

REDUCING BUSINESS OPERATING COSTS IN THE FIELD OF HEALTHCARE BY INTRODUCING CUSTOMERS WITH WEB SALE SYSTEMS

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ABSTRACT

Abstract – Contemporary business systems operate with high demands for efficiency and reduction of operating costs and this also applies to the field of healthcare. One of the means of reducing these costs is to introduce customers with various web sale systems, such as web shops, that can help them in purchasing the desired products or services. In this way customers are able to plan their purchase at their own pace, which is more convenient compared to the standard way of buying products/services. The introduction of a web sale system can reduce personnel expenses and in many cases existing personal becomes able to attend to their other duties in a more detailed manner since web sale system reduces part of their communication activities. In this paper, an integration of web systems support for purchasing of products or services into business systems in the field of healthcare is presented and its effects on reducing business operating costs are analyzed and elaborated.

Keywords – healthcare, business systems, operating costs, customers, web sale systems

I. INTRODUCTION

In order to be competitive and to provide their customers with fast and reliable services a maximum availability of information and sale channels is required from all business systems. While many business systems use web media for information purposes, there is a large number of companies that still do not incorporate web systems that would give their customers 24/7 availability of sale channels in the form of a web shop or some similar system. There are many authors who promote this kind of communication paradigm and availability [5; 11; 6] and the implications for electronic marketplaces have been researched and argued [2].

In order to maximize their availability to customers, various business systems employ call service agents who increase their business operating costs or in some cases they employ only a minimum of such agents leaving their customers with rather low availability time, which results in many customers buying the product/service elsewhere. In many cases employees that are primarily involved in other business activities perform the role of call agents. In order to conclude about the effects and the extent of reducing business costs when introducing web systems, a number of such systems have been introduced into a number of business systems in the field of healthcare and their effects have been analyzed to conclude about the costs reduction.

Healthcare systems have been chosen because of rather large number of customers per day and large number of different inquires.

The introduction of e-business in the form of web system has been recognized as an important in [15], order-to-payment cycle has been researched in [12], evaluation of such systems in terms of business values was discussed in [3] and real effects can be seen in transactional costs, like proposed in [4]. Although specific in some segments, healthcare business systems have many similarities with other systems so conclusions made here can also be applied to other business systems. In this paper, results of analysis of operating costs reduction by introducing web sale systems are given and elaborated along with discussion about other effects of web systems on analyzed healthcare business systems' overall financial and business results.

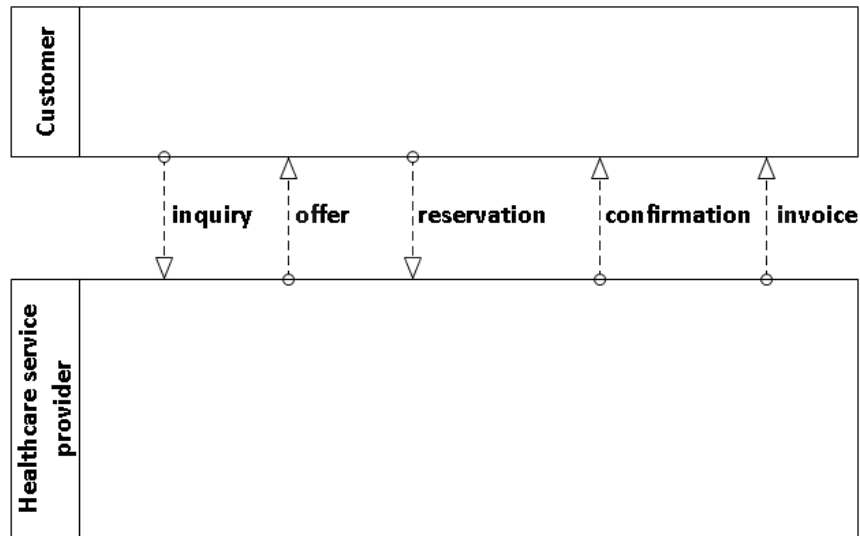
II. HEALTHCARE SERVICE SALES PROCESS AS IS

According to business process modeling methodology [10; 13] collaborative process model has been developed for healthcare service sales process in current AS IS state without web system support and new TO BE process was developed to present new process supported by the web system. E-business and its effects have also been researched in [16] and in this research collaboration was dealing with pure sales process in electronic equipment retail and wholesale industry. Standard process in healthcare service industry involves collaborative process that includes five steps communication between customer (patient) and healthcare service provider (hospital, private clinic or doctor's office). Whole process, with five business items or messages was developed as BPMN 2.0 collaborative diagram [17] and is shown in Figure 1.

Process starts 1) with customer's (patient's) inquiry (mainly through the phone or in person at the business physical location); 2) after which healthcare service provider (hospital, private clinic or doctor's office) sends an offer; 3) customer agree to possible terms and time schedule of appointment/treatment as the response in the form of reservation of service; 4) after reservation healthcare service provider responds with the reservation confirmation; 5) at the end there is a service provided in scheduled time and at the end invoice and payment. Last part of process was simplified since it does not affect communication between customer and the service provider. Among mentioned parties there are different interactions, but just the results of each process are presented on collaboration diagram with connection between two process pools (customer's and healthcare service provider's). Darts shows the direction of the communication.

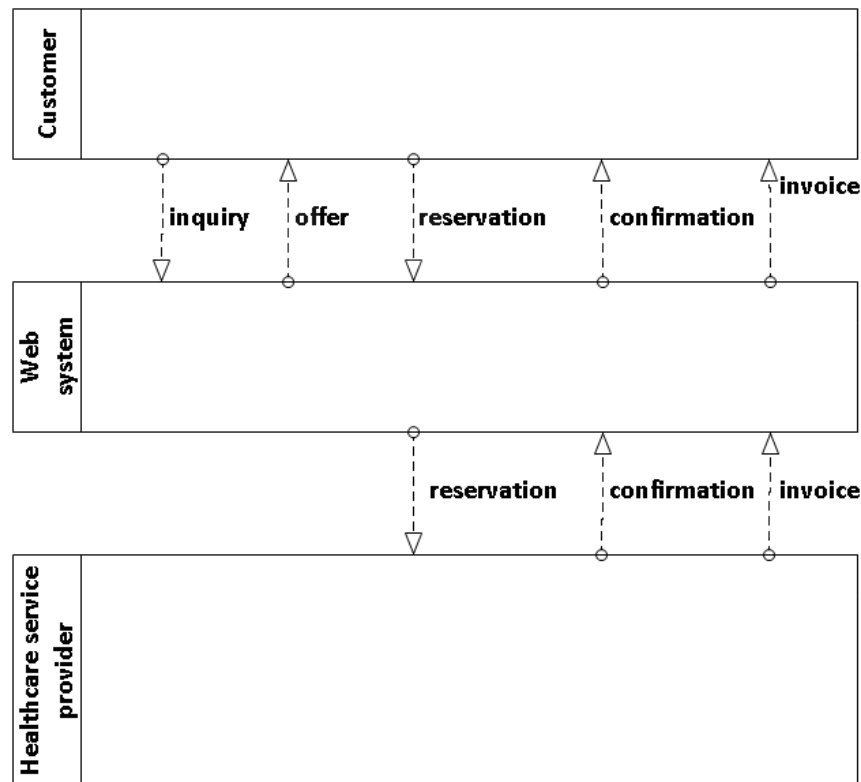
This kind of view on services is called choreography, opposed to orchestration [7], which describes the interactions that appears between a designated service (the orchestrator) and a plurality of subordinated services [9].

Figure 1: The model of selling/buying healthcare service AS IS



To research the new way of conducting process, so called TO BE process state, new collaborative diagram was developed (see Figure 2). At the new process diagram introduction of web system is presented as independent actor in the collaboration process that helps employees in healthcare service provider facility to automate some manual activities and to make customers interact with web system instead of calling and speaking directly to the healthcare service provider personnel. Intervention is needed only if reservation time requires confirmation or customers have a special needs or questions. New process model with introduction of web system is shown in Figure 2.

Figure 2: The model of selling/buying healthcare service TO BE



Of course, in order to show a web sale model, some other elements have to be incorporated. The main role of a web sale system is to provide adequate 24/7 selling service to the customers by using modern technology. This kind of system has to be able to provide customers with a detailed list of offered products or services, but it also has to be able to provide customers with filtering options as well as with various information that customers could request. This kind of system also has to be able to handle customers' payment requests and to provide adequate invoice feedback.

Research has shown that the overall aspects of web site design as well as reliability, responsiveness and trust influence the quality of the provided service and also the customer's satisfaction, which is closely related to customer's intentions to buy the product or service [8]. Another aspect that has been established by the research shows that the customer's perception that the web system is in more or less capacity a single integrated point of communication with the seller also influences customer's willingness to buy online and customer's confidence into products or services that are being sold [8]. This basically means that the customer has to think that the overall process of sale is conducted in one place and that it is centralized, rather than dislocated in both logical and physical sense.

Service orchestrations are present in an ecosystem that is highly unstable and in which various changes occur continuously and are hard to predict [14]. This unpredictability is especially true in the case of external services which can fail without warning or can become incompatible with the service at hand. Another aspect that can be stated is that orchestration elements can be changed to pair up with new business needs and because of that orchestration systems should provide means of dynamic improvements and alterations to allow modifications that are needed to cope with new situations that were not planned and to cope with new requirements [14]. Another important aspect of any web system is that it should always be updated and that it should reflect the real state of the business systems and their offered products or services.

III. THE CASE STUDIES OF WEB SYSTEM INCORPORATION

In order to assess the healthcare business operating costs reduction and other effects that can be accomplished by incorporating web system into business system's sale process a sample of 12 healthcare business systems has been selected and analyzed through 12 case studies [1]. The selected 12 healthcare business systems were mid-sized polyclinics with 10-20 employees and at least 5 years of business experience on the market. The factors that have been taken into consideration during the research are: the quality of the web system and whether the information are up-to-date, the number of phone or direct inquires before incorporation of the web system and the number of phone or direct inquires after incorporation of the web system, the assessment of operating cost reduction and other effects on the customers after the web system has become available. The period that has been taken into consideration is 3 months prior and 3 months after the incorporation of the web system. The research results that show reduction of operating costs per one employee per day are shown in Table 1.

Table 1: Research results (per one employee per day)

Business system no.	Quality of web system	Up-to-date information	No. of phone and direct inquires before (avg. per day)	No. of phone and direct inquires after (avg. per day)	Operating cost reduction (avg. per day in domestic currency)
1	3	4	43	17	25,14
2	5	4	59	30	26,24
3	5	4	51	15	31,02
4	5	5	77	35	36,42
5	4	5	53	22	27,61
6	4	3	41	14	23,35
7	3	4	55	20	32,54
8	4	4	48	23	22,51
9	4	5	45	12	27,01
10	5	4	68	43	19,84
11	3	4	49	21	25,84
12	4	5	34	18	14,20

As can be seen from the research results, introduction of web system for the support of business system's sales activities can result in significant operating cost reduction per each employee who is involved in the sale process and who deals directly with the customers. Along with this financial effect, there are also other effects of this kind of systems and they include greater satisfaction of customers because they are able to plan their buying process 24/7 on their own and because they are able to find almost all necessary information in the web sale system itself, as well as greater availability and confidence of customers in the business system.

However, a number of direct inquiries has still occurred and this can be argued with the fact that certain number of customers is still not so keen to use new technologies and that they feel more comfortable when talking to a person about their medical problems.

IV. CONCLUSION

Modern business systems and trends require greater flexibility, reduction of costs and maximized availability of products and services to customers. This trend has been recognized and stated by many authors. In this paper, a research has been conducted to find out about the effects of introducing customers with web sale system on reduction of operating costs in the field of healthcare and on other factors on the customers' side. The research results have shown that introduction of this kind of system can result in significant costs reduction and also in increased satisfaction of customers, as well as in their increased confidence towards the business system and the buying process.

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IMPLEMENTATION OF CROSS-TRAINING DURING PERILOUS STATES IN HOTELS

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ABSTRACT

The main purpose of this study is to; (1) scrutinize the extent of implanting cross-training in 5-star hotel departments, (2) identify the relevant factors that should be considered to maximize the cross training benefits, and (3) investigate its effect on the organizational performance of the hotel operations. The target population of this study involves all five-star chain hotels in Egypt. The authors prepared a list of 113 five-star chain hotels in Egypt. A survey will be constructed and distributed to a sample from employees in five-star hotels in Egypt. The study will reveal important findings such as an effective training technique which results in motivation is cross-training, when employed horizontally, upward and downward. Hotel department heads and employees can cross-train in different departments or within the department itself.

Keywords: Cross-training, Organisational performance, Egypt

LITERATURE REVIEW

Cross training

Ahmad and Schroeder (2003) and Huang, Kristal and Schroeder (2010) refer to Cross-training as Employee multifunctionality which refers to the extent to which firms provide cross-training to employees so that they can perform multiple tasks or jobs. Cross-training is a workforce development strategy in which each member of a team receives training on the tasks, duties and functions of other members of the team (Volpe, Cannon-Bowers, Salas, and Spector, 1996; Salas, Nichols and Driskell, 2007; and Abrams and Berge, 2010). The rationale for cross-training is to enable any member of the team to assume the functions of other team members to help or to replace a team member who is not able to perform the expected functions (Starr, 2009). In addition, this approach seeks to broaden employees' skills in order to help organizations remain in business in the event of sudden internal and external changes (Abrams and Berge, 2010). Thus, cross-training enables the company to run the mill with the smallest possible labor force (Danielson, 2000). Cross-training is also used to mitigate the effects of unplanned employee absences (Slomp and Molleman, 2002; Bokhorst, Slomp and Molleman, 2004; Inman, Jordan and Blumenfeld, 2004; Slomp and Suresh, 2005; and Easton and Brethen, 2014). Moreover, cross-training is considered as a motivational and problem-solving technique as it is against human nature to remain static, performing the same duties (Ojambati, Akinbile, and Abiola-Falemu, 2012).

H1: Many motivators influence the adoption of cross training.

H2: Many barriers influence the adoption of cross training.

Cross training and Service quality

Pinker and Shumsky (2000) indicated that cross-trained employees may not have sufficient experience to provide acceptable levels of customer service. Karupman (2006) and Yang (2007) also observed quality losses due to learning-forgetting-relearning processes that occur when cross-trained employees change assignments. In contrast, Kelliher, Riley and Jones (2002) have stressed that cross-trained employees can improve the quality of service by reducing departmental boundaries, as there is teamwork and interdepartmental cooperation. This enables them to identify problems and adapt to dynamic situations where decision making can be made (Tracy, Way, and Tews, 2008). It is believed that these experiences can enhance employees' knowledge, skills and abilities (KSAs), and thus performance of hotels as a whole (Crick and Spencer, 2011; Tracy et al., 2008). Chen and Tseng (2012) found that multiskilled line supervisors produce higher levels of service quality than nonmultiskilled line supervisors. Therefore, cross-trained employees are supposed in this study to achieve high levels of service quality as follows:

H3: The adoption of cross training is positively associated with the service quality.

Cross training and Employee satisfaction

Cross-training improves teamwork and relationships with both supervisors and coworkers, which contributed to lower burnout and improved job satisfaction. Cross-training improves the perception of autonomy among employees (Starr, 2009). Cross training is used to assist employees to get knowledge and skills from other departments (Walker 2007, 597-598). Moreover, cross training improves job enlargement (variety) and job enrichment (autonomy), which in turn has a positive impact on performance (Xie and Johns, 1995). Chen and Tseng (2012) also found that multiskilled line supervisors are more satisfied than nonmultiskilled line supervisors. Therefore, cross-trained employees are supposed in this study to be more job satisfied as follows:

H4: The adoption of cross training is positively associated with the employee satisfaction.

METHODOLOGY

The target population of this study involves all five star chain hotels in Egypt. The authors prepared a list of 113 five-star chain hotels in Egypt. A survey will be constructed and distributed to a sample from employees in five-star hotels in Egypt.

FINDINGS

The study will reveal important findings such as an effective training technique which results in motivation is cross-training, when employed horizontally, upward and downward. Hotel department heads and employees can cross-train in different departments or within the department itself.

Limitations and Implications

Because of the chosen research approach, the research results may lack generalisability. Therefore, researchers are encouraged to compare the results with different hotel category (independent vs. chain hotels). The study includes implications for the development of hotel management as cross-training can be applied optimally as a problem solving technique during low season, crises times, employees reduction, and others.

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ACCOUNTABILITY IN THE ADMINISTRATION OF TEACHER EDUCATION IN NIGERIA: THE WAY FORWARD

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ABSTRACT

Nigeria education system is rated to be experiencing an ever falling standard because of countless problems plaguing it. One of these problems which are not commonly discussed is accountability. Simply put, accountability is the process of comparing the input and output of educational system. Therefore the purpose of this study is to examine the opinion of school administrators about the level of accountability in terms of the presumed falling standard of education in Nigeria. Survey research design was adopted. Three research questions guided the study. The population comprised of 311 administrators in 13 teachers' training institutions in south-west Nigeria. Meanwhile, purposive sampling method was used to select the participants of this study. The instrument was self-developed with 32 items structured in likert form. Reliability was estimated to be as high as 0.82 using test re-test method. Data analysis involved mean and standard deviation as descriptive statistics, one-way analysis of variance, and t-test analysis as inferential statistics. The results showed that the accountability in the administration of teacher education in Nigeria was not really satisfactory, there was a significant difference in the administrators' perception of accountability as a veritable tool for good governance in teachers' education ($F_{(1, 310)} = 12.976$; $P < 0.05$), while no significant difference was observed in the administrators' perception of accountability in teachers' education based on gender ($MD = 0.773$; $t = 1.289$; $P < .05$). Based on the findings, it was recommended that accountability, monitoring and evaluation should be the major watch word in Nigeria educational system especially at the beginning, during and after every government financed program

Keywords: Accountability, teacher education, administrators, teacher training colleges, Nigeria.

INTRODUCTION

Accountability is a way to ascertain that performance is related to the organisational set goals and objectives. School accountability is the process of evaluating school performance and achievement on the basis of student performance measures. It is goal oriented activity viewed from the input perspectives. The measurement and reporting of a school's progress allows policy makers to assess how successful a school has been in meeting stated achievement goals. This is because schools have been entrusted with the education of future generations, it is a great responsibility, a failing school system is a total disservice to the nation. School

accountability systems are intended to provide incentives for schools to generate higher performance in academic subjects, and indeed, schools appear to pay attention to the subject matter on which the tests are based.

According to Cosmas, Edmore, Severino, Newman and Amasa (2012) accountability is synonym for responsibility because it emphasize the willingness to accept responsibility for one's decisions and actions, and to justify themselves to others. Bovens (2005) defined accountability as a social relation in which actor feels an obligation to explain and to justify his or her conduct to some significant other.

Accountability ensures that the public voice is heard, which should underpin the legitimacy of their elected representatives by enabling individual institutions to be answerable to their particular public (Aucoin, and Heintzman, 2000). Accountability to Hutt (2000) is aiming at the setting goals for action and ensuring that they are achieved, Accountability is an ethical concept – it concerns proper behaviour, and it deals with the responsibilities of individuals and organisations for their actions towards other people and agencies. The concept is used in practical settings, notably in describing arrangements for governance and management in public services and private organisations. Accountability tends to ascertain that performance is related to the organizational goals. It is therefore a goal orientated activity viewed from the input perspectives. It measures how well resources are integrated to produce high output. This brings out the leadership dimension of accountability.

There is need for accountability, there is a great expectation about school in so far as the impartation of knowledge and moulding of the future of the children is concerned. Government as employer also expects accountability through the relevant ministry or department of Education since government makes available resources and pays teachers. Barrett (2005) says that in their accountability to the government, teachers are also accountable to school administrators, the principal and the School Management Teams who are on the spot in schools for professional management on behalf of the government (Barrett 2005).

School accountability systems have the potential benefits of aligning effort with stakeholders' goals and providing information for improvement; however, they are limited by the fact that they can only measure a small number of the dimensions that stakeholder's value. Rothstein, Jacobson, and Wilder (2008) demonstrate that educational stakeholders value a wide range of outcomes including not just academic performance and educational attainment but also areas such as citizenship, work ethic, and critical thinking.

Accountability in education is a broad concept that could be addressed in many ways, such as using political processes to assure democratic accountability, introducing market-based reforms to increase accountability to parents and children, or developing peer-based accountability systems to increase the professional accountability of teachers. To some researchers like Nakpodia and Okiemute (2011) schools in Nigeria are not making any noticeable impact in achieving the set goals and objectives as well as on the nation's social-economics development despite that the escalating cost-expenditure in education. There is low relative performance of students on academic assessment in the past few years.

Accountability in the administration of teacher education is a measure of the extent to which available resources in a productive system are used for greater efficiency and productivity of teacher education. The

integration of accountability in the administration will help to control indiscipline in teacher education thereby increasing efficiency and effectiveness in the system. The school administrator is the head of the school with clearly defined functions. The prudential and judicious management of the available resources rest on his leadership acumen. His relationship with accountability is clearer when the administrator is viewed from both leadership and management position (Nakpodia&Okiemute, 2011).

They are of the opinion that accountability implies that the school administrator must be perceived as a principal actor in management processes. He measures the performance of the organization by establishing targets with which to measure both performance of the organization and that every person in the organization. He analyzes, appraises, and interprets performance and communicates the outcomes to the sub-ordinates, colleagues and superior.

Accountability in various forms should be the hallmark of any profession, if schools operate in the same manner day-in-day-out without accountability, measures and procedures, quality service delivery and good performance is not guarantee in education system.

Statement of Problem

Over the years, the issue of accountability in our schools have not been taken so seriously. In the schools, administrators have in a way neglect this essential segment of their administrative functions. There are so many stakeholders and many problems that makes accountability in teacher education a bit difficult. Some origin contributes to non-accountability i.e., parents, government e.t.c because they are stakeholders. The effect could be the negative output we are experiencing now as a result of dwindling in the quality of our educational system and wastages in the system. Administrators are confronted with several challenges as regards matters of accountability during their managerial function. They ought to ensure the need for accountability in the input and output of every facets of both the academic and the administrative sections of their schools. Accountability in our schools needs to be taken seriously because of the demand for constructive and positive changes in our educational system in order to improve the quality of our educational system.

Research Questions

1. Is the level of accountability in the administration of teacher education in Nigeria satisfactory?
2. Is there any significant difference in the administrators' perception of accountability as a veritable tool for good governance in teachers' education?
3. Are there any significant differences in the administrators' perception of accountability as a veritable tool for good governance in teachers' education based on gender?

METHODOLOGY

Research Design

The study adopted a descriptive survey research design of ex-post-facto type. This is so because this method enabled the researchers to carefully analyze the sampled population with a view to assessing accountability in the administration of teacher education in Nigeria.

Participants

A sample of 311 participants comprising of school administrators of colleges of education in South-West Nigeria (Course Coordinators, Heads of Departments, Deans, Provosts) were selected through purposive sampling technique from the thirteen institutions involved in teacher education in South-West, Nigeria (see table 1). The age range of the participants was between 39 and 63, while the mean age was 47 years with a standard deviation of 10.8. Further descriptive analyses revealed female participants to be 109 (35.0%) while 202 (65.0%) were male.

Table 1: Federal Colleges of Education

<u>S/n</u>	<u>Teachers' Training Institutions</u>	<u>LOCATION</u>	<u>STATE</u>
1	Federal College of Education	Abeokuta	Ogun
2	Federal College of Education (Technical)	Akoka	Lagos
3	Federal College of Education	Ondo	Ondo
4	Federal College of Education (Special)	Oyo	Oyo
5	Tai Solarin College of Education	Ijebu-Ode	Ogun
6	Ekiti State College of Education	IkereEkiti	Ekiti
7	Osun State College of Education Ila-Orangun	Ila-Orangun	Osun
8	Osun State College of Education Ilesa	Ilesa	Osun
9	Lagos State College of Education (Primary)	Noforija	Lagos
10	AdeniranOgunsanya College of Education Oto-Ijanikin	Lagos	Lagos
11	Oyo State College of Education	Oyo	Oyo
12	St. Augustine's College of Education, (Project Time)	Yaba	Lagos
13	Sulaiman College of Arabic & Islamic Studies	Ososa	Ogun
14	Tai Solarin University of Education	Ijagun	Ogun

Research Instrument

The instrument for this study is a 32 item partly structured and partly unstructured questionnaire. The instrument is tagged questionnaire for administrators on educational accountability (QAEA). It was a self constructed questionnaire by the researcher and it was made up of two sections; A and B. Section A sought for information about the respondents and section B is made up of 20 structured items and 4 unstructured items which are meant to collect data and answer research questions itemized. The structured items consists of an opinion statements on a 4 Likert rated options. The options were also assigned numerical weight of 4,3,2,1 respectively for the purpose of data collection and analysis. The rated option is as follows; Strongly Agree, Agree, Disagree, Strongly Disagree. The respondents were instructed to pick only one option that is applicable to them.

Validation of Instrument

The instrument was validated by giving it to experts in Test and Measurement to examine and assert its suitability and appropriateness regarding the item content and purpose of study. A reliability test using the test re-test method was also carried out to determine the reliability of the instrument. The results produced a reliability coefficient of 0.82.

Procedure

The researchers with the help of five other assistants administered the questionnaire on the participants. The data collection lasted three (3) weeks and two (2) days. The completed inventories were thoroughly checked to ensure that they were properly filled. All the inventories were returned. Thus, 100% success of inventory administration was recorded. Analysis was carried out using the independent t-test statistics. Results were tested for at the 0.05 level of significance.

Data Analysis

Data were analyzed using mean and standard deviation for research question 1, one-way analysis of variance for question 2 and independent t - test for research question 3. All research questions were answered at 0.05 level of confidence using a two-tailed test

RESULTS

Table 2: Level of accountability in the administration of teacher education

Variable	N	Minimum	Maximum	Mean	Std. Dev
Accountability	311	32.00	128.00	51.962	12.503

Table 2 reveals that the accountability in the administration of teacher education in Nigeria mean score is 51.962 (40.6%), which is not really satisfactory. This is because it is less than 50%, though higher than the minimum score of 32 which is 25%. It could then be deduced generally that accountability in the administration of teacher education in Nigeria is not encouraging and satisfactory, which may be as a result of cultural and institutional factors inherent in the educational sector of the country.

Table 3: Summary of One-way Analysis of variance on differences in the administrators' perception of accountability as a veritable tool for good governance in teachers' education

Source of variation	SS	Df	MS	F	Sig.
Between group	298.456	1	298.456		
Within group	7107.309	309	23.001	12.976	.007
Total	7405.765	310			

The table indicates that the analysis of variance data produced an F-ratio value significant at 0.05 level ($F_{(1, 310)} = 12.976$; $P < 0.05$). Therefore, it could be deduced that there is a significant difference in the administrators'

perception of accountability as a veritable tool for good governance in teachers' education. The implication of this finding is that administrators perceived accountability as a veritable tool for good governance in teachers' education differently.

Table 4: Independent t-test analysis of differences in the perception of male and female Nigerians on

Leadership Education

	N	X	Sd	Mean Diff.	Df	t-cal	P
Female	109	51.206	13.017	0.773	309	1.289	<.05
Male	202	50.979	13.961				

Results in Table 4 indicated no significant difference in the administrators' perception of accountability as a veritable tool for good governance in teachers' education based on gender (MD = 0.773; t= 1.289; P <.05). Therefore, the null hypothesis that stated that there is no significant difference in the administrators' perception of accountability as a veritable tool for good governance in teachers' education based on gender was sustained by the outcome of this study.

DISCUSSION OF FINDINGS

These findings have revealed that in spite of the advancement in teacher education, a wide gap still exist in the level of accountability in the administration of teacher education in Nigeria, which may be as a result of cultural and institutional factors inherent in the educational sector of the country. This findings support the meta-analysis report of Ayodele (2016) that search lights on corruption and non-accountability has particularly been beamed on the behaviour of public officials (civil servants, military and police personnel, elected officials etc.) and former public officials, contractors, business associates of public officials and families of public officials and not on educational industry.

The result of the statistical analysis of the second research question indicates a significant difference in the administrators' perception of accountability as a veritable tool for good governance in teachers' education. This is in line with the findings of Lock, Pilkington, Newton, and Robson, (2010) who contested that there will be school leaders who feel constrained by the regulatory framework and there will be leaders who are determined to test its limits in pursuit of what is likely to be better for their schools, staff and students. Also, Atelier Learning Solutions (ALS), (2007) conducted a meta-analysis of the research surrounding the challenges associated with the change in the orientation of the leadership role towards management and accountability, rather than leading teaching and learning.

Another significant finding of this study is that no significant difference observed in the administrators' perception of accountability as a veritable tool for good governance in teachers' education based on gender. This finding corroborates Nakpodia and Okiemute (2011) schools in Nigeria are not making any noticeable impact in achieving the set goals and objectives as well as on the nation's social-economics development despite the escalating cost-expenditure in education. Also, accountability is enriched with

internalization of good potentials along with honesty, truthfulness, loyalty, transparency and integrity (Aladenusi & Ayodele, 2011). These values define the main characteristics of authentic leadership. Thus, gender to a large extent has nothing to do with the administrators' perception of accountability.

CONCLUSION AND RECOMMENDATIONS

With the findings of this study it could be concluded that accountability in the administration of teacher education in Nigeria is not encouraging and satisfactory which may be as a result of cultural and institutional factors inherent in the educational sector of the country.

Based on the findings, it was recommended that accountability, monitoring and evaluation should be the major watch word in Nigeria educational system especially at the beginning, during and after every government financed program.

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A STUDY OF TOURIST BEHAVIOR OF CAPSULE HOTELS

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ABSTRACT

Capsule hotel is originated from Japan, it became popular among international tourists because of its irresistible price and convenient location. This research paper aims to better understand the behavior of Taiwanese tourists who stayed at capsule hotels in Japan and their optimum stimulation level (OSL) from perceived risk perspective. This research paper adopted the short form of Change Seeker Index (CSI) profile by Steenkamp & Baumgartner (1995) and collected 223 valid samples by questionnaire survey. The survey consisted of three parts: (a) background information, (b) optimum stimulation level, and (c) perceived risk. Our assumptions were that there would be significant optimum stimulation level and gender differences in perceived risk. Results of this research have shown that: (1) nearly 90% respondents collected information of capsule hotels through internet. (2) There was a statistically significant difference in the scores of physio-psychological risk between tourists with high OSL and tourists with low OSL. (3) There were statistically significant differences in the score of performance risk, financial risk and physio-psychological risk between male tourists and female tourists.

Keywords: Capsule Hotel, Optimum Stimulation Level, Perceived Risk, Taiwan

EFFECTIVE STRATEGIC PLANNING BASED ON CUSTOMER SEGMENTATION

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ABSTRACT

Abstract – In this paper, customer satisfaction cues in mobile services among Croatian IT students are examined. The purpose of this paper is to develop a model to profile the customers based on their usage patterns of services on their mobile devices in order to design a differentiated price plans and device strategies that will maximize customer satisfaction. To meet our objective, we apply unsupervised data mining technique cluster analysis on the dataset collected among the IT students. The results of the analysis are clusters of students with similar data-usage attributes and mobile preferences. The case study highlights specific issues related to segmentation in mobile communications setting and the results provide examples of the possible benefits of implementing of data mining for customer satisfaction improvement. The identified clusters can be targeted by service providers with customized plans.

Keywords – cluster analysis, customer satisfaction, customer relationship management, segmentation.

I. INTRODUCTION

Customer segmentation is widely used for targeting a smaller market and is useful for decision makers because it enables them to apply marketing mix to target a smaller market with greater precision. Also, the results of customer segmentation can be used to determine the particular competitive strategies [1]. Clustering algorithms are popularly employed in dealing with this kind of problem. In this research, we use k-means clustering algorithm. Cluster analysis based on k-means algorithm is a technique used for partitioning a set of customers into k groups in a way that each group is homogeneous with respect to certain variables based on either the similarity or the dissimilarity [7]. Considering this fact, cluster analysis is an ideal tool for segmentation. Various authors applied cluster analysis in their research. Athanassopoulos used it in domain of retail banking services in Greece [2]. Cluster analysis was used as a means of segmenting customers into homogeneous groups. The cluster membership was derived from variables that reflected socioeconomic status and form of relationship with the banking institutions [2]. Their results gave profile of the clusters within individual and business customers. The analysis revealed five clusters and authors explained profiles of customers in each cluster. Mentzer, Myers and Cheung performed segmentation for logistics services [9]. They identified specific customer segments and emphasized benefits of their approach: reduced costs, enhanced revenue, and the ability to differentiate their offering from the highly competitive marketplace [9]. Dutch researchers conducted segmentation in an industrial setting with the aim to determine segments according to achieved profit from particular group [12].

Dennis, Marsland, and Cockett [4], Lee, Suh, Kim, and Lee [8], Yang and Padmanabhan [14] all performed target customer analysis and customer segmentation. Their target customer analysis involved seeking the profitable segments of customers through analysis of their characteristics, and customer segmentation included the division of customer groups into smaller or segments, consisting of customers who are similar within each specific segment

As seen from the literature review, cluster analysis was previously used in customer segmentation, but, as far as we know, not in mobile industry targeting IT students.

In this paper we apply cluster analysis with the aim to identify different segments of IT students on the basis of demographic and behavioral data i.e., their usage patterns. The data was collected through the questionnaire among students. The analysis revealed three groups of customers. Based on the results the service providers can provide offers targeting customer's preferences.

II. RESEARCH DESCRIPTION

Clustering is the task of segmenting a heterogeneous population into a number of more homogenous clusters. Customer segmentation is a process of dividing customers into distinct groups which might require separate service mixes [13]. Customer segmentation models are generally based on various customer characteristics, including demographics and attitudinal attributes of a customer [5]. Data for this research were collected by questionnaire which was developed and carried out among students of the University of Zagreb, Faculty of Organization and Informatics. Questions in the survey are divided into several sections:

- Personal data (3),
- Questions regarding preferred mobile device (10),
- Questions regarding details of expenditures (4),
- Services which customers use (9).

The questions are presented in Table 1.

Table 1. Questionnaire description

<i>Personal data</i>	
Gender	Female Male
Age	
Monthly income	
<i>Preferred mobile device</i>	
I prefer Apple mobile phone	0 – I don't prefer 1 – I prefer
I prefer Blackberry mobile phone	
I prefer HTC mobile phone	
I prefer Samsung mobile phone	
I prefer LG mobile phone	
I prefer Motorola mobile phone	
I prefer Nokia mobile phone	
I prefer Sony mobile phone	
I prefer Huawei mobile phone	
I prefer Alcatel mobile phone	
<i>Expenditure and usage</i>	
Monthly expenditure on mobile Internet	0-500 MB 500 MB – 1 GB

	1 GB – 5 GB 5 GB – 12 GB
Total montly expenditure	
Average minutes for calls per day	Less than 10 minutes 11 – 30 minutes 31 – 60 minutes 1 – 2 hours More than 2 hours
Average SMSes per day	None 1 -10 11 – 20 More than 20
<i>Used services</i>	
Music and video download	0 – I don't use it 1 – I use it
E mail checking	
Social networking	
Stock news	
Reading documents (pdf, word)	
Reading news and jokes	
GPS facility	
Online games	
SMS/MMS	

This dataset was used to discover the usage pattern of customers and create segments that can be targeted with different contract plans based on their preferences. The patterns are discovered by means of cluster analysis. Cluster analysis divides data into groups or clusters that are relevant, useful or both. If the goal of the analysis are significant groups, then clusters should incorporate natural data structure. Cluster analysis plays an important role for the understanding and utility in many fields: psychology and other social sciences, biology, statistics, data mining, etc. "The goal of cluster analysis is to achieve mutual similarity of objects within the group and the variety of objects from different groups" [11]. The greater the similarity of objects within the group and the larger the difference between the group the better the clustering. There are three simple algorithms included in the cluster analysis: k-means clustering, hierarchical clustering and DBSCAN. The first one will be used in this paper since it is widely accepted and mostly used.

III. RESEARCH RESULTS

After data preparation, a standard k-means clustering was performed on the data is SAS JMP 11 [10]. K-means clustering means that n users (in our case the customers – students) are divided into k clusters (groups). Initially, five clusters were created. However, with five clusters there was too much variability among the clusters to segment customers. In the next stage, three clusters were created. This number of clusters seemed adequate for the segmentation. Below this level there did not seem to be enough variability to create sensible clusters. Table 2 shows the number of customers in each cluster.

Table 2. Number of customers in clusters

Clusters	Number of customers
Group 1	25
Group 2	15
Group 3	34

Graphical representation of clusters is given in Figure 1.

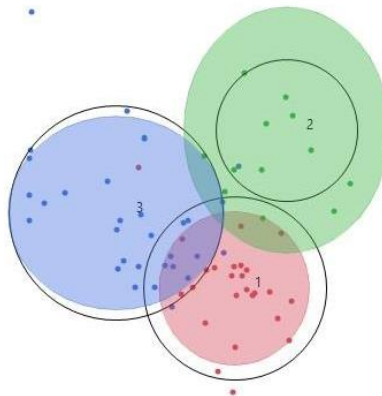


Figure 1. Graphical representation of clusters

Figure demonstrates low variability within clusters. Hereinafter, we discuss the specifics of each group:

Group 1:

- They prefer LG and Huawei mobile phones in small degree,
- They do not prefer Motorola and Alcatel mobile phones,
- They have high monthly expenditure on mobile internet compared to the other groups,
- They have high average duration of voice calls,
- They have highest monthly expenditure on services,
- They mostly have an affinity towards Apple,
- They are heavy users of GPRS services.

An effective way of targeting this kind of customers would be selling low rate GPRS with free voice calls. Since they are heavy users of GPRS services they can be offered plans in which the rates are low for high usage.

Group 2:

- They use HTC, Samsung, LG, Huawei and Sony mobile devices,
- Average internet usage and call duration is smaller than first group,
- High percentage of customers play games,
- High percentage of customers who check stocks.

This segment has the group of clients with very specific needs and preferences, but spends the least on phone bills. We can say that this group is agnostic to the brand of the phone. Offers based on devices would probably not be a good option for them.

Group 3:

- They do not prefer Blackberry and Huawei mobile phones,
- They prefer Nokia mobile phones,
- They incur a low monthly expenditure on mobile services,
- They send a small number of emails and SMSes, and have small average duration of calls,
- They don't read news and these are the users who are highly socially active on their phones.

This group consists of new generation of users who are highly socially active on their phones. Such customers can be targeted by introducing Nokia based offers in the form of social networking packages. The packages can have unlimited access to social networking sites.

IV. CONCLUSION

Customer needs are extremely heterogenous and the segmentation strategy has been widely used in the business environment. Customer segmentation involves clustering a whole market into several meaningful segments because different people have different needs. With the aim of meeting these various needs, the market has to be divided into smaller segments in order for the marketers to have the ability to plan good positioning of its products and services. In this paper we have performed the segmentation of mobile phone users. There are multiple beneficiaries of this kind of analysis.

- Telecommunications companies - they find out which items and services are mostly used which enables them to create new tariffs. The devices that are not popular can be offered to the users to whom mobile device brand is not important.

- Producers of mobile devices - they know which group of people use their mobile devices and can analyze which items are important to them (messages, voice calls, etc.). To increase the number of users they can develop the additional tools that make the task easier for these users. For example, if a user uses Samsung and also uses a lot of voice calls, then Samsung may develop a new application built in all Samsung devices that recognize the voice that we want to call. If most users use Dropbox then producers should sign an additional agreement with them to provide all users who purchase such devices additional 5GB of free Dropbox.

- Customers – they get cheaper rates because the telecommunications companies have adapted to their needs; they receive mobile devices with new improved specifications that have been adapted to their needs.

Contribution of this paper is application of cluster analysis approach for segmentation in specific domain: IT students. Given the steady increase in the number of students enrolled in IT programs potentially they may represent interesting and fruitful market for telecommunication industry. The rapid development of technology is a key limiting factor here and telecommunications companies need to be in constant growth with new innovative offerings to differentiate from the large number of competitors. The limitation of research in this context is the ongoing development of mobile technology and the need for conducting such analyses is increasing so the telecommunications companies could retain current customers and eventually attract new customers.

In the future research measurement of customer perceptions concerning the mobile preferences should expand and take a longitudinal nature in order to assess the extent to which individual students bear the burden

of customer satisfaction and the way customers perceive the efforts made by their mobile providers to supply adequate services

Such an analysis can only enhance the buyer - seller relationship and this kind of analysis should be carried out not only in this context, but also in many other domains.

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DESIGN AND IMPLEMENTATION OF MICROCONTROLLER BASED AUTOMATIC TOLL GATE CONTROL AND TAX PAYMENT SYSTEM USING RFID TECHNOLOGY

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ABSTRACT

This paper presentation was based on toll gate control and tax payment system using Radio Frequency Identification (RFID). Access based entrance/exit using smart technology is rapidly becoming the way of the future for many businesses, government buildings, hospitals, and other establishments requiring secured but easy to control access solutions. Today, there is a huge rush in the toll plazas in order to pay the toll tax. Therefore in order to reduce the traffic jam, save time, and other inconveniences associated with manual control/payment systems, we have designed project for the automation in toll tax payment using combination of RFID technology and Load cell technology. This report explains the design and implantation of automation in toll plaza and mark a quantum leap forward towards improving the monitoring of vehicles travelling in predetermine routes. The aim of our project is to design a system, which automatically identifies an approaching vehicle and records the vehicle's number /automatically opens the toll gate and a predetermined amount is automatically deducted from its account. This translates to reduce traffic congestion at toll plazas and helps to lower fuel consumption. An RFID system consists of a reader device and a transponder. A transponder or tag has a unique serial number which is identified by the reader. The RFID has been interfaced with AT89C51 to provide secured access. The relevant messages are displayed on a 16x2 LCD. The RFID automated access is very cost effective and secure to use. RFID technology is based on the concept of magnetic coupling, which is the principle that current flowing in one circuit can induce current flow in another circuit through a magnetic field generated in the space between the circuits. The AT8951 microcontroller serves as the brain of the whole system and it is used to control, coordinate, manage and direct all the activities of the system.

THE ANALYSIS OF PARTICIPATION IN ADULT EDUCATION ACTIVITIES IN TAIWAN

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ABSTRACT

The aim of the study was to explore the adults' participation in formal, non-formal and informal learning activities in Taiwan. To accomplish the aim, "secondary data analysis" was used. The data was collected by the Ministry of Education through Computer-Assisted Telephone Interviewing System in 2009. 10,000 samples were withdrawn from the 16 year-old and above population. The study tried to analyze the participation rate in 2008, the relationship between formal and informal learning activities, and compare the difference in different socio-demographic variables, including gender, generation, social status and urban-rural living area, etc. The results of this study were as the followings:

1. The adult education participation rate was 29.1% in 2008. The informal learning, such as reading books and magazines, watching television programs and listening to the radio took around 7.46 hours per week in average. The more hours they participated in informal learning, the lower rates they participated in formal and non-formal learning activities.
2. The participation rate of female was 32.5%, while the rate of male was 25.7%; the rate of generation x was 35.2%, which was the highest among other generations; the rate of participation in metro area was 34.5% which was the highest than in other areas; the rate of upper class was 58.7%, which was the highest class among other class.
3. The average hours of reading, watching television programs and listening to the radio by the late-life generation was lower than the generation y, the generation x and the baby boomers. The adults who lived in metro area, urban industrial and commercial area listening to the radio was more than those who lived in the elderly-remote towns. The adults who lived in metro area and urban industrial and commercial area participating in informal learning, the average hour was longer than adults who lived in new town, traditional industrial town, lower development of township and elderly remote towns. The average hours of upper class participated in informal learning was longer than the middle classes and the lower classes in society.

Keywords: adult learning, formal and non-formal learning, informal learning, secondary data analysis

THE IMPACT OF INCOME INEQUALITY ON VOLUNTEERING ACROSS MUNICIPALITIES IN THE SEOUL METROPOLITAN AREA OF KOREA: A MULTI-LEVEL ANALAYSIS

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ABSTRACT

We explore the individual- and municipality-level predictors of volunteering in Seoul, Korea, and in particular, how changes in income inequality measured at the municipality level affect the volunteer rate measured at the individual level. We use multi-level modelling to analyse representative data on 44,185 individuals in 25 municipalities in Seoul, merged with census data containing various municipality-level measures. Our findings suggest that the income inequality of a municipality is significantly negatively related to the volunteer rate, controlling for individual-level predictors such as gender, income, and education, and for municipality-level predictors such as poverty rate, crime rate, and residential instability.

Keywords— multi-level analysis, income inequality, volunteering, volunteer management

FACTORS INFLUENCING MENTAL HEALTH STATUS OF COLLEGE STUDENTS IN GUAM

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ABSTRACT

Objectives: (1) To explore the various factors that may influence stress level. (2) To determine the correlations of stress with anxiety and depression. (3) To provide the community with knowledge to better the mental health services for college students. *Methods:* A five-year study, using one 83-question survey regarding depression, anxiety, and stress with the following instruments: Depression Anxiety Stress Scale (DASS-42), College Readjustment Rating Scale and demographic data, was conducted among 311 male and female samples from Guam Community College (GCC) and the University of Guam (UOG) students. *Results:* Of the 311 student samples recruited from this study: (1) gender reveals a significant difference in only in anxiety levels, with female college students reporting higher anxiety than their male counterparts; (2) change in sleeping habits is the most commonly reported life events experienced by college students, followed by increased in workload, change in eating habits, lower than expected grade, change in social activities, and outstanding achievement; and (3) a strong correlation exists between stress, anxiety and depression levels, indicating that there is the need to increase awareness to provides appropriate resources for college students on Guam.

Nursing implications derived from the study are: (1) promoting future studies to increase awareness in mental health status among college students on Guam; and (2) promoting accessible preventive care on campus by educating on the importance of sleep, time management, and proper nutrition in buffering the effects of the development of psychological problems among college students in Guam.

A STUDY ON THE RESPONSE OF EUROPE TOWARDS REFUGEES: FOCUSED ON THE REFUGEES FROM FORMER YUGOSLAVIA AND SYRIA

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ABSTRACT

These days, the European Union (EU) is facing the biggest challenge from refugees problem. Suddenly increased refugees resulted from Syrian civil war, swarming over to the EU and is suffering general fatigue and the Mediterranean coast, the European Union, EU leaders held an emergency meeting and measures and certainly hadn't found a solution but to discuss revised down. Europe is now ahead of a civil war in Yugoslavia, is due to have gained even at the time of the many refugees. Of course, Europe at the time of social and economic situations of European society now and there are several difference from each other in the same status as refugees but in spite of Yugoslavia. Obviously there is a difference for the attitude of the EU to accept refugees and Syrian refugees. This study, the European Union and international refugee conventions and information on refugee protection, observing and Yugoslavia, the civil war refugee situation and now Syria for refugees. To see things and accept to compare the positions of the European Union. Refugees deserve to have human rights protected and the international community's attention and support is needed. Currently, many Syrian refugees that come to the European Union is working together international society by sharing the responsibility and moral obligations to Syrian refugees.

Keywords—Europe, Refugees, Former Yugoslavia, Syria.

INTRODUCTION

The 20th century is characterized by a long spell of wars, big and small, around the globe. Almost all countries were divided into the two camps—capitalist and communist—and got opposed to each other in the Vietnam War and in the Korean War as well as in both World Wars and the ideological, religious, and racial issues constantly caused disputes in every corner of the world. Due to lots of difficulties, including financial ones caused by the political instability and wars, people began to be displaced during this period and the international society is still having difficulty with the issue of refugees in the early part of the 21st century.

According to the report released by the United Nations High Commissioner for Refugees (UNHCR) in 2014, Europe is the continent that has accommodated the largest number of refugees. One of the possible reasons lots of refugees come to Europe is the situation relating to the human rights in the continent.

Article 2 of the 1992 Maastricht Treaty stresses that the European Union (EU) has been established on the basis of the value of respect for human rights and EU's concerns about human rights can be found in the EU Charter of Fundamental Rights. Article 18 of the Charter specifies political exile and refugee protection; Article 21 provides that every resident in EU, though not an EU citizen, regardless of nationality, shall not be subjected to discrimination based on gender, race, skin color, social origin, language, religion, belief, political view, minority status, wealth, birth, disability, age, or sexual orientation.

1. Theoretical Consideration

1.1. International Agencies and Agreements Relating to Refugees

1.1.1. UN Refugee Agency

The United Nations High Commissioner for Refugees (UNHCR), which was founded to solve the

problem related to refugees in Europe in 1949 after the World War and was established in Geneva, Switzerland on December 14, 1950, is known as the UN Refugee Agency.

The UN Refugee Agency is leading the organization as a global player to solve the problems with refugees around the globe and protect their rights and happiness. UNHCR aims to allow any refugee to have the right to ask for protection, help them settle in the third country and locally assimilate, and make efforts to help them return home spontaneously.

Both the Convention Relating to the Status of Refugees and the Protocol Relating to the Status of Refugees are usually called international refugee conventions. I will describe them briefly.

1.1.2. Convention Relating to the Status of Refugees (1951)

As a multilateral treaty relating to refugees, which is widely applied to the international society, the Convention Relating to the Status of Refugees is usually called the Geneva Refugee Convention. This convention was adopted by the United Nations (UN) in 1951 to solve the problems with refugees after the Second World War and defines a refugee as “a person who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country as a result of events that occurred prior to January 1, 1951; or who, not having a nationality and being outside of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.”

1.1.3. Protocol Relating to the Status of Refugees (1967)

The Convention Relating to the Status of Refugees defines a refugee and prescribes the procedure for recognizing a refugee and his status and rights in details but specifies the spatial and temporal restrictions—in Europe before the year of 1951—in the definition of a refugee.

It was written on January 31, 1967 and came into effect on October 4 the same year. 126 countries were directly concerned. It is also called the Refugee Protocol and is composed of a preamble and 11 articles. This New York Protocol was written by UN in response to the occurrence of refugees in every corner of the world after 1951.

UN removed the spatial and temporal restrictions from the 1951 refugee convention through the brief convention called the Protocol Relating to the Status of Refugees in 1967 and enabled the prescriptions of the convention to be applied, without any spatial and temporal restriction, to any refugee from any part of the world after 1951.

2. EU Treaties Related to Refugees

2.1. Schengen Agreement

This agreement originates in the announcement of the international agreement by the five EU member countries—Germany, France, and Benelux (Belgium, the Netherlands, and Luxemburg)—in Schengen, Luxemburg on June 14, 1985 to open the national borders and share information. Briefly speaking, this agreement has enabled people to pass freely without a passport within the Schengen countries.

The Schengen Agreement is a plan for simplifying immigration procedure, allowing people to move freely and realizing revitalization, but is an important agreement related to survival for refugees. This is because refugees who arrive alive in Mediterranean regions of Europe—Italy, Spain, Greece, and Portugal—are granted refugee status and are allowed to move freely within Europe. So this agreement is one of the reasons why refugees run a risk to come to Europe.

2.2. Dublin Regulation

As a regulation relating to the principles of asylum application for refugees coming to Europe, this is a

kind of EU international law. The core prescription of the Regulation is that any refugee coming to Europe shall apply for asylum in the state through which he/she first entered the EU.

As of 2015, the member states of the Regulation include 28 EU member states and 4 non-EU member states (Norway, Iceland, Switzerland, and Liechtenstein).

The Dublin Regulation aims, first, to make the application review more efficient and prevent so-called 'refuge shopping'—refugees' choosing a state for asylum—by preventing an applicant from sumitting applications to multiple member states and, second, to prevent states receiving an application for asylum from avoiding the responsibility for protecting the refugee.

However, the Dublin Regulation has become a target of criticism because it was regarded as a cause of refugees' concentrating partially on several countries within Europe. This is because it puts an excessive burden of refugee accommodation on several states, including Greece and Italy, which serve as gateways to Europe.

As the problems with refugees coming to Mediterranean countries have become serious, EU urged to revise the prescriptions relating to refugee accommodation and asylum application entirely and suggested implementing the so-called quota system for the member states to accommodate refugees equally.

2.3. *Treaty of Amsterdam*

The Treaty of Amsterdam was concluded to more effectively build the political system for realizing European integration determined by the Maastricht Treaty—the European integration treaty for political, economic, and monetary integration of Europe—which was concluded in 1991. (The Treaty of Amsterdam contains the revision of the Maastricht Treaty, which failed to lead to integration in three sides—diplomacy/security, economics/currency, and society—as expected)

The Treaty of Amsterdam deals with the respect for the civil rights and the rights of the individuals and has reinforced democratic control by allowing the European Parliament to get more involved in policy-making by EU. The Treaty also addresses the issue of employment, freedom of communities, security, and judicial policies and discusses agency reform in preparation for expansion of EU and reinforcement of the Common Foreign and Security Policy (CFSP).

In addition, it prescribes protection of fundamental human rights, including gender equality and nondiscrimination, and visas, asylum, and immigration.

Articles 61 to 69 of Title 4 of the Treaty have made it clear that a common policy shall be made within a period of five years after the entry into force of the Treaty, under the title of VISAS, ASYLUM, IMMIGRATION AND OTHER POLICIES RELATED TO FREE MOVEMENT OF PERSONS. In particular, Article 63 provides that the minimum standards shall be made with respect to refugees, asylum, temporary protection, and so on.

3. *Crisis of Refugees during Civil War in Former Yugoslavia*

This study discussed the issue of refugees and the position of the European society, focusing on the separatist-independence movement (1991-1995) of former Yugoslavia during the civil war in the country.

Yugoslavia, a mosaic region composed of seven principal ethnic groups and minorities with different religions and languages, was stably ruled by Josip Broz Tito, the father of Yugoslavia, for 35 years after the liberation from Nazi ruling in 1945. His death in 1980 led to absence of a control tower—the one playing the central role—which caused a chain of confusing situations; moreover, the aggravation of the political and economic problems and the wind of democratization due to the fall of the Berlin Walls in 1989 began to stimulate the separatist-independence movement of Yugoslavia.

Croatia and Slovenia proclaimed their withdrawal from Yugoslavia in June 1991 and the Yugoslavian troop invaded Croatia to suppress the independence of the two regions and the invasion led to the civil war in former Yugoslavia. The civil war expanded from Croatia and Slovenia to Bosnia and Herzegovina and Kosovo and attracted attention of the international society because it was miserable and cruel enough to produce a new expression, 'ethnic cleansing'.

The civil war in former Yugoslavia with 140,000 victims was the cruelest war after the end of the Cold

War and the disputes intensified, with Yugoslavia divided into independent regions—Croatia (1991), Slovenia (1991), Macedonia (1991), Bosnia and Herzegovina (1992), and Serbia and Montenegro (new Yugoslavia)—as a result of the civil war. Since Kosovo's one-sided declaration of independence from Serbia in 2008, the former Yugoslavian region has had an apple of discord.

Specific discussions about the policies related to refugees and the strategies for responding to them within EU probably originated in the problems with a great number of refugees within Europe as a result of the civil war in former Yugoslavia early in the 1990s.

The Yugoslavian Civil War caused at least 14,000 victims and 2.3 million refugees. At least 10% of the former Yugoslavian population totaling 24 million had lost their base for life, wandered to flee from the war, and become a new burden on Europe after the end of the Cold War.

At the early stage of the occurrence of the problems with refugees after the ethnic conflicts and the civil war, the European countries, including the then European Community (EC), and UN made somewhat immature responses and failed to make progress in solving the problems with East Europe and refugees. International societies, including Europe and UN, began to discuss new plans for solving the problems with the great number of refugees and strategies for responding to them; ultimately, European countries made a policy for temporary protection of refugees, according to the proposal by UNHCR. UNHCR promised repatriation of East European refugees scattered around the Europe after the end of the civil war and made it clear that refugees were not allowed to apply for political exile during their stay in European countries under temporary protection; consequently, European governments were able to remove their internal burden and become more positive toward refugee accommodation.

Germany accommodated the largest number of refugees—of 1,354,000 refugees staying in Germany, a total of 350,000 were from this region—by 1994; of a total of 152,300 refugees staying in France, about 15,000 were from this region; and of a total of 20,000 refugees staying in the United Kingdom, 1,970 were from this region.

The need to maintain the solidarity among the member states with respect to the policy for temporary protection and to secure finances to respond to the huge influx of refugees led to establishment of the European Refuge Fund in 2000; therefore, EU has made a specific framework for solving the problems with refugees within Europe.

The Europe Summit Meeting held in Tampere, Finland in October 1999 determined to make an EU joint policy for asylum and immigration; consequently, Eurodac was established with the purpose of building a joint information system for identification of refugees within Europe in 2003.

4. Responses of EU towards Syrian Refugees

The Syrian Civil War started from Jasmine Revolution (Arab Spring) that spread over the Arab world in 2011. It can be said that the Syrian Civil War is an international war in which many countries, including Israel, Turkey, Saudi Arabia, Qatar, Iran, the United States, and other western countries, intervene due to complaints about long-term seizure of power by the Assad family from Hafiz-al-Asad (1930-2000), who had held on to power for a long time after taking power by a military coup in 1971, to the incumbent President Bashar al-Assad, who took power in 2000, demand for democratization, aggravating economy, problems with religious differences (government-Shiite vs. antigovernment-Sunni), intervention of Kurd (Sunni) and IS (for the purpose of founding an independent state), and East Asian hegemony.

Due to the powers' pursuit of political gains, the ordinary people have no choice but to wander as refugees to survive and many of them have their human rights violated during their wandering.

It is now estimated that there are about 12 million Syrian refugees: Syria accommodates 7.5 million refugees, Lebanon 1.12 million, Jordan 630,000, and Turkey 1.94 million. Most of the Syrian refugees who failed to settle in neighboring countries choose to take a journey to Europe with the aim of starting a new life. The islands (Lampedusa and Lesbos) of Mediterranean countries, including Italy and Greece, have become symbols of maritime refugees and an average of 600 refugees a day reportedly come to Greece. This study aimed to discuss EU's responses to refugees coming to Europe.

EU has failed to remove the aftermath of the 2008 global financial crisis and EU member states display a negative view of refugees and are opposed to the influx of refugees because it takes a large budget to

accommodate refugees coming to every corner of Europe.

Among the EU member states, East and West European countries show quite different attitudes toward refugees according to their situations, particularly their economic conditions. Most of the West European countries, including Germany and France, strongly demand the Refugee Quota System that requires EU member states to accommodate a quota of refugees, whereas the East European countries, including Hungary, are strongly opposed to this system.

The EU executive committee promoted the plan for increasing the size of refugee accommodation in its member states to 160,000 and Germany decided to accommodate 40,000 refugees, France at least 30,000, and Spain about 15,000 among the West European countries. Instead of participating in the EU plan for accommodating refugees, the United Kingdom reported its own refugee accommodation plan and decided to accommodate 20,000 Syrian refugees in the coming five years.

East European countries are negative toward refugee accommodation for financial and religious reasons. In particular, Hungary among the East European countries refuses to accommodate refugees. On the ground that the influx of refugees can damage the values and identity of Europe rooted in Christianity, the country closed the border with Serbia, set wire entanglements, and responded with tear gas and water canon to hundreds of refugees.

However, the terrorism committed in Paris, France on November 13, 2015 has weakened the refugee policies of Europe and the continent got faced with a new task: eradication of terrorists disguised as refugees. Although European Commission President Jean Claude Juncker denied the need to revise the refugee policies of EU following the terrorism in Paris, France blocked its border entirely and its neighboring country, Belgium, also reinforced checks on its border. North European countries that had been generous about refugee policies also began to control their borders and manage immigrants. East European countries that began refusing to accommodate refugees at the early stage of the refugee influx make it clear that they cannot accommodate any more refugees.

Due to the ever-changing situations of Europe and the continuous influx of refugees, EU is frequently modifying its responses and policies. However, Syrian refugees are still coming to Europe continuously and EU and each of its member states are making constant efforts to solve the problems with refugees.

5. Conclusion

While both former Yugoslavia and Syria had the common situation with the civil war largely due to political conflicts, aggravating economy, religious problems, and national sentiments, the ethnic conflicts occurred in different continents—Europe and East Asia—in the 20th and 21st century, respectively. However, both civil wars produced lots of refugees and EU has accommodated the majority of them.

EU accommodated most of the refugees from former Yugoslavia in the same continent; however, its member states take different positions with strict attitudes toward refugees coming to Europe due to the Syrian Civil War. When refugees first came to Europe due to these two civil wars, European countries were commonly negative in accommodating them. However, neighboring European countries were relatively more willing to accommodate Yugoslavian refugees both because the Yugoslavian Civil War occurred in the same continent and because of the similarity in culture and in life and the temporary protection policy.

However, EU shows a different attitude toward the refugees from Syria. While West European countries, including Germany, among the EU member states respecting human dignity and values, take the lead in accommodating refugees, East European countries that experienced the Yugoslavian Civil War are against accommodation of refugees. In addition to East European countries, some West European countries, including France and Belgium, who had been positive about refugee accommodation, have suspended the Schengen Agreement and been on special guard to reinforce the procedure of border-crossing and checks since the terrorism in Paris.

It is not easy to accommodate refugees because all of the political, economic, and social factors as well as internal security should be taken into account. Nevertheless, not only EU but also people around the globe and the international society should pay attention to the problems with refugees and make efforts to solve them. Anyone can become a refugee, who also has a right to get respect for their dignity, values, and happiness as a human being. Therefore, many countries to which refugees come around the globe and the international society

as well as EU currently confronting a serious crisis due to the Syrian refugees need to pay more attention to the problems with refugees and help solve them.

For the existing East European people displaced by the Yugoslavian Civil War and those displaced by the current Syrian Civil War, EU, international society, and the whole world need to cooperate with one another to share responsibilities, discharge moral obligations relating to refugees, and fulfill their humanitarian responsibilities.

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THE ASSOCIATION BETWEEN THE NATIONAL INTELLECTUAL CAPITAL COMPONENTS AND THE QUALITY OF LIFE

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ABSTRACT

The study measures the association between the national intellectual capital components and the quality of life in the 24 European Union countries. The overall quality of life ranking lists Austria at the top and Romania at the bottom. Quality of life shows the highest positive correlation with the financial capital index throughout the observed period of time. Regarding the human capital, the components that offer room for improvement seem to be the employee training and total public expenditure on education. Regarding the market and process capital, people seem to perceive the higher quality of life in countries with better transparency, government efficiency and capital availability. What is interesting is that all the components of the renewal capital are positively correlated with quality of life. The interplay between financial capital, renewal capital and quality of life should be further investigated in future research. The research findings provide valuable information for policy makers when formulating effective strategies for strengthening the perceived quality of life in their countries.

Keywords – national intellectual capital, quality of life

I. INTRODUCTION

National intellectual capital (NIC) refers to the national knowledge and capabilities involved in a society's value creation processes [15]. It represents the background of a nation's wealth creation process [2] and is considered to be a crucial ingredient in the development of the country.

According to Lin and Edvinsson's methodology [13], national intellectual capital consists of five components: human capital, market capital, process capital, renewal capital and financial capital. Human capital consists of the knowledge about facts, laws and principles, in addition to the teamwork and communication skills [21]. The second component of national capital i.e., market capital represents a country's capability and success in providing attractive and competitive solutions to meet the needs of its international clients and sharing its knowledge with the rest of the world [7]. Process capital refers to the overall environment, government, capital and information technology that facilitates the creation and the dissemination of information and knowledge [7]. The fourth type of national intellectual capital is renewal capital that refers to research and development activities. The financial capital is represented by the GDP per capita adjusted for purchasing power parity.

The NIC approach provides a new way of analyzing knowledge and its influence on the development of the society. Intellectual capital is the source of the competencies and capabilities deemed essential for national economic growth, human development, and quality of life [6]. The researchers are often focused on confirming the influence of NIC on GDP, but recently its broader outcomes are investigated such as innovation, competitiveness, productivity, sustainable development, creativity and quality of life, read more in [16]). The quality of life is in the focus of this paper. The objective of the research presented here is to examine the association of national intellectual components with the perceived quality of life in the European Union countries.

The paper is organized as follows. In the next section, the quality of life concept is explained in more detail. The 3rd section discusses the data and the measurements that were used. Section 4 presents the results, while section 5 concludes the paper.

II. QUALITY OF LIFE CONCEPT

Quality of life is one of the major issues in every country. Diener [3] gives a subjective definition of quality of life by stating that it is desirable for people themselves to think that they are living good lives and that it is democratic to give each individual the right to decide whether his or her life is worthwhile. Quality of life indicates the level in which human life has desirable characteristics, sometimes with a focus on external aspects (e.g.. income level), sometimes with the emphasis on the internal aspects (e.g. life satisfaction). Most of the authors under the concept of quality of life involve the incorporation of objective and subjective aspects and the satisfaction with them [4; 5; 8]. Davis, Fine-Davis and Meehan [1] conducted the first research about the satisfaction and happiness of Europe`s residents. In the study *Quality of Life in Europe* [4], quality of life is also defined as the overall well-being within society which enables the achievement of the objectives for every member of society, and it is measured by different economic, but also non-economic indicators. Alber et. al. [4] point out that the quality of life is a broad concept that deals with the overall welfare of the society with the role to enable people to achieve their goals and to select the ideal way of life. Fahey et al. [5] explain quality of life as the total well-being of people living in a particular area. Well-being not only reflects the living conditions and the control of resources in all domains of life, but also the ways in which people respond and feel about their lives in these domains. The quality of life is hard to measure precisely because, in addition to material well-being (living standards), it includes non-material, intangible components such as the quality of the environment, national security, personal security, political and economic freedom, innovation, happiness [8]. Diener et al. [10; 12] point out that economically developed societies have many indicators which evaluate the quality of life in society; nations, cities and business organizations often measure important aspects of life in order to enable decision makers information that are used to increase the quality of life.

The list of indices, indicators and studies involving the measurement of quality of life aspects at European and world level is quite long. Here are some of the most popular and most commonly used: Gross National Happiness – GNH emerged with the aim of replacing GDP as a measure of society`s progress [17], World Database of Happiness from Netherlands [22], Happy Planet Index [18], National Accounts of Well-being [11], World Values Survey – WVS [23], General Social Survey within which extensive research is carried out and certain parts are related to questions about well-being of citizens in the country [20], European Quality of Life Survey [14] and Quality of Life Index. Quality of life index was developed by The Economist Intelligence Unit – EIU (independent part of The Economist Group) which connects results of subjective surveys of life satisfaction and objective determinants of the quality of life in the countries. The index was calculated for 111 countries in the 2005. The rankings are based on a scale from 0 (those with the lowest quality of life) to 10 (the country with the highest quality of life). More information about the index can be found in the publication *The World in 2005* [9]. The conceptualization of quality of life used in this paper is the one used in the IMD World Competitiveness Center research [19]. They measure quality of life on the scale from 0 to 10, by survey. Each respondent is asked to evaluate *Quality of life is high* statement for the country they live in. This paper endeavors to address the following research questions:

- 1) What is the current state of perceived quality of life in the European Union countries?
- 2) Is there a positive linear association between national intellectual components and quality of life in the European Union countries?
- 3) What are the implications for future increase of quality of life in the European Union?

III. METHODOLOGY

In this research we have measured national intellectual capital index for the European Union countries in the 5-year period: from 2008 to 2012 by using Lin and Edvinsson`s methodology [13]. The measurement of national intellectual capital requires the definition of a complex set of variables. According to Lin and Edvinsson`s methodology, national intellectual capital consists of five components: human capital, market capital, process capital, renewal capital and financial capital. In addition, we are deconstructing the variables

of each component. Human capital includes skilled labor, employee training, literacy rate, higher education enrolment, pupil-teacher ratio, internet subscribers and public expenditure on education. Market capital consists of corporate tax encouragement, cross-border venture, openness to foreign culture, attitudes toward globalization, transparency, country image and exports of goods. Process capital encompasses business competition environment, government efficiency, intellectual property rights protection, capital availability, computers in use per capita, convenience of establishing new firms and the number of mobile phone subscribers. Renewal capital includes business R&D spending, basic research, R&D spending/GDP, R&D researchers, cooperation between universities and enterprises, scientific articles and patents per capita, while financial capital refers to the GDP per capita. The data for these indicators was collected from the IMD World Competitiveness database [19] and the OECD database [21].

Quality of life is measured by the IMD World Competitiveness Center. IMD World Competitiveness Center provides a unique and comprehensive database on the competitiveness of nations. The objective of their survey is to help measure competitiveness issues that are not easily quantifiable, such as quality of life. Survey responses reflect the perceptions of global business executives about the present and future of competitiveness. Survey participants are asked to evaluate the present and expected competitiveness conditions of the country in which they have lived and worked for the past year. The data obtained are on a 0 – 10 scale. The World Competitiveness Yearbook consists of the criteria grouped into 4 main factors divided into 20 sub-factors: economic performance, government efficiency, business efficiency, and infrastructure. Quality of life is a sub-factor in the fourth factor i.e., infrastructure measured as the survey data which assess quality of life as it is perceived.

IV. RESULTS

Table 1 presents the measured perceived quality of life on the scale from 0 to 10. Austria scores highest in quality of life (9.65), followed by Denmark (9.42) and Germany (9.28). At the end of the list are Romania (1.48), Bulgaria (2.3) and Hungary (4.05).

Table 1: Quality of life in European Union countries [12]

Country	Quality of life	Country	Quality of life
Austria	9.65	Italy	7.19
Denmark	9.42	Portugal	6.10
Germany	9.28	Slovenia	6.06
Luxembourg	9.17	Greece	5.53
Sweden	9.15	Lithuania	5.49
Netherlands	9.09	Poland	5.26
Finland	8.91	Slovakia	5.14
Belgium	8.51	Estonia	5.08
France	8.16	Hungary	4.05
United Kingdom	7.48	Bulgaria	2.3
Czech Republic	7.33	Romania	1.48
Spain	7.26		

Hereinafter, we empirically investigate the association between national capital components and the quality of life by applying correlation analysis. The correlation between quality of life and national intellectual capital sub-indices for the 5-year period is presented in Table 2. In each of the observed years quality of life shows the strongest positive correlation with the financial capital index, followed by the process capital index and renewal capital index which both have consistently high correlation coefficients with quality of life throughout the observed years. The correlation coefficient between human capital index and quality of life rises from 0.725 in the year 2008 to 0.763 in the year 2012. The lowest of the observed correlation coefficients

are found between market capital index and quality of life ranging from 0.540 in the year 2010 to 0.673 in the year 2009.

Table 2 Correlation between quality of life and national intellectual capital index components

	Year		HC index	MC index	PC index	RC index	FC index	NIC index
Quality of life	2008	Pearson Correlation	,725**	,630**	,811**	,809**	,899**	,858**
		Sig. (2-tailed)	,000	,001	,000	,000	,000	,000
		N	24	24	24	24	24	24
	2009	Pearson Correlation	,739**	,673**	,829**	,844**	,877**	,868**
		Sig. (2-tailed)	,000	,000	,000	,000	,000	,000
		N	24	24	24	24	24	24
	2010	Pearson Correlation	,747**	,540**	,788**	,832**	,854**	,839**
		Sig. (2-tailed)	,000	,006	,000	,000	,000	,000
		N	24	24	24	24	24	24
	2011	Pearson Correlation	,745**	,552**	,768**	,799**	,888**	,822**
		Sig. (2-tailed)	,000	,005	,000	,000	,000	,000
		N	24	24	24	24	24	24
	2012	Pearson Correlation	,763**	,627**	,786**	,854**	,888**	,861**
		Sig. (2-tailed)	,000	,001	,000	,000	,000	,000
		N	24	24	24	24	24	24

** . Correlation is significant at the 0.01 level (2-tailed).

From the seven variables that make up the human capital index, four of them seem to be associated to the quality of life (can be seen in Table 3). The highest correlation coefficient is observed between the internet users and the quality of life, followed by the correlation coefficient between public expenditure on education and quality of life. Statistically significant correlation for the quality of life also exists with the variables employee training and skilled labor. The correlation with quality of life is not statistically significant for the variables literacy rate, higher education enrollment and pupil teacher ratio.

Table 3: Correlation between Quality of life and Human capital index components

		HC	SL	ET	LR	HEE	PTR	IU	PEOE
Quality of life	Pearson Correlation	,763**	,464*	,661**	,341	,371	-,022	,781**	,690**
	Sig. (2-tailed)	,000	,022	,000	,103	,074	,919	,000	,000
	N	24	24	24	24	24	24	24	24

Notes: HC – HC index; SL – Skilled labour; ET – Employee training; LR – Literacy rate; HEE – Higher education enrollment, PTR – Pupil teacher ratio, IU – Internet users; PEOE – Public expenditure on education

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

From the seven variables that make up the market capital index, five of them seem to be associated to the quality of life which is presented in Table 4. The highest correlation coefficient is observed between the country image and the quality of life, followed by the correlation coefficient between transparency and quality

of life. Statistically significant correlation for the quality of life also exists with the variables corporate tax encouragement, crossborder venture and attitudes towards globalization. The correlation with quality of life is not statistically significant for the variables openness to foreign culture and export of goods.

Table 4: Correlation between Quality of life and Market capital index components

		MC	CTE	CV	OTFC	ATG	T	CI	EOG
Quality of life	Pearson Correlation	,627**	,608**	,569**	,369	,476*	,719**	,756**	-,145
	Sig. (2-tailed)	,001	,002	,004	,076	,019	,000	,000	,498
	N	24	24	24	24	24	24	24	24

Notes: MC – MC index; CTE – Corporate tax encouragement; CV – Crossborder venture; OTFC – Openness to foreign culture; ATG – Attitudes towards globalization; T – Transparency; CI – Country Image; EOG – Export of goods

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5 presents the results of the correlation analysis for the variable quality of life on one side and the process capital index components on the other. From the seven variables that make up the process capital index, five of them seem to be positively linearly associated to the quality of life, those being intellectual property rights protection, business competition environment, computers in use per capita, government efficiency and capital availability. There is no statistically significant correlation between quality of life on one side and convenience of establishing new firms and mobile phone subscribers on the other.

Table 5: Correlation between Quality of life and Process capital index components

		PC	BCE	GE	IPRP	CA	CIUPC	COENF	MPS
Quality of life	Pearson Correlation	,786**	,857**	,671**	,895**	,587**	,843**	,293	,028
	Sig. (2-tailed)	,000	,000	,000	,000	,003	,000	,164	,895
	N	24	24	24	24	24	24	24	24

Notes: PC – PC index; BCE – Business competition environment; GE – Government efficiency; IPRP – Intellectual property rights protection; CA – Capital availability; CIUPC – Computers in use per capita; COENF – Convenience of establishing new firms, MPS – Mobile phone subscribers

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From the seven variables that make up the renewal capital index, all of them are positively linearly associated to the quality of life, including Business R&D spending, Basic research, R&D spending, RDR – R&D researchers, CBUAE – Cooperation between universities and enterprises, SA – Scientific articles, PPC – Patents per capita. The results are presented in Table 6.

Table 6: Correlation between Quality of life and Renewal capital index components

	RC	BRDS	BR	RDS	RDR	CBUAE	SA	PPC	
Quality of life	Pearson Correlation	,854**	,737**	,776**	,759*	,822*	,761**	,775*	,727**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000
	N	24	24	24	24	24	24	24	24

Notes: RC – RC index; BRDS – Business R&D spending; BR – Basic research; RDS – R&D spending; RDR – R&D researchers; CBUAE – Cooperation between universities and enterprises; SA – Scientific articles; PPC – Patents per capita

*. Correlation is significant at the 0.05 level (2-tailed).; **. Correlation is significant at the 0.01 level (2-tailed).

V. CONCLUSION

The research discusses the association between the national intellectual capital components and quality of life. It does not assume the causal relationship between the analyzed variables because quality of life and the variables that are correlated with it may be caused by the same third variable. However, certain points can be made based on the performed analysis.

First of all, quality of life shows the highest positive correlation to the financial capital index throughout the observed period of time. Regarding the human capital, literacy rate is very high in all the European Union countries, which means that its further improvement will not have a substantial effect on the perceived quality of life. It seems that all the countries have satisfactory pupil-teacher ratios and any further improvement of this ratio would not contribute to the overall quality of life. The components that offer room for improvement seem to be the employee training and total public expenditure on education. The business environment should encourage private sector to invest in employee training.

Regarding the market and process capital, people seem to perceive the higher quality of life in countries with better transparency, government efficiency and capital availability. However, there is no association between the quality of life and openness to foreign culture nor export of goods. Also, the number of mobile phone subscribers is not significantly correlated with the quality of life since it is relatively high in the all observed countries.

What is interesting is that all the components of the renewal capital are positively correlated with quality of life. This might be the consequence of the fact that the countries with higher GDP per capita have more resources for the R&D activities and at the same time countries with higher GDP per capita also have more satisfied citizens. However, the interplay between financial capital, renewal capital and quality of life should be further investigated in future research since there is a possibility that renewal capital impacts quality of life both as an avenue for strengthening creativity in the society as well as the process that results in the increase in the quality of life.

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