).

If a school has a clear picture of how and why students choose to enroll in a particular institution, it is easier for them to find the right attributes that would position them as the choice (Hemsley-Brown & Oplatka, 2006)⁴.

In general, students are quite satisfied with the quality of teaching in Europe - with the highest level of satisfaction being recorded in Finland, Georgia and the Czech Republic with over 70%. The lowest satisfaction recorded in this survey is in Romania (39%). Slovenia is ranked 13th, with 66% satisfied students (European Commission, 2018)

2.1 The 2019 college admission bribery scandal

But sometimes unwanted events happen, just like an excess that arose as “The 2019 college admission bribery scandal”. More than 50 people were involved in “a widespread college admission bribery scandal. The racketeering conspiracy case included the parents of applicants, ACT and SAT administrators, a test proctor and coaches” at different universities⁵.

⁴ High quality teaching is the most important factor for students based on a research among 62.366 international student studying at 65 universities in 12 EU countries conducted by Hobsons. Affordable tuition fee options and good ranking were high on the list as well. The possibility of meeting like-minded people was fourth factor, followed by a high graduate employment rate. Ability of meeting the entry requirements and good reputation were also mentioned often (International Student Survey 2017).

⁵ The list of universities included in this scandal is impressive: Georgetown University, Northwestern University, Stanford University, UCLA, University of San Diego, University of

33 parents were charged. (Kates, 2019) Surprisingly (or not?), children were usually not aware what their parents were up to.

There were different ways how college admission process was sabotaged: exam administrators were bribed to facilitate cheating on entrance exams, coaches and administrators of elite universities were bribed to nominate unqualified applicants as capable athletes. Even charitable organizations were used to process laundered bribery payments. (Smith, 2019). Payments went up to 50.000 and even 100.000 USD. (Trevino, 2019).

Unfortunately, everything that has been revealed in March 2019 was not an individual case. W. R. Singer, a college counselor (also an author of self-help books for college admission) organized and sold unfair college admission services to 761 wealthy families' children and boosted their chances of getting into different institutions. Organizing a complex fraud was quite complicated and connected with high costs - some of the parents even spent up to 6,5 million USD for their children to be able to be at the school of their choice! (Korn, Levitz and Ailworth, 2019; Winter and Burke, 2019) What an investment!

How could you avoid scandals like these? If universities would enroll more students, they would not have been evolved into gatekeepers for some of the industries in USA, especially law and finance, where it is absolutely important where you have studied (Kingkade, 2019). In Canada, for instance, employers rarely discriminate between job candidates. Canadian students often study locally since it is not that important which university they received their diploma from and even "donations don't get you into the University of Toronto, and certainly, backdoor routes like sports and so on are not very important" (Marginson, S. in Kingkade, 2019).

3. METHODS

To introduce the topic of this paper, some desk research had to be carried out.

Our approach to conducting the main survey had several steps - the first step was the qualitative analysis of students' needs, reasons for their decision. In the class we identified several clusters of characteristics important for students and later we organized them in logical groups.

Then the quantitative approach followed, in classes again. Students attending the studies were asked to describe and rank the characteristics / factors that were important at the time when they were deciding.

Southern California, University of Texas at Austin, Wake Forest University and Yale University. Tennis, sailing, men's and women's soccer, basketball, water-polo, volleyball coaches and staff members, responsible for exams were usually involved.

And at the end, the Maximum Difference Scaling method was chosen, using a set of 20 facts.

MaxDiff (best-worst scaling) is an approach for obtaining preference/importance scores for multiple items, based on the method of paired comparisons as a very old (at least to the early 1900s) and well-established approach for eliciting tradeoffs among paired items. It is a technique invented by Jordan Louviere in 1987. We could use this method for brand preferences, product features, advertising claims and other marketing research. With the MaxDiff method, respondents are shown a set of the carefully prepared items in the study and are asked to indicate the best and the worst items or most and least important.

Two hundred and ten students from five Slovenian IHEIs participated in the study.

This approach enabled us to develop a model of selecting an institution, considering designated factors / attributes that make up the reason to choose one school over another. Using the MaxDiff method we measured which attributes had a significant impact on their choice. Student-related benefits in a form of questions, where students prioritized a list of performance attributes of schools, were asked.

3.1 Desk Research

Several papers, different sources, seminars and materials from conferences, dedicated mainly to quality (assurance) in education had to be analyzed in order to have a clearer picture on the subject. The bribery scandal that escalated in March the USA drew our attention as well.

3.2 Qualitative Research

We used focus groups of students, as a preliminary research. Two focus groups were organized during classes at Gea College and at VŠPV. Results in both focus groups were practically identical and coincided with the arguments defined based on the selection of characteristics of the records of students from the first institution. So, we finalized a list of properties that we used in the next step.

More than 400 different attributes were collected, including the conditions of enrollment, the tuition fee rates and the method of payment, the environment and the location of the school, the schedule of lectures, and the reputation of the institution.

One student sent us her description of reasons why she had decided for Gea College: sister's recommendation, her wish to become an entrepreneur, impression that she got at the informative day and the information that 90% of graduates from Gea College get a job very soon.

3.3 Questionnaire - Maximum Difference Scaling Method

Our survey was held between February and April 2018. Students from five Slovenian private high schools or faculties were invited to participate in the study. More than two hundred responded and finished the questionnaire. Respondents who entered on the page with the questionnaire, were asked to choose the most important and the less important fact from a five-list-facts. Combination of facts was randomly selected by the system where combinations of items were carefully designed with the target to each item to be shown an equal number of times. And every respondent usually saw each item two or more times across the survey. Each fact appeared several times and respondents were able to consider them in different combinations.

There were twenty facts used in our survey and they were defined and selected based on the qualitative research (see above):

1. Tuition is up to € 2,000 per year.
2. The course fee is up to € 1,000 per year.
3. Tuition is up to € 3.000 per year.
4. The Faculty is in a large city, where many students study.
5. The Faculty is outside Ljubljana, where the environment is more peaceful.
6. The Faculty is near the place where I live.
7. There is a free parking close to the school.
8. The Faculty is reputable, with a long tradition.
9. Faculty is a part of the public education system.
10. There is a lot of practice in the education program.
11. Exercises and lectures are based on (analysis of) case studies
12. Subjects are comparable with the program of other faculties.
13. Lecturers are experienced practitioners.
14. Lecturers are mainly academics.
15. A few students are enrolled, so the lecturers' approach can be more individual.
16. I can pay tuition fees in several installments.
17. The Faculty is quite new, so it is more flexible and accessible.
18. The Faculty is private with an innovative educational approach.
19. The Faculty advertises a lot in the media and on social networks.
20. The Faculty is recommended by a lot of acquaintances and friends.

Five clusters of characteristics were considered:

- price of the program
- location of the school
- tradition / practical usefulness / program
- number of students
- communication tools

4. FINDINGS

For summarizing respondents' preferences, we used Counting analysis, the quick summary method called "counts". It simply looks at how many times an item was available within sets and counts how many times it was chosen either best or worst. The percent of times an item was chosen as best or worst (when it was available) is termed the "count proportion."

Table 1: MaxDiff Counts Analysis

MaxDiff Counts Analysis							
MaxDiff Exercise	x						
Sets Included	All						
Respondents Included	Complete s						
Total Number of Respondents	210						
Total Number of Sets	1680						
Label	Item Number	Time s Show n - Best	Times Selecte d Best	Best Count Proportio n	Time s Show n - Worst	Times Selecte d Worst	Worst Count Proportio n
Tuition is up to € 2,000 per year.	1	428	41	0,096	428	63	0,147
The course fee is up to € 1,000 per year.	2	416	66	0,159	416	60	0,144
Tuition is up to € 3.000 per year.	3	417	30	0,072	417	59	0,141
The Faculty is in a large city, where many students study.	4	420	7	0,017	420	244	0,581
The Faculty is outside Ljubljana, where the environment is more peaceful.	5	420	2	0,005	420	245	0,583
The Faculty is near the place where I live.	6	416	42	0,101	416	172	0,413
There is a free parking close to the school.	7	418	34	0,081	418	149	0,356
The Faculty is reputable, with a long tradition.	8	421	126	0,299	421	17	0,040
Faculty is a part of the public education system.	9	418	32	0,077	418	117	0,280
There is a lot of practice in the education program.	10	415	160	0,386	415	11	0,027
Exercises and lectures are based on (analysis of) case studies	11	417	188	0,451	417	14	0,034
Subjects are comparable with the program of other faculties.	12	414	100	0,242	414	50	0,121
Lecturers are experienced practitioners.	13	431	242	0,561	431	11	0,026
Lecturers are mainly academics.	14	432	59	0,137	432	65	0,150
A few students are enrolled, so the lecturers' approach can be more individual.	15	412	100	0,243	412	45	0,109
I can pay tuition fees in several installments.	16	425	134	0,315	425	30	0,071
The Faculty is quite new, so it is more flexible and accessible.	17	432	66	0,153	432	88	0,204

The Faculty is private with an innovative educational approach.	18	418	169	0,404	418	21	0,050
The Faculty advertises a lot in the media and on social networks.	19	411	17	0,041	411	169	0,411
The Faculty is recommended by a lot of acquaintances and friends.	20	419	65	0,155	419	50	0,119

The report shows results for 210 respondents and 1680 sets (each respondent received 8 choice sets; $210 \times 8 = 1680$). Each respondent had to choose 8 best and 8 worst items in all 8 questions. Not all questionnaire versions were used but we see from the "Number of Times Shown" column that each item was shown almost the same number of times (411 to 432 times).

In the column "Times Selected Best", we can see how many times each item was selected best (across all sets and respondents). Dividing the "Times Selected Best" by the "Number of Times Shown" results in the "Best Count Proportion." The higher the proportion, the more impact this item has on reenlistment.

The Counts method of analysis is very intuitive, but a good way to get quick proportions of (top-line).

5. DISCUSSION

We divided results into four groups according to importance: items with high importance, secondary, low and items with no importance for choosing a school to study.

Items that have score from 0 to 2 were tagged as not important (no importance), items between 2 to 4 as less important (low importance), above 4 to 8 as more important (secondary importance) and above 8 as very important (high importance).

Table 2a: High Importance Items

	Item	Average score
1	Lecturers are experienced practitioners	12,05
2	Exercises and lectures are based on (analysis of) case studies	10,92
3	There is a lot of practice in the education program	10,63
4	The Faculty is private with an innovative educational approach	9,73
5	The Faculty is reputable, with a long tradition	8,31

As we can see, the characteristics of schools related to practical skills, lecturers with practical experience, use of case studies and private faculty with an innovative approach are the most important factors influencing the decision at which school the students enrolled. The only characteristic not

related to other claims in this group is the Faculty is reputable with the tradition. This latter characteristic is not necessarily related to other values that are more typical for the recent period of development of schools, especially smaller private faculties.

Table 2b: Secondary Importance Items

	Item	Average score
1	I can pay tuition fees in several installments	7,98
2	A few students are enrolled, so the lecturers' approach can be more individual	6,17
3	Subjects are comparable with the program of other faculties.	6,13
4	The Faculty is recommended by a lot of acquaintances and friends	4,33
5	The course fee is up to € 1,000 per year	4,21

In the second group properties that are not as homogeneous can be found. Cheaper tuitions, the option of paying in several installments, recommendations from friends and acquaintances and subjects comparable with other faculties, are factors that can be attributed greater importance.

Table 2c: Low Importance Items

	Item	Average score
1	The Faculty is quite new, so it is more flexible and accessible	3,46
2	Lecturers are mainly academics	3,24
3	Tuition is up to € 2,000 per year	3,16
4	Tuition is up to € 3.000 per year	2,79
5	The Faculty is near the place where I live	2,27

Tuition fees, the proximity of the place of residence, and that lecturers with an academic approach are considered to be less important factors.

Table 2d: No Importance Items

	Item	Average score
1	There is a free parking close to the school	1,82
2	Faculty is a part of the public education system	1,63
3	The Faculty advertises a lot in the media and on social networks	0,59

4	The Faculty is in a large city, where many students study	0,34
5	The Faculty is outside Ljubljana, where the environment is more peaceful	0,23

The possibility of a free parking place, the school being in the city or is out of town in a quiet place, and that a school advertises in the media were considered to be completely irrelevant factors that do not affect the students' decision on enrollment.

Students who already decided for their program - what to study - were participants in this survey therefore the program itself (usually the most important decision factor) was not taken into consideration.

Students mostly studied management or business-oriented studies.

Table 3: Comparison between selected IMEIs

GEA College	Doba Faculty	VŠPV
Lecturers are experienced practitioners.	Lecturers are experienced practitioners.	Lecturers are experienced practitioners.
Exercises and lectures are based on (analysis of) case studies	The Faculty is private with an innovative educational approach.	There is a lot of practice in the education program.
The Faculty is private with an innovative educational approach.	There is a lot of practice in the education program.	Exercises and lectures are based on (analysis of) case studies
There is a lot of practice in the education program.	I can pay tuition fees in several installments.	The Faculty is private with an innovative educational approach.
The Faculty is reputable, with a long tradition.	Exercises and lectures are based on (analysis of) case studies	Subjects are comparable with the program of other faculties.
	The Faculty is reputable, with a long tradition.	

To compare results of students coming from the three selected institutions, we decided to analyze results for Gea College and VŠPV from Ljubljana and Doba from Maribor. Five most important factors for decision were taken into consideration.

As we can see, "Lecturers are experienced practitioners" is the most important factor for students from all three institutions. Being private with an innovative approach was the second most important factor for Doba, third for Gea College and 4th for VŠPV, "practical program" was 2nd for VŠPV, 3rd for Doba and 4th for Gea College. Using case studies was the second factor for Gea College's students, 5th for Doba and 3rd for VŠPV. "Reputation and tradition" was a factor relatively decisive for students of Gea College - 5th

factor, less important for Doba - 6th, where VŠPV's students also didn't include it among 5 most important factor (in fact, it was only 9th).

Lecturers who are coming from industry are strong asset for all three institutions. And students often decide to study there just because of lecturers who are known to be experienced practitioners.

Case studies are often used as a lecturing method at Gea College so that students can link theory and practice in real situations.

All three institutions are privately owned, additionally, Doba Faculty is specialized for on-line studies that are also performed in Gea College.

Program is especially considered to be practical at VŠPV, where other factors at Doba and Gea College are more important.

6. CONCLUSION AND IMPLICATIONS

Our goal was to detect the most important factors that affect the decision where to study - which school to choose and to find differences between selected institutions. We used several methods, both qualitative and quantitative: desk research, discussion in classes, focus groups, questionnaire in classes and CATI survey (MaxDiff Scaling Method) that was held between February and April 2018. 210 students participated in this survey.

We found out that in Slovenia, students prefer lecturers that are practitioners with some experience and lecturers who are able to teach with the help of practical cases. Tradition and reputation of an institution is important, as well as the opportunity to pay tuition fees in several installments. Smaller number of students that enables a more personal approach is also expected.

Number of international students across Europe is increasing and for them scholarships, high quality teaching⁶ and good ranking are important things. (International Student Survey 2017).

Location of the IMEI, on other hand, is not an important characteristic when students in Slovenia are deciding.

Comparison in results for the three selected institutions didn't present significant differences - practical classes are the most important factor. Nevertheless, we are confident that GEA College, Doba and VŠPV could benefit from redefining their competitive advantages, explain them very clearly and be able to enroll more students.

⁶ Indicators of high-quality teaching are as follows: highly qualified staff, high graduate employment rate, up-to-date technology and online learning options, work placement organized by the university and high volume of face-to-face teaching hours.

Our research has some limitations. A relatively small sample, only one iteration of the survey, students from five privately owned and managed Slovenian IMEs only, without students from public universities. In the future, it would be interesting to find out the results from Erasmus students and survey could be carried out at institutions in other countries as well.

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KNOWLEDGE MANAGEMENT IN DIGITAL ERA

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Abstract

Changes in the organizational environment as outcome have a need for organizational changes. With the development of industry 4.0 there is a need for digital transformation which is focused on digitizing business as well as in the automation of activities. In order to adapt the organization to the new conditions in an environment it is necessary to develop organizational knowledge. Once created, knowledge should be managed and must be disseminated to all organizational levels. With automatization of organization system, there is need for applying artificial intelligence that will manage implemented automated systems, but will also manage created base of knowledge. Furthermore, for the knowledge management organization may employ different models, but with the change in the organizational environments, there is a need for developing new models that will enable knowledge mining, management and dissemination of knowledge in the digital age.

Key Words

Industry 4.0; digital era; knowledge management; organizational environment.

INTRODUCTION

Changes in organizational environments' have an impact on today's business paradigms. There is the emergence of a new type of economy that is based on digital technology. Digitalization and digital technology lead to changes of ways of communication in organizations and also have an impact on business processes. Described forces drive a need for digital transformation of the organization which implies implementation of cyber physical systems, internet of things technology and the whole line of new innovations.

Furthermore, described changes and need for digital transformation, today's organizations forces to develop new knowledge that will enable organizational adaptation to new requirements from environments. Organizational learning process means exchange of knowledge whit organizational environments and adjustment of current knowledge to organizational needs (Zbucha & Vudu, 2018). Once acquired, knowledge must be managed in order to create and add value to product, service and organizational processes at all. Organizational knowledge is managed by processes that are focused on creation, dissemination and used of created knowledge. However, use of knowledge depends of competence of organization and competence of organizational employees at all (Sharma K, 2005).

Digital transformation can be one of foundations for organizations to create competitive advantage in the market. Through the use of innovations of information-communication technologies, sharing and creating of organizational knowledge is made more effective and efficient. The organization has the possibility to create a knowledge base within which can accumulate and store created knowledge bud also can analyze that knowledge for different purposes. However, to the organizations are recommended for creation of a knowledge management system that will not be based only on the gathering and documentation of knowledge, but also on creating the relationship between the knowledge and its use for the purpose of creating value. In addition, the need to manage organizational knowledge is not only a consequence of changes in organizational environments, but also results of need for much better adaptation to future changes.

REVIEW OF LITERATURE

Knowledge management is a discipline which is still in development, especially when come to the digital environment. Today's scientific papers that are talking about knowledge management are focused on benefits that an organization has from focusing to collecting, manage and dissemination of knowledge. Ghosh (2003) in his paper talking about the importance of libraries which are some kind of knowledge bases in physical form. In his research Ghosh refers to the importance of customization to the new environmental conditions whit implementation of new technologies (Ghosh,

2003). Gavrilova, Alsufyev I Kokoulina (2017) in their research are talking about the important of organizational support that organizational have formed an informational technology (IT) in all processes that are related to knowledge management. Except importance of IT, Gavrilova, Alsufyev I Kokoulina concluded that every organization must ensure that strategic management is committed to defining goals and strategies that are related to collecting of knowledge. Furthermore, there are identified oversized focus of some organization to IT although the organization has small maturity level of existing organizational knowledge (Gavrilova, Alsufyev, & Kokoulina, 2017). Digital transformation, on today's organizations sets a request and challenges that are related to safety of organizational knowledge. Ilvonen, Thalmann, Manhart, Sillaber (2018) emphasize that ensuring safety of organizational knowledge is one of the biggest challenges with whom organizations are facing today. They emphasize the need for developing models of securing organizational knowledge and security-related threats that are coming from organizational environments. Because this fact, it is necessary for organizations to include experts from different areas to development of the security model (Ilvonen, Thalmann, Manhart, & Sillaber, 2018). With the gathering of large amounts of data, there are challenges related to defining the ways in which collected data will be managed. Given this need, Grigorov, Georgiev, Petrov, Varbanov, Stefanov (2009) explore various possibilities that are different information systems offering and recommend that information systems should have three levels of access, public, limited private and shared access (Grigorov, Georgiev, Petrov, Varbanov, & Stefanov, 2008).

Given the fact that organizational knowledge stems from organizational changes and adapt to the environment, Mizintseva and Gerbina (2018) talk about the need to create organizational knowledge so that the organization can develop and holistically approach to digital transformation of business (Mizintseva & Gerbina, 2018). On the other hand, Schwarzmüller, Bros, Duman, Welpé (2018) write about a number of changes affecting the organization, resulting in the need to digitization and digital business transformation. Changes in the environment are resulting in need of different kind of competence that are required for the employees that work in organization and which is related with creativity in the process of problem resolution (Schwarzmüller, Bruce, Duman, & Welpé, 2018). One of technology that enables collecting and generating organization knowledge is big data. Big data is base of information that organization are generated and collecting in processes. With mining techniques, organization can identify knowledge from big data and used it for different purposes.

MODELS OF KNOWLEDGE MANAGEMENT IN ORGANIZATIONS

Need for development of new model for knowledge management arises from requirement for increasing organization efficient and effective. Organizational management is in constant search for new models with help of whom will be possible to use existing organizational knowledge for

organizational growth and development. Parallel with raising organizational needs for models for managing knowledge, a number of models are developed which are focused on different things (Hacienda & Sarinah, 2009). Furthermore, models for organizational knowledge management allow dissemination of existing knowledge to all organizational levels. In turbulent conditions of organizational environment, it is imperative to adopt the model for knowledge management because knowledge is one of the factor that is correlated with ability of the organization to survive those turbulences (Mohajan H., 2017). Which model will organization choose depends on organization needs and existing of strategy for knowledge management (Hoagie & Kingston, 2003).

Nonaka, I Takeuchi (1995) in their paper in which is described research made in Japan in 1995 identified that in the organization are existing two types of knowledge, explicit and implicit. They conclude that organization's success depends on mechanical processing of collected explicit knowledge. Furthermore, they described that process of creating organizational knowledge is determined with four factors: socialization, externalization, combination and internalization. These are factors that affect transforming implicit knowledge in explicit through dialogue and communication, linking new knowledge with existing one, learning with doing things and working in teams (Tavakoli & Gandomani, 2016). Implicit knowledge is intuitive knowledge of employees, and it is neither defined nor documented, while explicit knowledge is clearly documented and easily accessible to everyone in the organization. Takeuchi emphasizes that regardless of the source from which knowledge is gathered it is the basis for the development of innovation (Takeuchi, 2006). There are some similarities between models that are presented from Boisot (1987) and Nonaka and Takeuchi (1995). Boisot in his paper speaks of a codified and unqualified knowledge that is consistent with the explicit and implicit knowledge represented by Nonaka and Takeuchi. Both models assume the expansion of knowledge through the all levels of the organization (Haslinda & Sarinah, 2009).

Although the transfer of knowledge in organization is a complex process that assumes that knowledge differs depending on the employee's career stage and can be divided into individual, group, organizational and interorganisational relationships that relate to the knowledge of partners, suppliers, competitors and other (Haslinda & Sarinah, 2009). So, the level of knowledge depends on career development, and such knowledge as can be clearly articulated and tacit. In existing literature many authors do not clearly define the concepts of storage, transformation and transfer, which are clearly defined in the model that is represented by Hedlund (1994). Furthermore, the same model describes three fundamental concepts, articulation and internalization of knowledge, expansion and appropriation of knowledge, or assimilation and dissemination of acquired knowledge. Assimilation of knowledge refers to the collection and adoption of knowledge from the environment, which can be a two-way process, and is linked to career development. Dissemination refers to the expansion of

knowledge outside the organization, while the processes of articulation, dialogue, reflection and internalization occur between articulate and tacit knowledge at different career stages (Hedlund, 1994).

It is important to say how tacit and articulated knowledge are considered like intellectual capital in organizations. A model that is represented by Skandia consider model that is developed for measuring level of existing intellectual capital in organizations. Focus of model is on the establishment equality between buyers, suppliers and innovations. Therefore, this model is depending on these components; structural, human and buyer. In model is described how the market value of an organization depends on the level of intellectual capital in an organization which is determinate by organizational employees. Structural capital is determinate by capital of buyers and organizational capital is the determinate whit capital of inventions and processes (Hacienda & Sarinah, 2009). Organizational focus on intellectual capital allows organizational development and growth as well as growth of organizations market value which depends on goodwill. In other words, investments in the development of organizational intellectual capital determinate faster growth of organizational market value (Edvinsson, 1997).

Demerst model of knowledge management point that organizational knowledge is made in organizations, and once made, knowledge is embodied in the organization. Scientific paradigms determinate creating of organizational knowledge parallel whit impact of paradigm of society. Creating knowledge is an interactive process which is constantly embodied in the organization and through an organization is disseminated. Result of creating management knowledge is seen through the emancipation of employees, which determines many of the benefits for organization (Haslinda & Sarinah, 2009). On the other hand, Frids model of knowledge management is talking about the maturity of knowledge level and may bring down to five levels; chaotic state, the state in which an organization recognizes organizational knowledge, the degree in which the organization is focused on knowledge, the degree in which the organization is guided by the knowledge and the last degree in which the knowledge is in the organization center (Caganova, Szilva, & Bawa, 2015). Stankosky and Baldanza (2001) identified a number of factors that are classified as factors that enable organizational knowledge and they are: learning, leadership, organizational structure and culture and technology. However, the authors emphasize that knowledge creation is not only influenced by such factors, but also whit disciplines such as strategic planning, finance, psychology, economics, engineering, etc. (Haslinda & Sarinah, 2009). Descriptive models are just some of the models that enable organizations to manage the created knowledge. However, under the influence of industry 4.0 and digital transformation, existing organizational knowledge management models have to adapt to newly defined requirements.

KNOWLEDGE IN DIGITAL ERA

In order to ensure the growth and development of the organization as well as its sustainability, it recommends to organization to create and implement some of models for knowledge management. Different knowledge management models focus on different aspects, and the type of model the organization will implement depends on the type and characteristics of the organization (Mohajan H., 2017). Particular attention should be paid to the strategic knowledge management that can provide the possibility of adapting the organization to new requirements in a turbulent environment. One of the challenges facing today's organizations, driven by changes in the environment, is needed for developing new knowledge that is based on IT and which today's entrepreneurs and owners of organizations must have (Sousa & Rocha, 2019). The importance of the existence of an information system within an organization that will enable communication of acquired knowledge and data protection in an implemented information system is constantly emphasized because of the fact that organizational knowledge can be a competitive advantage (Kushwaha, Tripathi, Chauhan, & Saxena, 2017).

Industry 4.0 and its related innovations determinate development of new systems that enable organizations to efficiently manage their knowledge as well as possible to collect new knowledge. Development of technological innovations in organizational knowledge management faces challenges that are associated with the ability to identify data from different locations within the organization, the ability to collect data of the machine performance, as well as on the activities that employees perform on machines, optimize data collection and initial processing of collected data (Rot & Sobinska, 2018). Digitalization and technological innovations become an essential component of today's organizations, and directly affect the management processes in the organization. Newly created technological innovations enable organizations to achieve much greater flexibility in decision making than organizations that have not been digitized (Kaivo-oja, Virtanen, Jalonen, & Stenvall, 2015).

It is evident that there is not enough scientific and professional research that could contribute to the identification of the impact that digital business transformation has on managing and generating knowledge in the organization. Furthermore, networking in the organization and the use of sensors is enabling the collection of a large number of data from which is possible to identify and create organizational knowledge (Zhou, Alexandre-Bailly, & Piramuthu, 2016). Growing need for a transformation of traditional knowledge-based economy to an innovation-based economy is identified (Meško, Suklan, & Roblek, 2017). However, it is important to emphasize that innovation-based economy cannot be acquired without organizational knowledge which is possible to collect and improve it with digital technologies. Digital technologies enable management of created knowledge bases, extraction of knowledge from databases, dissemination of

knowledge as well as analysis of acquired knowledge (Zbucheá & Vudu, 2018). In addition, digital technologies and more accurately networking in the organization enable better communication and transfer of acquired knowledge. Research has shown that the creation of communication networks in the organization can be a significant cost, but can, in the long run, lead to significantly higher profits (Vladova, Ullrich, Bahrs, & Bender, 2018).

Organizational knowledge and artificial intelligence

Digital transformation implies the implementation of expert systems as well as automated systems that are based on artificial intelligence. Artificial Intelligence in the last few years is mentioned as one of the ways in which tacit organizational knowledge can be identified and transformed into clearly defined knowledge. However, the issue of artificial intelligence in organizations is not strictly related to its use only within expert systems, but also in automated activities. As such, artificial intelligence can not now contemplate the context of certain activities delegated to it that can result in a possibility of harming the organizational environment (Sanzogni, Guzman, & Busch, 2017). The question is whether artificial intelligence can really replace the intelligence and knowledge of people and also there is a question that is related to the risk to people if artificial intelligence begins to carry out activities that people have done so far. In practice, artificial intelligence is beginning to be applied in the healthcare where is serving in expert systems that assist medical personnel in making decisions (Furmankiewicz, Soltysik-Piorunkiewicz, & Ziuziański, 2014).

Furthermore, there is not yet a sufficiently well designed artificial intelligence system that could communicate with people. However, existing knowledge management systems implemented some form of artificial intelligence that allows a variety of functions, such as mining knowledge (Tsui, Garner, & Staab, 2000). Implementing of artificial intelligence into organizational knowledge management systems is imperative because of the functions that knowledge management systems have and must do, often requiring complex activities (Birzniece, 2011). Birzniece (2011) On the other hand, linking the knowledge base to artificial intelligence allows easier programming such systems and setting up algorithms to perform activities almost without the intervention of organizational employees. In other words, updating operating instructions makes it easier to define automated system settings that will upgrade existing activities performing. The application of such systems will be emphasized with regard to the development and focus on the development of the cognitive computing that integrates a number of functions within it, such as learning automated systems, motion recognition, speech recognition etc.

Knowledge mining and big data

By implementing technological innovations like sensors in organizations, the organization collects a large amount of data that is stored in the database. For collected data there is a need for analysis so data can be used for making decisions (Ruzgas, Jakubėlienė, & Buivytė, 2016). From the database, it is possible to extract and identify organizational knowledge using mining techniques. In this context, knowledge identification techniques are divided into a data classification, which means grouping data in individual groups from which it will be possible to identify knowledge, create a cluster of data, then classify data in the same group, and finally create a conditional formatting to identify whether there is a link or correlation between individual data (Silwattananusarn & Tuamsuk, 2012). In addition to this, there are a number of different ways to identify knowledge from big data, which primarily depend on the type of data being processed (Fayyad, Piatetsky-Shapiro, & Smyth, 1996). Generally speaking, big data and data mining techniques can be useful when it comes to using identified data for quality improvement, production planning, process improvement, etc. (Cheng, Chen, Sun, Zhang, & Tao, 2018). However, data mining should not only be seen from the aspect of generating knowledge from big data, but also from gathering existing knowledge hidden in organizations, due to insufficiently well-articulated communication between employees, that is, insufficient commitment of management to documenting and gathering knowledge.

CONCLUSION

Digital transformation of organizations becomes imperative due to changes and innovations that arises from development industry 4.0. Along with that and by increasing the complexity of organizational environment, organizations are forced to adapt to new conditions. By adjusting to the new requirements, organizations acquire new knowledge based on which they can develop a competitive advantage on the market or differentiate themselves from the competition.

It is evident that there is a deficit of research that would cover a digital area of organizational knowledge management. Furthermore, the organization's knowledge that is acquired must be managed. Existing organizational knowledge management models have to adapt to new conditions. Organizations need to define new models that will gather organizational knowledge, given the fact that digital transformation enables organizations to apply new technologies for dissemination of organizational knowledge across all organizational levels as well as automated systems that are often based on artificial intelligence.

Organizational growth and development is based on organizational knowledge that needs to be adapted to new conditions. It should also be noted that the knowledge profile of organizational staff changes due to the

fact that the activities carried out in organizations often automate, which means the need to develop the competencies of organizational staff that will enable them to manage such systems. Organizations are encouraged to create a knowledge base as well as disseminate knowledge generated according to the needs at different organizational levels to enable the foundation of a competitive advantage and improve organizational performance.

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DIGITAL TRANSFORMATION IN SLOVENIAN ECONOMY

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Abstract

In today's business environment, companies are facing new challenges that force them to constantly and quickly adapt. New technologies, customer demands and expectations, fierce competition and new business challenges are changing business practice. Changing habits of consumers who are massively using mobile, smart devices and social networks are forcing companies to change their products, business practices and business models. Companies are adapting to the trends of digitalization not only through customer satisfaction, but also through the optimization, robotization and automation of their business processes. Data analytics and artificial intelligence are helping the companies to understand business environment better. The digital transformation of the society and of the economy is the fact that community must embrace and adapt. In the paper we are going to present the results and analyses of the survey conducted between Slovenian companies that shows the trends of digital transformation in Slovenia and CEE region.

Key Words

Digital transformation; digitalization; digital trends; ICT; digital trends.

DIGITAL TRANSFORMATION

Human Digital disruption is rapidly changing the world in which we are living and working today. The driver of changing world is not a human anymore, but it is the technology. New technology creates new markets which creates new customers and new competitors. Those customers and competitors are building a new expectations which are building new business models. It is clear, that this pace of speed is not going to slow down, but it will only be faster (KPMG International Cooperative, 2017).

Organizations must provide superior experience for the customers, consumers, employees and to citizens. But that is not enough. They have to provide and deliver the service faster, high quality and reliable. The opportunity and the risk of survival is here. Only the organizations which understand the requirements of the market will be able to change fast and successful.

Digital transformation is enabled and driven by technology, but only the change of technology is not enough. Digital transformation is not only about technology but when company is in the process of transforming, there are changes in the organization and in the business operating model. The way how people are working is changing. Change reflects in the front, in the middle and in the back office. Understanding people behaviour, collecting and analysing data of customers, predicting trends and personalization is often key success factor and need to not gain competitive advantage but survive on the market.

DIGITALIZATION IN EU

Technology drives changes in economy. When we say technology, we are talking about social media, mobile services, cloud technologies, internet of things, cybersecurity, robotics and automated machinery, big data and data analytics, 3D printing and artificial intelligence. Implementing those technologies in to the business environment and transform digital, each company should think about eight digital dimensions. Those dimensions are: digital technologies, digital strategy, digital skills, digital economy, digital investments, digital adoption, digital transformation and finally impact. Based on Digital transformation scoreboard prepared by European Commission, most of companies in EU see digital transformation as opportunity. Many companies which started digital transformation are lacking clear targets, effective monitoring and KPIs. But on the other side 8% companies which invested in digitalization observe operation cost decrease and 46% observes increase of turnover (Laurent Probst, Virginie Lefebvre, Christian Martinez-Diaz, 2018). Digital transformation is not only task of economy, but also the task of state. Governments should build digital averseness in the state and among citizens.

Based on EU research Slovenia is slightly above EU average in the digital transformation.

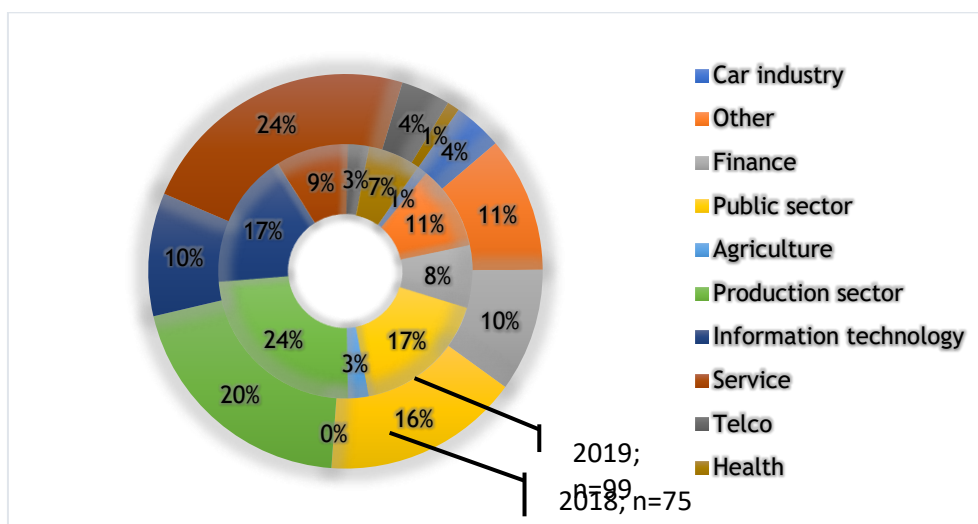
DIGITAL TRANSFORMATION IN SLOVENIA

Based on a survey conducted among Slovenian companies, current trends in digitalization in Slovenia are shown. The survey clearly shows which areas of digitalization are crucial for businesses and how businesses perceive digitalization. Changes in the strategic orientation of companies in the field of digitization are also visible.

Review of companies surveyed

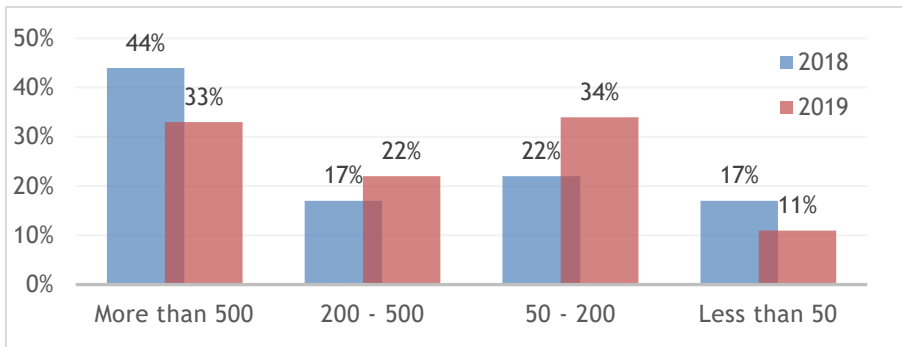
As shown in Figure 1, 75 companies answered the survey questions in 2018 and 99 companies in 2019. Companies come from different industries. The largest number of responses came from manufacturing companies in 2018, while in 2019 the service sector was the most represented.

Figure 1: Companies surveyed by sectors



The manufacturing sector is represented by 24% of enterprises, the services sector with 48% of enterprises and the public sector with 16% of enterprises in the year 2018, while in 2019, the representation of manufacturing companies is 25%, of service companies is 42% and of public administration is 17%. There is a greater representation of companies active in the healthcare field too. Since the response to the 2019 survey is greater than in 2018 what indicates that companies are becoming more aware and engaged in digitization trends.

Figure 2: Size of companies



The survey was answered by large and medium-sized enterprises as can be seen in Figure 2. From this we can conclude that the survey was mainly done by companies that are actively engaged in the field of digitalization, with digitalization know how and with employees who are familiar with current trends in digitalization.

Figure 3: Proportion of companies with digital strategy

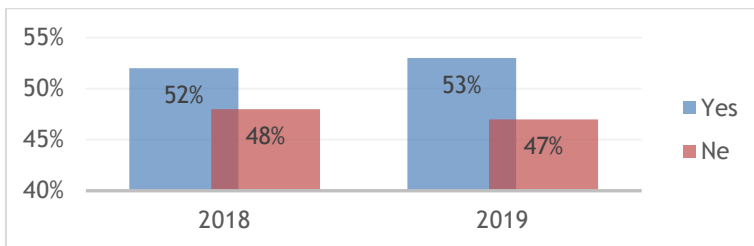
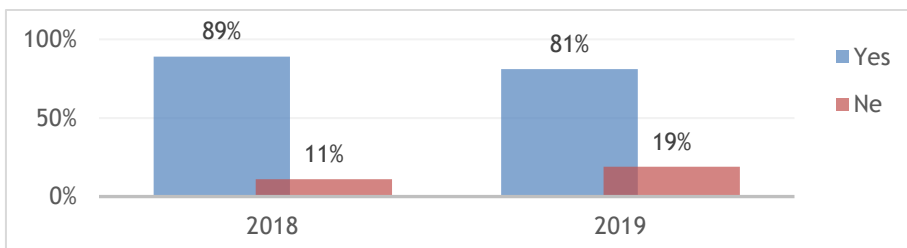


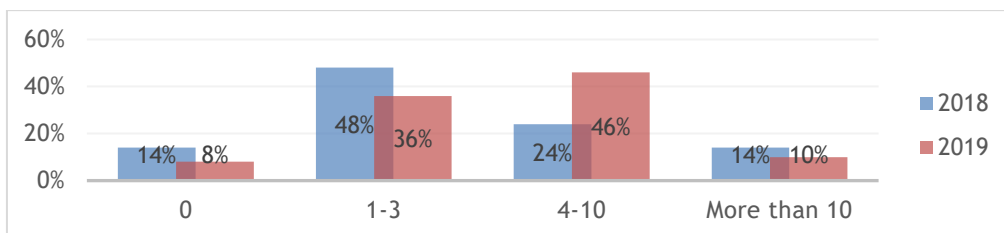
Figure 3 shows that companies are actively and comprehensively confronting trends in digitalization and in digital transformation. More than 50% of companies have a digital strategy in place. However, over 80% of businesses are actively engaged in digital transformation (Figure 4). The lower proportion of companies in 2019 compared to 2018 that are adopting digital transformation can be attributed to the fact that a larger number of smaller companies participated in the 2019 survey. Smaller companies, even if they are running digitalization, often they are not formally managing digital transformation projects.

Figure 4: Proportion of companies running digital transformation



Scope of digital transformation projects and investing in digital transformation

Figure 5: Number of completed digital transformation projects



From the point of view of realized digital transformation projects, it can be concluded that companies are completing projects from previous years, so that the number of realized projects is increasing (Figure 5) from year 2018 to 2019. Companies were completed between 1 and 3 projects in 2018, while they completed between 4 and 10 projects in 2019. The trend will continue in the coming years as most companies (Figure 6) are planning to start on average two to three digitization projects over the next period (Figure 7). Investment is gradually increasing as almost half of businesses expect to see an increase in investment in digitization projects in the future (Figure 8).

Figure 6: Planning of new digitalization projects

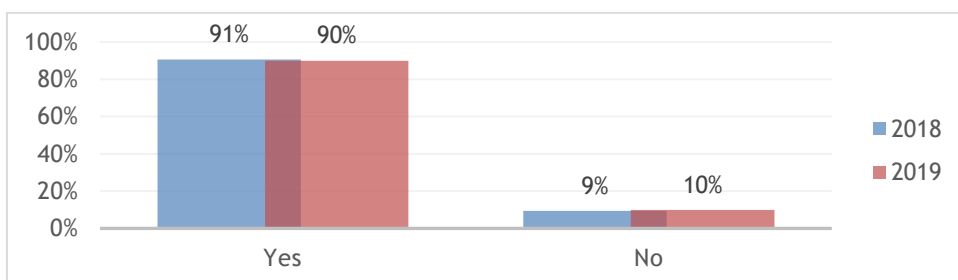


Figure 7: Number of planned new digitalization projects

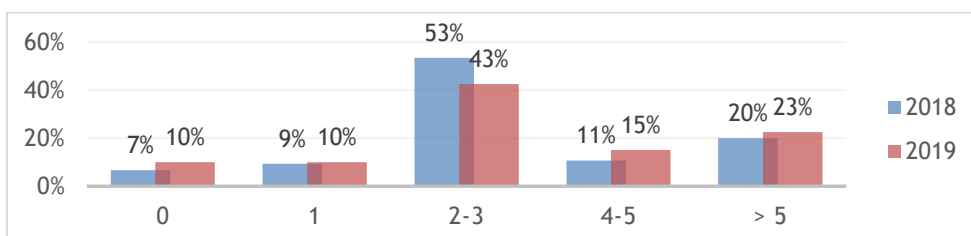
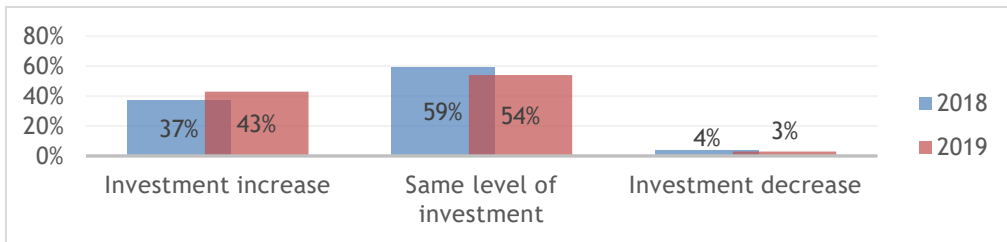
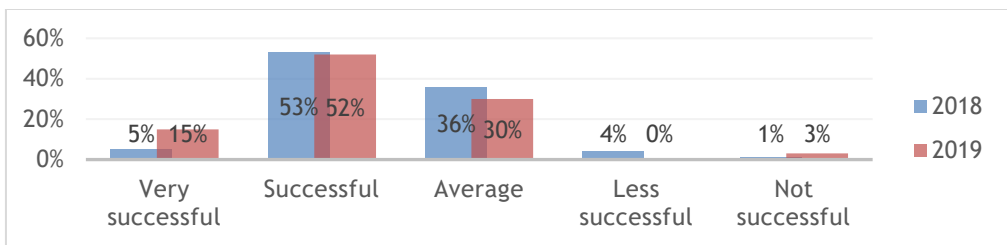


Figure 8: Investments in to digital projects



Digital transformation success

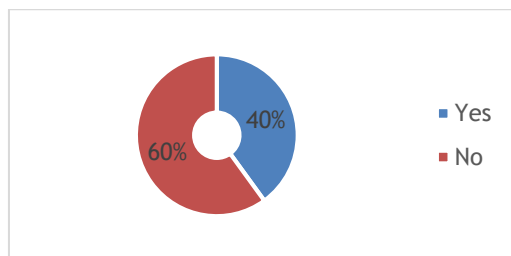
Figure 9: Success of digitalization projects



The success of digital transformation can be measured in terms of successful realization of projects. That means the project is realized in accordance with the content, deadlines and costs. More than half of the surveyed companies estimate that they have been successful in implementing digital projects (Figure 9).

On the other hand, it turns out that as many as 60% of businesses do not measure the effects of digitization (Figure 10). Which, of course, means that they are unable to assess whether investments in digitization projects have been commercially efficient and beneficial or not.

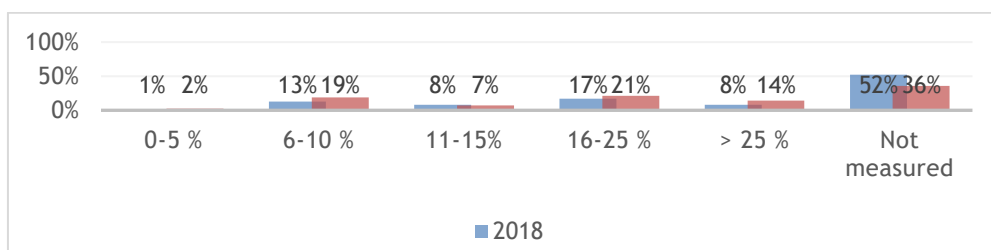
Figure 10: How many companies have measured success of digitalization



Among companies that measured the effects of implemented projects, two thirds (Figure 11) perceive positive effects on increasing employee productivity. This shows that companies are investing in the optimization and digitization of internal processes. Employees engagement changes from

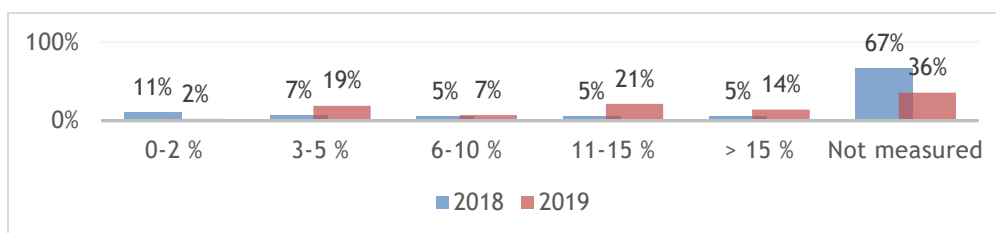
routine low value added work into activities which brings greater benefits and higher financial impact to the company.

Figure 11: Employee productivity increase because of digitalization



On the revenue side, positive trends have been observed among companies that measure transformation efficiency. Two-thirds of companies were unable to estimate the impact of the digital transformation on revenue in 2018. Understanding of digitalization on revenue increased in 2019, when only one-third companies were unable to estimate the financial impact (Figure 12). As many as one-third of businesses reported that the digital transformation increased in revenue of more than 10% compared to not implementing digitalization. The survey shows that the effects of digital projects that have taken place over the past years are beginning to show. Companies are becoming more aware of these effects.

Figure 12: Digital transformation revenue increase



A key motivation for digital transformation

When we are looking at the key motivations for digital transformation, we can conclude that companies are forcing two objective factors into transformation. The first objective is internal work optimization. It does not necessarily mean lowering costs, but above all process optimization, automation and robotization of business processes. Technology enables businesses to completely overhaul their business processes. To the same extent as enhancing employee productivity, companies use the technology capabilities to retain or retrieve customers through different and better user experience. They are increasingly aware that they can only achieve this with a satisfied customer whose experience is excellent. Only such customer will remain loyal. However, in hand to hand with the rapid changes in technology, new players on the market, fierce competition, innovative

companies they are being forced to adapt quickly and find new business and technological solutions. New and fast-changing business models are getting more and more important factor in digital transformation. Many companies are aware of this. Technology as such drives modern business and companies are building new business models by using technology solutions (Figure 13). It is very important to carefully observe a competition, follow technology trends, technology capability and act fast. Employees know how, understanding the technology and business in the same time is crucial for doing the right things in the right time. Decisions makers have to decide smart between many available technical solutions on the market. Not each and every technology would fits for every organization.

When setting guidelines for building a digital strategy, companies receive information from various sources. The survey says (Figure 14) that knowledge of technologies and the knowhow of employees is an important factor for setting goals in digital content. They also obtain frequent information through external consultants who are familiar with trends on the market, with technology and industry trends. Only when they understand the client needs, technology capabilities, completion and industry trends, they can make smart decision regarding digital transformation.

Figure 13: Goals as result of digital transformation

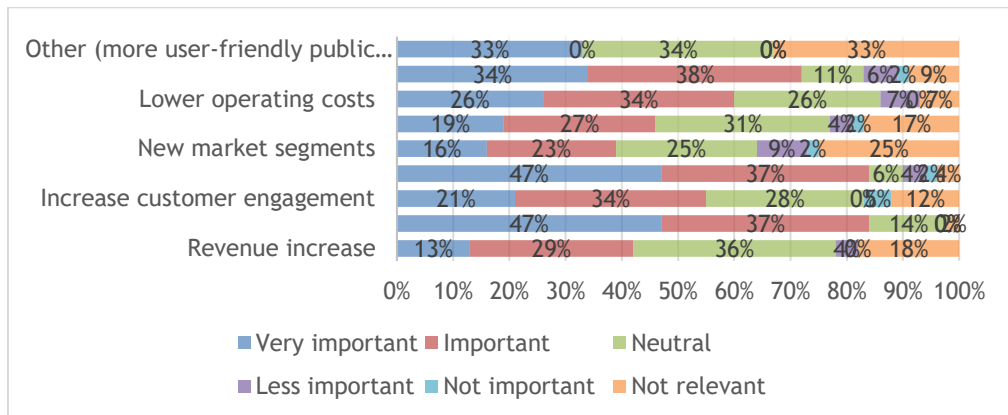
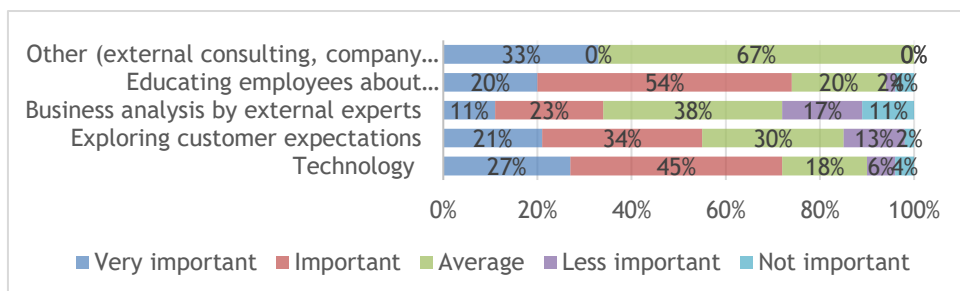


Figure 14: Influential elements on the implementation of digital transformation



Impact on business and technical areas with digitization

Digital transformation is changing business processes, employee work, business models and customer relationships (Figure 15) mostly. This is in line with the goals that companies set when starting digitalization.

Digitization has a significant impact on technology (Figure 16). Business process changes, a different way of working, a different user experience and finally a changed business model are realized through technologies. Key changes results mainly in the changed business systems (as ERP, Core systems and other business software). Implementation of the new technology is resulting in a changed way of working of employees, transparency of business processes, introducing and changing mobile technologies. All the changes are influencing in the user experience, where internal work force should optimize the way of operational work. On the other hand customers shall receive superb customer experience. Digitalization is closely connected to investing in information security. Driver for investing in information / cyber security is on the one hand the legislation (for example GDPR) and on the other hand increasing cyber threats, which can cause significant damage to the company in the worst case.

Figure 15: Business segments of the business that are being transformed by digital transformation

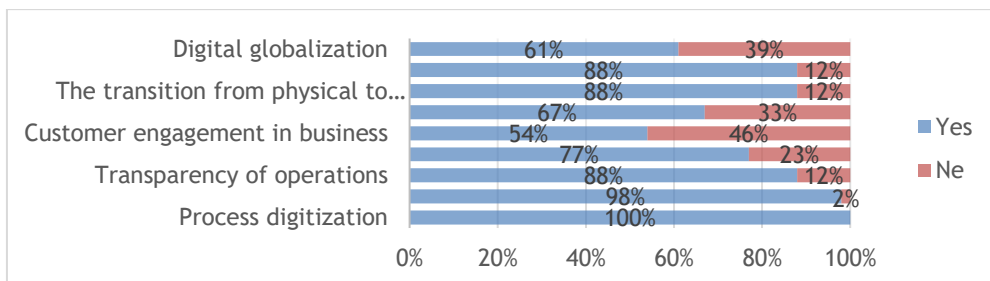
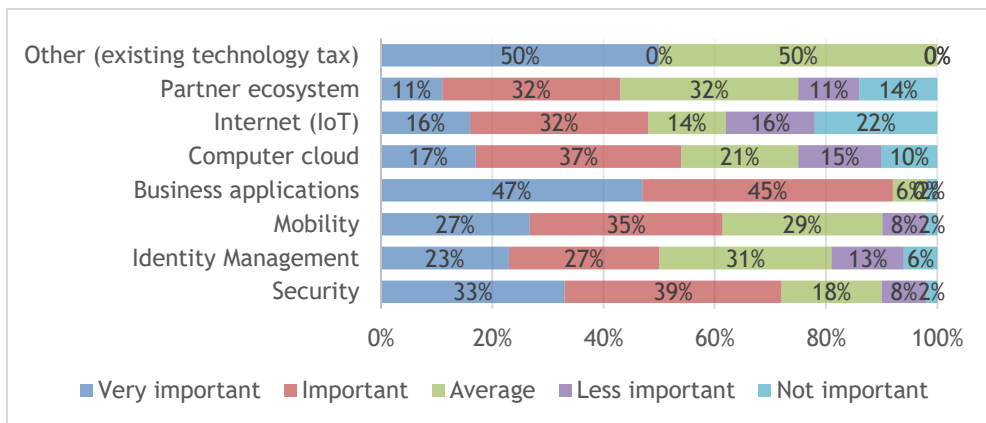


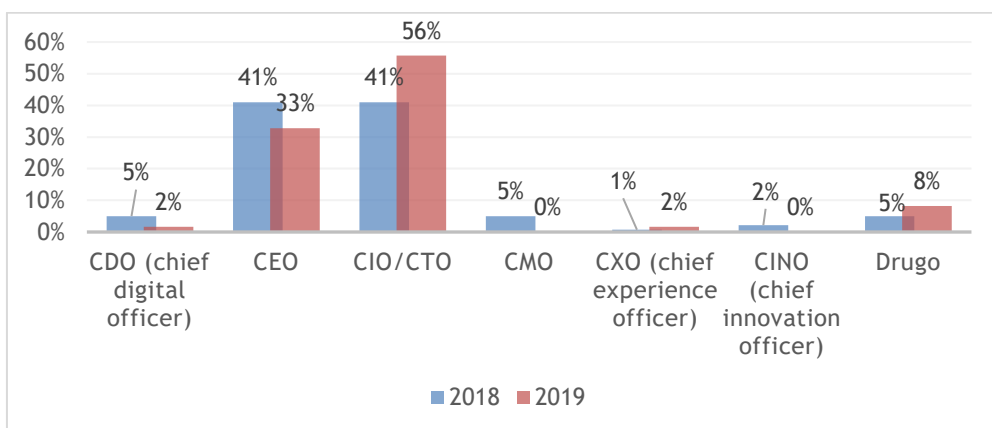
Figure 16: Technical areas which are influenced by digitalization



The organizational aspect of digital transformation

Decision makers play a key role in introducing new technologies and new processes. The survey (Figure 17) shows that in the companies a key role in the decision-making process play the CEO (Chief Executive Officer) or the CIO (Chief Information Officer) / CTO (Chief Technology Officer). The Chief Digital Officer (CDO), a function that businesses have implemented in recent years to support digitization, has no direct decision-making role in digital transformation projects.

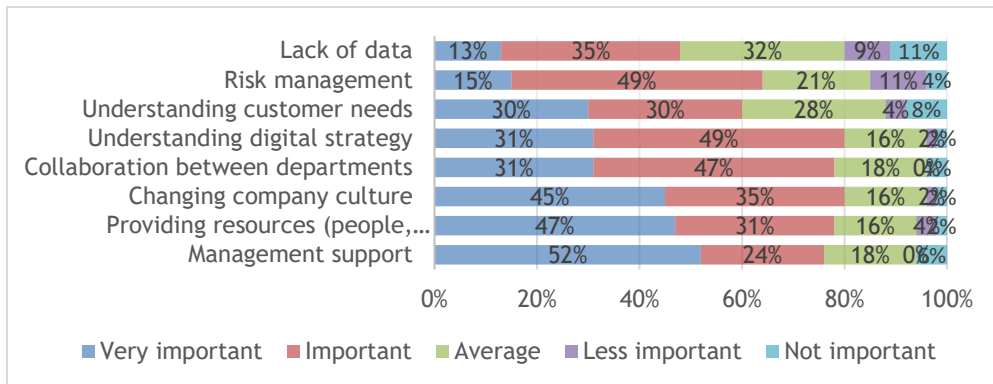
Figure 17: Leading decision makers on digital transformation in business



Key success factors for digital transformation

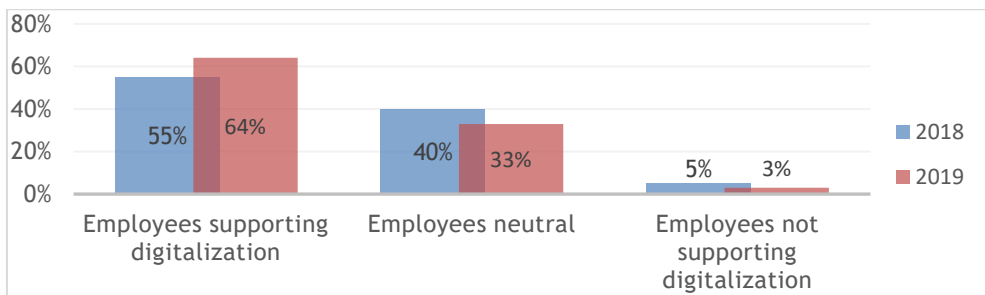
Key success factors for digital transformation (Figure 18) are, above all, management support, available resources and a changed corporate culture. In addition to these factors, knowledge of digital strategy and good collaboration between departments are also important.

Figure 18: Key success factors for implementation of digital strategy



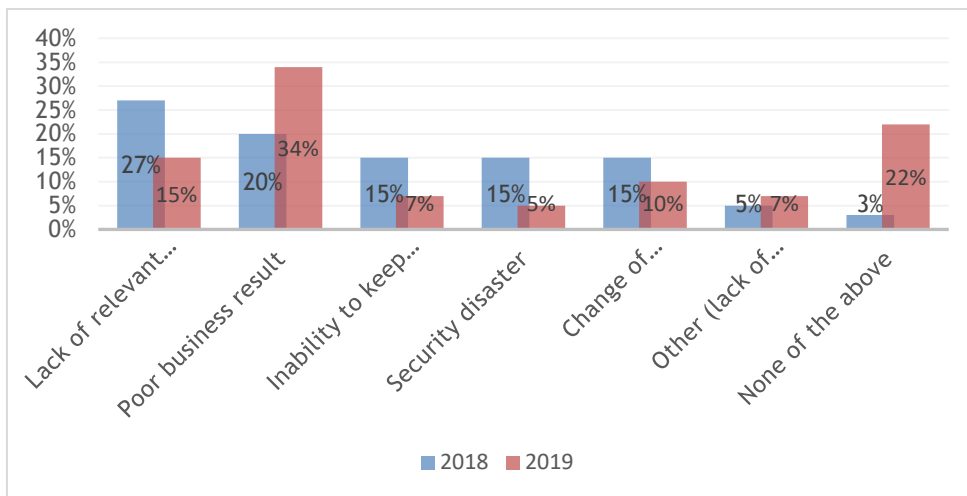
Since one of the key success factor in the digitalization is the changing culture of the company, there is important that employees are aware of digitalization and they accept changes and consequences because of it. This is also evident in Figure 19, which shows that support for digitalization in companies is high, which means that employees understand digital transformation.

Figure 19: Internal support to digitalization



Businesses estimate that the biggest risk of digitalization process can be poor performance of the company. Investments in digitization might be reduced or discontinued in that case. Businesses would be forced to focus primarily on day-to-day operations. The lack of relevant skills in the company can be a big problem. In that case the company would face an inadequate staffing or the departure of key personnel with knowhow of the modern technologies and processes. The risk is also in a change of management, because new management may discontinue digitalization and change the priorities.

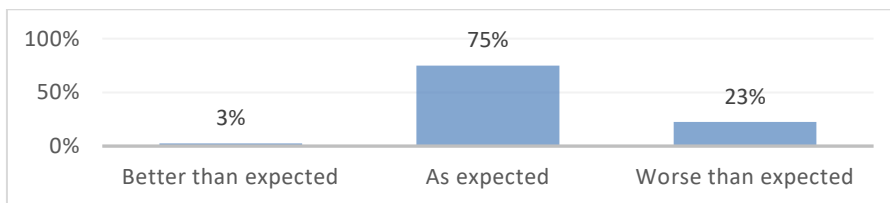
Figure 20: What would jeopardize digital transformation



Overall assessment of digital transformation

As shown on Figure 21, companies are evaluating the success of digital transformation as expected and planned. Only few companies consider digitization to be more successful than expected. 23% of the companies are not satisfied with the results of digitalization. This can be attributed that companies has too high expectations or they are unable to eliminate the risks that arise in digital transformation.

Figure 21: General results of digitalization



CONCLUSION

Digital is the way of living. Information is highest value asset. Understanding how to use information and technology in today's "digital" world might be a challenge for companies. It is not a question to digitalize or not anymore. It became obligatory. It is a matter of survival. Companies which have the highest understanding of digitalization will adopt faster and they will have higher opportunity to survive in the new economy.

As we see from the survey, digital transformation is the process, which touches all aspects of the company. It starts with changing the culture, employee awareness, organizational set up and continues with changing and

optimizing internal processes. At the end, customer is moved to the front and companies trying to provide the customer perfect service.

We can conclude, that most of the Slovenian economy is in the process of digital transformation. Who will be the winner and who will survive or die it will be seen in the following years.

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