

ABSTRACTS

Session: Social Informatics: Internet Research, Social Media, and Computer Games etc.

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Abstract title “Data Science from Economics to Philology: Learning Trajectories of Undergraduate Students”

Informational technologies have changed educational process in many ways. Development of virtual learning environments (VLE) – e-learning system for supporting students’ learning process [6], and blended learning, which includes an online component, led to a variety of student behavioral data available in real time. Exploring this data and finding patterns which can be used to improve educational process and learning outcomes is the aim of learning analytics [1–3].

Researchers use different metrics affecting learning outcome from time spent on learning activities, frequency of logins into learning management systems to participation in online discussion activities [1, 3, 8].

Based on the prior research in the field of learning analytics and social computing [5] we investigate learning strategies of students who chose a minor specialization in Data Science in St. Petersburg campus of Higher School of Economics. In this research, we compare 2 cohorts of students in terms of adopted learning strategies using student activity data in VLE. Additionally, this year we included optional online materials and we explore the effect they might have on the use of available resources in relation to learning achievement.

Data was collected from two cohorts of students who chose minor Data Science in 2015 and 2016 years respectively. Throughout the course, students learn basics of data analysis, programming in R and machine learning. Students of all academic disciplines from economics to Asian studies are able to take this minor.

Studying process is supported by virtual learning environment, consisting of Rstudio Server, which enables access to the students’ environment both in and outside of the classroom, and Q&A forum. This year in the second cohort we introduced optional materials on online educational platform stepic.org to facilitate knowledge acquisition. Each two-three weeks a new module is opening consisting of nearly 8 tasks. To get pass-mark students have to complete any 60% of all available tasks. Modules are opened until the exam and are automatically assessed in the system.

During the course, students may show various learning behavior, using different types of resources. To show the difference in adopted behavior we used concentration curves [4]. We also presume that introduction of optional materials with the new feedback system can affect patterns of resources use in relation to learning outcomes. Student’s level of achievement was measured as a result of midterm tests.

In this study, we used the following metrics as indicators of students’ learning activity:

- logs of coding activity in Rstudio Server;
- communication on the Q&A forum;
- percentage of completed tasks on stepic.org;
- results of midterms.

In addition, we conducted a series of surveys to detect friendship relationships between students. Previous researchers have shown that advice and support from friends serve as an effective resource for learning [7].

We suggest that students with low and high academic achievements exploit resources given in significantly different ways. Moreover, they have unequal access to advice networks, which consist of their friends and teaching assistants.

Using concentration curves we demonstrate that distribution of resources used by students as well as potential access to them are hardly occurring due to the chance. Those who are characterized by even a little engagement in forum communication have higher grades than those who neglect this activity. Furthermore, students with higher academic achievements report significantly broader network of peers than those who have poor achievements. These results remain stable for both cohorts of students, however, there is a difference in forum usage. Students in the second cohort use forum more often, compared to the first cohort. This may happen due to the feedback system employed in stepic.org, which forces students to use the forum for more detailed answers.

The major insight is that high- and low-performing students can exploit different learning strategies in terms of resource usage, have difference in access to advice from friends. The introduction of new information sources, for example, optional online materials, may change the way students use other resources like Q&A forum.

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Abstract title “Virtual goods. Valuation practices”

Considering trade as a process, we can find plenty of questions related to price formation: how to find price equilibrium, how to consider expenditures, how the goods utility is reflected in price. To begin with, these and many other issues were addressed mostly by economists. However, modern economy and trade leads to the emergence of consumer's behavior, for instance “conspicuous consumption”, which cannot be explained only through prism of economics. The lack of tools for analysis of such phenomena leads to the emergence of a new field of science known as valuation studies which includes economic sociology, psychology and economy. Online trade markets become the raising topic of research in valuation studies. Online trade markets grow as popular form of e-commerce, especially, in case of virtual goods in online games. Consumption of virtual goods for real or virtual money is closely interwoven with the model of game monetization in general and types of economic interactions in particular (Hamari & Lehdonvirta, 2010; Lehdonvirta & Castronova, 2014). Virtual goods in a game context possess value for players (Montola, 2012).

Goods become valuable due to their ability to make game easier, i.e. "functional" (Lehdonvirta, 2009) role; or due to "decorative" (Gyuhwan & Taiyoung, 2007) benefits which could be expressed in "social" or "emotional" attributes (Lehdonvirta, 2009). In a case of mainly functional items, purchase intent is mostly associated with item's utility (use value) in the game. As for decorative items, it is important to take into account status and aesthetic qualities, i.e. visual and sound representation in virtual world (Lehdonvirta, 2009).

Current studies of virtual consumption mostly focus on functional goods (Hamari et al., 2016; Hamari & Keronen, 2016). One possible explanation is that in most of online-games, both “functional” and “decorative” values are highly interwoven in the same item (Lehdonvirta, 2009), which provides predominance of functional value in consumer motivations to purchase the good. Focus on functional goods leads to lack of understanding of how value of decorative goods is perceived and constructed.

Being expressed mostly in aesthetic and status terms, cosmetic items' value is shaped and constructed to the large extent socially not only by the game designers' decree but by community performance: being 'good' or 'bad', being 'cool' or not depends on the judgment of others (Raptis, Kjeldskov, & Skov, 2013)

The purpose of this work is to decompose value of decorative goods applying methods of machine learning and natural language processing in the case of Dota 2. Dota 2 is the game with trademark based only on decorative goods, which let me change focus from functional goods to decorative one. Taking into account the price of items, characteristics of items' appearance and analyzing with topic-modeling algorithms players' discussions of items and practices related to consumption in the game, I am going to find out how value of decorative goods is constructed and reflected in players' communication.

In this work, I examine two Dota 2 subreddits as a platform for social discovery and value construction where players' communication can tell us about collectively performed experiences, judgments and evaluations of cosmetic items. Furthermore, I study Steam Community Market which is online platform for trade decorative items between players.

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Kseniya Kalashnikova
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Abstract title “Visual Communication in Urban Space of Novosibirsk: Differentiation and Perception”

The focus of this research is numerous manifestations of visual, informal communication in an urban public space. We set a purpose: to identify and describe the kinds of objects of visual communication and the peculiarities of their perception by the citizens using the example of the city of Novosibirsk. Theoretical framework of the research is based on Bourdieu's view on social space and physical space, Lefebvre's spatial triad and Berger's visual communication concept. To achieve the purpose several sources of information are involved: interviews with street artists and citizens with the help of visual materials, and the large archive of the photos of objects. To select kinds of objects of visual communication, the following criteria were considered: message source, author, message, medium, channel, audience and perception. As a result, the following

kinds of objects of visual communication are obtained: inscriptions and marks, graffiti, street-art, public-art, HCS-art, buffs. One of the key criteria for sorting out is the medium, or the way of coding, which can influence a human perception. Aesthetics, application place, meaning are the main characteristics of the object, which we consider to be determinative for the respondents' perception.

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Abstract title “Analyzing Web Presence of North-Western Russian Universities in Scientometrics Context”

All over the world universities are moving in a direction to increasing transparency of their performance. There is a call for the new indicators for universities rankings (Bonaccorsi, Daraio 2016) because universities pursue higher positions in ratings, which can be achieved by gaming procedures: reporting wrong information and cheating (Espeland and Sauder 2007).

In current work-in-progress we aim to enrich scientometric analysis by focusing on web presence of Russian North-West universities. We look on context in which they are mentioned and linked with industrial agents like firms and media, using data gathered from regional business and media websites.

Inspired by Cybometrics Lab approach (Aguillo, Ortega, and Fernández 2008) we are also employing webometrics to measure web presence. The crucial metric, Web Impact Factor (WIF) (Ingwersen 1998) is suitable in our case, since WIF is correlated positively with the offline research activity of the university (Thelwall 2002).

Usually, researchers use semantic analysis of media texts in which universities are mentioned in order to understand public relation (Gunduz, Demirhan, and Sagioglu 2014). We use, in some sense, more flexible method - LDA (Blei, Ng, and Jordan 2003) to get some insights about stance and context of universities' activities.

For analyzing universities' performance we use 3 basic measurements of universities:

- * number of unique external links to the university domain, which may be interpreted as a complementary measure of scientific activity (Thelwall and Harries 2003)

- * scientometrics indicators - normalised number of publications in the fields of Economics, Management, and Business Studies

- * number of references to university extracted from media and companies' websites

While inputs for LDA consist of:

- * document corpus shaped from media articles referring university

- * document corpus shaped from the companies' web-site pages, which have references to university

Firstly, we extract connections with foreign universities and build the co-authorship networks. We exploit data both from RSCI and Scopus databases. That gives us the possibility to evaluate scientific authority across Russian universities (RSCI co-authorship network) and international scientific reputation (Scopus co-authorship network).

We use hierarchical clustering (Ward Jr. 1963) in order to extract groups, which have substantial differences in strategies, history and specialisation based on aforementioned 3 measurements.

Next we apply one of the topic modeling algorithms - LDA separately on both corpuses. Mass media contribute significantly in shaping universities' image (Yavas U., Shemwell D. J. 1996), whereas companies' websites directly and indirectly form universities' business image (Vedovello C. 1998). One of the possible biases is that we used 9 regional mass media websites and companies web sites from TOP 50 companies of North-West region ranking based on revenue.

Russian universities are stratified across different dimensions. Based on connection with companies and publication strategies we revealed several groups of universities.

There are top universities, which invest in developing high-profile publication ties. Across them are both socio-economical and STEM universities. They are linked in business and media as expert centres, business education providers and innovation leaders, with a saliency in LDA topics on research, innovations, business and industry development.

Second cluster characterised by more narrowly focused universities with advanced level of publication activity and performance in the region. These universities satisfy needs of regions and tend to be out of attention of mass media, albeit, focus on building strong connections with a particular industrial partners.

Third cluster consists of universities with low publication activity in economic and management, so the education in this areas is disconnected from the research.

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Abstract title “The viral content analysis”

Why are certain pieces of online content (e.g., advertisements, videos, news articles) more viral than others? This article takes a psychological approach to understanding diffusion. Using a

unique data set of 3 000 posts published on Facebook, the authors examine how emotion shapes virality.

In order to perform this research, we used an Facebook API to collect data. The data was collected through posts of 3 most popular media Facebook pages (National Geographic, New York Times, BuzzFeed).

The purpose of the statistical analysis is to explain the relationship between the dependent variable and independent variables.

The results indicate that positive content is more viral than negative content, but the relationship between emotion and social transmission is more complex than valence alone. Virality is partially driven by physiological arousal. Content that evokes high-arousal positive (awe) or negative (anger or anxiety) emotions is more viral. Content that evokes low-arousal, or deactivating, emotions (e.g., sadness) is less viral.

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Abstract title “Online communication among e-sports viewers”

Electronic sports (e-sports) is an industry, which is becoming more popular every day. Sjöblom and Hamari are describing e-sports as a form of sports, but with human-computer relationships on primal position [1]. Despite of the usual sport events, which you can attend in real life, e-sports is about watching on distance, even if you are at the actual tournament: the reason is that all the activities are happening on computers, but not in real life.

Due to this aspect, many online-platforms were created for people to have an opportunity of watching others playing. Such platforms as Twitch.tv [4] are becoming more appealing to the gaming audience by different reasons: from the social aspects[1,2,10] to the learning of playing [1,2].

Such platforms have a feature of discussing current translations on chat dialogues. It can be used for discussing the game [1,2,5], interacting with streamer [2,5] or even for making an offensive jokes (which will be punished). Sjöblom and Hamari discovered, that while watching game events, people are not really concerned about the social aspects, while audience of usual streamers describes communication as one of the most important reasons to watch it [1,2]. In this research, I introduce a brief analysis of e-sports as a media event, discussed by the audience of the Twitch.tv platform, which is varying on the host language.

The event was observed is called Dota 2 Major, which was held on Boston and translated via Twitch.tv on several channels about a month ago.

All streams consist of the name of the translation (which can be changed during the steam), the number of current viewers, messages from the viewers on real time and overall information

about the channel. The databases for this study consist of two collections of chat messages, recorded from the two biggest Twitch.tv channels, connected to Dota 2 Major tournaments: “dota2majorru” and “dota2major”.

The first one is a Russian host and the second one is English. Collections include approximately 150 and 350 thousands messages respectively and consist of the time of posting, nicknames and the text itself.

After gathering, the data was prepared by removing stop-words (which consist of twitch emotes and SMART-collection [11] and by using overall text mining, and then on this data was applied a Latent Dirichlet Allocation algorithm (LDA) [8]. This algorithm helps to extract specified topics from the set of text documents: here, several models were build (Russian and English chats while and after the translation), where messages were taken by the documents, and divided into 12 topics, based on the number of events (or, in other words, on the variance of stream names).

The common goal was to find out whether the chat communities can vary, depending on the stream language and host allocation and what are the main features of the e-sports viewing. Also, Jędrzej Olejniczak found out that the context of messages and its length strongly depends on the number of stream viewers [3]. So, due to the big number of audience on the event-related gaming channels (~100-200 thousand viewers), I guess that the messages while the translation will not represent a big discussion, but mostly emotional expressions.

Commonly speaking, LDA algorithm showed that both chats, even if they are holding on the same event, can represent different topics and different views on the tournament. E-sports community looks like a crowd in real life, which is not discussing all that is happening immediately, but rather show it emotionally. It is very similar to what is happening on actual sport events [1, 9], but not quite much alike with discussing games like baseball online [5]. As a result, it was discovered that observing communities are varying in many ways: from the length of messages to discussed topics among viewers. It’s got to be notioned that some theories, connected to the characteristics of messages, were approved on English chat, but not all of them were true on the Russian one: the reason is that here people tend to write a long slogans, which are not always connected to what was happening on screen and act more unexpected than the viewers from another stream.

This research is just a beginning of the study, connected to the observing e-sports on media and the nature of the streaming community by itself.

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Abstract title “EFFECIENCY OF USING INFORMATION TECHNOLOGIES IN THE EDUCATIONAL PROCESS: SBMT BSU CASE STUDY”

The Internet swiftly entered the life of the humankind in the 20th century. It took less than ten years to face the fact of its spreading worldwide. [1] The Internet emergence affected many areas of life; education is no exception. Active informatization of education is observed in all developed and many developing countries. Meanwhile, ways to improve the overall quality of education are intensively developed; sufficient money is invested to search for new information technologies.

Many universities are actively implementing distance education in the learning process.

Depending on the number of hours allocated and the scope of information and communication technologies used, online-courses fall into three models.

First, E-courses, from English «enhanced». The specific feature is that online-learning is added to traditional in-class study. It comprises online-testing, chats with fellow-students, use of email for study, participation in seminars and conferences.

Second, M-courses, from English «mixed-mode». The model combines traditional and online study. It reduces the number of classroom hours, a large amount of work being done online.

Thus, education becomes more convenient.

Third, W-courses, from English «web-based». The model is based on online technologies which do not require teachers/students' presence. This format activates online communication and develops educational Internet communities.

The SBMT BSU launched its learning portal in 2009. At first, it was a pilot project within the MBA programme, but 2 years later full-time and part-time bachelor students got involved. In 2011, online versions of courses were designed on the portal; access was given to every student assigned to a course. Five years on, it is vital to review the efficacy of E-learning in order to

improve and tailor the content and form to current students' needs.

Thus, the purpose of this study is to evaluate the effectiveness of using the model of E-courses by the example of the School of Business and Management of Technology of Belarusian State University.

We conducted a survey among 90 SBMT students, using Google-Forms. They were asked 14 questions: 13 test questions and 1 question with a free response. The questionnaire was spread through Vk messages; the link to the questionnaire was placed at Vk SBMT student group. The aim of the survey was to obtain relevant information about the degree of students' satisfaction with the educational portal. The free response question revealed what the respondents would like to change in the learning portal. The results were processed and presented in pie charts.

We interviewed 10 SBMT teachers/lecturers of different age groups and assessed their degree of satisfaction with the educational portal.

Dean's Office of the Faculty of Business has provided the information about the academic performance of students who major in Logistics, for the last 4 years. Using Microsoft Excel, we processed the data and calculated the average grade of students for each year.

Distance Learning Department has provided the data about the attendance of the learning portal from 2011 to 2016. Having analyzed the data, we calculated the average attendance per day.

These figures were compared by the year and month.

By 2017 the number of registered e-courses reached a record high – 450. The past year saw 200 round-tables via forum, 150 webinars. Students did 2,000 tests/assignments to control knowledge.

The maximum hits per month were recorded in November 2016 – 20,579; the daily hits average – 686. We traced the pattern: the number of visits increases by the end of semester. Obviously, e-learning is gaining popularity in our school: this school year, the number of visits in the first semester exceeded that of the previous year.

By the example of Logistics majors, we traced the progress of graduates over 4 years (2011-2016) and noticed that performance is higher in those who used e-learning throughout the study period.

As the survey proves, students are satisfied with e-learning, not willing to abandon its use. Over 50% found obtaining information through webinars more attractive than classroom lectures, which means webinars may replace classroom lectures in future. The vast majority believe the portal helps improve performance, motivates to timely complete assignments.

To conclude, IT is an integral part of learning processes. Internet-based self-study has a positive effect on academic performance; moreover, it gives students a chance to broaden their knowledge in spheres of interest by themselves.

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Abstract title “Performance-based Marketing as a Unified Strategy of Online Advertising Tools”

The majority of marketers faced with the problem that it is hardly possible to measure accurate results from the Internet advertising. Actually this challenge caused the development of a new measurement concept that brings profitable results. More recently, it seemed impossible, but now the Internet marketers have already known how to count not only the usual clicks and conversions, but also keep track of what goods recently the user was interested in and how far he looked through the web page. The advent of performance-based marketing has significantly changed the approach to the promotional activity planning.

Research question that I will discover in my paper is how to integrate the majority of online advertising tools in one unified strategy that enables to save marketing budget by paying only for target user actions.

As for objectives I can point them in the following way:

- to identify and state a problem of the paper;
- to compare previous marketing strategy of the company with new performance-based strategy;
- to develop a solution for the research problem and implement it;

- to assess its impact and clarify which strategy is more effective and profitable for the company;
- to clarify future prospects.

There is no doubt that methodology plays an axial role in the research. Right research approaches identification enables to explore the topic, find out crucial needs and preferences for further application. To my mind it is essential not to choose too many research tools and concentrate on two or three methods.

Due to the fact that I have to investigate why it is essential not to spend money blindly on product promotion and take into account the specific quantitative result of each individual direction it would be better to collect the data by conducting a quantitative observation and analysis. Firstly, I will choose a quest-company and decline from their previous marketing strategy and start implementation of performance-based model. Consequently, I will count the use of service before and after performance marketing application; number of target users that access the new service; life time value of each client and the cost of each user's action. Comparing the results of previous marketing strategy with performance-based one it will be possible to identify which one is better and what is the economic effect for the company. However I can't be limited only by quantitative research methods. That's why I will use an interview. It is the most suitable qualitative method because it enables to structure the process regarding to the respondent's answers. I suppose that with the help of face-to-face communication I can clarify pros and cons of performance-based marketing strategy to the quest-company, understand which strategy is more appropriate to the CEO.

First of all I want to establish a picture of performance-based marketing in order to highlight in what extend it could be put into practice. Furthermore implementation of the unified strategy based on performance-based marketing inside entertainment sphere will provide measurable results about the impact of the performance marketing on the quality of online advertising services. After I will compare the previous marketing strategy with performance-based strategy it will be obvious what are pros and cons of each variant. Such analysis will identify the most effective and profitable strategy and help to state company's choice on the appropriate strategy. What's more my paper will help me to check if the tools of performance-based marketing are correctly set up inside entertainment sphere. And as a final step I can gather feedback in order to improve the implementation of performance-based strategy in future prospects.

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Abstract title “Media Activism in Russia: civil society on the Internet or personal gain?”

It is known that, the World Wide Web serves as the most important factor of socio-political process in Contemporary Russia for quite a long time, thereby providing the entirely new platform for political and civic mobilization.

As a result, most of the modern social movements are represented in the public sphere of social services and networks.

Despite the considerable attention of researchers to these social movements, in our opinion, motivational and value bases of such civil initiatives are not enough analyzed. At the moment the jubilation in the scientific community has grown into an ambiguous perception of the current media aktivizm. This equivocal reaction was observed by us during the preliminary analysis of comments from the public in response to the video materials produced by activists.

Thus, the main question is what serves as the primary purpose of these social organizations - the opportunity to earn by attracting the audience's attention by creating conflicts or the desire to solve the pressing social problems?

In this regard, we set a goal to learn the basic motives for the implementation of social activity among activists - what motivates young people to join public organizations, what motives cause them to pursue social activities or, conversely, to stop it, etc. The second part of sociological research is a discourse-analysis of video materials published by social movements in order to highlight possible existing models of provocation.

As an object of research, we chose the former and current activists of popular movements as "StopHam", "Lev Protiv", "Chrjushi Protiv" and "Vector dvizheniya", which implemented (or implement) their activities on the territory of Moscow, Saint - Petersburg, Samara and Penza. The semi-structured interview was chosen as a method of gathering information.

We would like to underline that the inclusion of former activists is not random, because it corresponds to a set of research tasks, the essence of which consists in the retrospective analysis of possible changes in the nature of the activities of the studied social movements and, in particular, the motivational system of participants. In addition, selected locations for the survey will allow to compare the results obtained during the analysis of capital social movements and civil activism implemented in the provincial towns.

Besides, we have chosen the method of discourse analysis for the realization of the second part of the research that allowed us to highlight models of provocation in video materials published by activists on YouTube service. In this case, the sample included 10 Youtube-channels of the studied social movements (10 most popular video materials were taken for analysis from each of the selected channels).

The results of the discourse analysis demonstrated that the activists during the dialogue with violator don't escape emotive statements. It was revealed that one of the most common types of provocations is publicly stigmatization, which in most cases becomes a major catalyst for conflict. There were marked elements of social polarization in the rhetoric of activists, which was in opposition of activists as a sample the proper life, and those who live differently (i.e. wrongly). In addition, elements of intimidation were identified in the behavior of some activists (the appearance of the individual participants, the use of force, hints about the possible consequences in the case of "disobedience" and so on). It is interesting that some of the analyzed social movements select potentially aggressive-minded social groups as the object of their "raids" - people without a permanent place of residence, alcoholics and other socially disadvantaged citizens. An important conclusion of the analysis is that the prevalence of certain models of provocations in video materials published by studied social movements depends on the popularity of these online videos. We can make the assumption that the creation of conflict situations during conducted "raids" is not accidental, but is one of the tasks pursued by the Russian activists.

P.S. At the moment, the first part of the study is on the information gathering stage.

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Abstract title “Social problems detection in online-media”

Analysis of user-generated content has been increasingly seen as potentially useful for revealing existing or emerging social tensions and problems. Such analysis thus can be regarded as a new form of research on public opinion, albeit related to online public only, and also on some forms of social behavior. Methods of this research are still in their cradle. In this paper we show how sociologists can benefit from using data mining methods combined with qualitative manual analysis of news and comments for the goal of finding what media topics are seen by the audience as important and problematic. For this purpose we adopt the following operational definition of social problems: they are social issues salient enough to find their way into the media of a certain level and marked as problematic by the audience of these media in the respective user comments.

We use the data from the media of the Omsk region, an area in the Southern Siberia. Our units of analysis are news items and comments on them published in one of the Omsk online media

outlets. Our sample thus included all news items and respective comments from four most popular news websites for the entire year from September 1, 2013 to September 1, 2014. The collection comprised 33,887 news items and 258,121 comments. We borrow two data mining methods – topics modeling and sentiment analysis, offer two new indices of topic popularity and topic polarity.

It is not surprising that the most positive emotions are related to holidays, entertainment, sports and culture. Crimea accession is also an obvious case for any Russian, since Crimea-driven rise of the national pride and the feeling of victory have been overwhelming. Of more interest in the negative extreme of the list. These topics are mostly related to disasters and crime which naturally arouses negative emotions. However, at a closer look at the comments, the topics, as expected, are split between those dominated by general negative emotions, such as grief, fear and anger, and those that are seen as social problems. Of them, the most paradigmatic examples are “Accidents with children” and “Ivan Klimov’s murder”. The former collects stories of children getting injured, falling out of the windows, committing suicide and the like. An even more important case is the topic on the international relations between Russia, Ukraine and the USA. It produces the most polarized and diverse comments.

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Abstract title: “Agile Methodologies Adoption in Managing Software Development Projects: Case Study Conteq LTD”

An increasing amount of publications in the sphere of these models implementation that were made by contemporary scholars signifies that there are lots of questions that have already been discussed and solved. Researchers paid significant attention to the issues of adopting agile methods, evaluating their impact on team performance and project success, creating hybrid project management methodologies and others. Nevertheless, the problem of identifying the guidelines on how to choose and use the agile methods, and how to tailor the project management practices to a particular project and organizational environment, has been poorly investigated by modern scientists, especially Russian ones.

Research questions:

- 1) Which agile methods and practices are being used by Russian IT companies in managing projects?
- 2) What is the relation between adopted agile methods and the implicit factors for Russian project management team?
- 3) How do the project manager in Conteq LTD smoothly adopt agile methodologies in order to take all of their advantages and not to spoil the software development team efficiency?

Objectives:

- 1) To identify which agile methods and techniques are being implemented in Russian IT-companies;
- 2) To identify factors and project characteristics that imply that the agile methods are more preferable to the conventional approach according to the Russian digital project managers and development teams;
- 3) To produce insights on how to improve the adoption of agile methods in Conteq LTD.
1. Conduct a questionnaire in Google Forms or in SurveyMonkey platform. The sample on this research includes practitioners working with agile methods and/or practices, who also work in the area of software project management and IT. The survey is going to be divided into 3 main parts. Part one of the survey will consist of demographic questions and profile of the organization. The importance of the tailoring criteria on the decision to adopt the agile practices will be assessed in the second part. Part three will identify the level of adoption of the listed agile practices on the organization according to the agile practitioner’s point of view.

2. Carry out an interview to know the attitude of Russian project managers to the process of agile adoption in an enterprise. The interview style will be semi-structured. Firstly, it will enable me to follow a framework in order to address key themes such as challenges, successful experience, appropriateness of certain methods and others. Secondly, it will allow a certain degree of flexibility for me and my future interviewees.

3. Data analysis will use the SPSS software. Statistical multivariate analysis techniques such as structural equation modelling will be run to ensure that there is a relation between adopted agile methods and the implicit factors for Russian project management teams.

This research is going to investigate the way that agile methods are being implemented in Russian IT-companies, the obstacles and challenges that software development teams has to cope with. Moreover, this paper is going to identify the relation between the factors that impact the agile adoption decision and actual degree of agile approach implementation. Finally, based on the derived results of this Russian agile community analysis, a set of recommendations will be elaborated to help Conteq LTD with identifying the factors that they should take into consideration while transiting from conventional to agile software development approach.

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Abstract title: “Privacy in social network sites and in real life: intergenerational comparison”

Almost all living adults found the advent of the Internet; however, it had at different stages of their life cycle. It is assumed, that each cycle is pertain to a particular age period and has its own characteristics associated with differences in life styles, intensity of social interactions, pace of technology adoption (Hong et al., 2013; Venkatesh et al., 2003; Morris&Venkatesh, 2000). Thus, it is likely, that representatives of different generations belong to different types of users of social networks.

M.Prensky, which explored the impact of digital technologies and the phenomenon of "digital divide", has distinguished two generations: Digital Native and Digital Immigrants (Prensky, 2001). These names reflect the level of involvement of the person in the use of digital technologies.

The former takes digital technology as a natural part of everyday life, while the latter, though included in the process of assimilation of novel technologies, however, is less successful in some ways in their usage.

Based on the idea of “digital divide”, it is expected that there are some intergenerational differences in users’ online behavior too, in particular in privacy behavior in social network sites. The relationship between privacy in social network sites and users’ age was examined in several studies (Terlouw J. et al., 2011; Wolfe, 1975; Livingstone et al., 2011; Kezer et al., 2016; Madden M. et al., 2013; Lee et al. 2016); however, obtained results are rather contradictory.

According to this, it were formulated following research questions:

RQ1: Are there differences in the level of privacy in social network sites among people related to various generations?

RQ2: What is the relationship between privacy in social network sites and in “real life” toward various categories of users (friends/strangers)?

The study was based on a comprehensive application of the following methods:

1. The level of privacy of the person were assessed on the basis of the amount of available to others information posted on personal page in the social network. This information was counted during a manual content analysis of web pages of users. We identified the presence or absence of the following information posted on the page in social network users: identification information, contact information, personal information, education, career etc.

Social network Vkontakte.ru was chosen for analysis as the most popular social network among Internet users in Russia (according to statistics of Brandanalytics.ru and Mail.ru).

A content-analysis was conducted from several positions in relation to the respondent (friend /stranger) in order to identify the differences in privacy settings for these two categories of users.

The amount of information announced on online-page were calculated for each user. Further it was calculated the share of disclosed information in relation to the maximum of possible disclosure of information in the social network. Accordingly, the greater the amount of information respondents were reported about themselves, the lower was considered their level of privacy.

2. The data about level of privacy in “real world” were collected by the mean of “Self-Disclosure Questionnaire” of S.Jourard. The results of the questionnaire were compared with the data obtained in the course of content-analysis. Therefore, the questionnaire were modified: from 60 questions those were selected, which were also reflected in the items of profile in social network Vkontakte.ru. For example, political views, home-town etc. This mapping was used to conclude whether there are differences between the level of privacy of respondents in social network site and in "real life".

3. The following statistical methods were used: Pearson’s correlation coefficient, Student’s t-test, analysis of variance, cluster analysis.

The main criterion, on the basis of which age periodization and the selection of the boundaries of generations were carried out, was the stage of labor socialization of a person (Andreeva, 1994). Thus, it was highlighted following generations:

- Digital Native (14-23), refer to school period;
- Digital Immigrants (24-50), refer to working cycle;
- Digital Tourist (51+), refer to retire cycle;

The first two names have been borrowed from M.Prensky’s terminology; the latter have been added in order to explore some generational differences.

Preliminary analysis allowed establishing a number of important differences:

- All generations are characterized by much higher level of privacy in "real life" in relation to strangers rather than friends ($p < 0.001$)
- Digital Native and Digital Immigrants have a significantly higher level of privacy in the social network towards strangers ($p < 0.001$), while it has been not found any differences in the case of

Digital Tourists

- Digital Native and Digital Immigrants are more “open” towards their “real-life” friends than in relation to virtual friends ($p < 0,001$), while Digital Tourists do not difference between these categories of friends. The same pattern occurs in relation to strangers: the former is less private in relation to strangers in “real life” than in online communication, the latter has no significant difference in the level of privacy
- One of the natural thing was found: significantly higher level of privacy in relation to strangers in the social network than towards friends in "real life"

Further work and expected results

Further work will be consisted in expanding the sample (in the pilot study involved 188 people) in order to enhance obtained results. It is planned also to include a new data about users' activity (such as number of friends, number of groups/public pages, frequency of posting etc. This data will help to define more exactly demarcation of generational boundaries.

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Abstract title: “Place-identity development expressed through social media: a case of first year undergraduates in Saint Petersburg”

Personal identity is influenced by a place and one’s personal relations to it [Proshansky, 1983; Hull, 1994; Twigger-Ross, 1996]. Place-identity emerges, as one incorporates belonging to a specific place into one’s identity through interaction with the place [Stedman, 2002; Wester-Herber, 2004; Hernández, 2007]. The concept of home is central to a person’s self-perception [Relph, 1976], and moving away can be a challenge in a necessity to adapt to the new environment [Brown, 1992]. Students who move to study are an especially interesting case. Many of them have to get away from their “regular” life for the first time, and adapt to a new place. Combined with a transition to the “student life”, this process has a great influence on one’s identity [Chow, 2008; Holdsworth, 2009; Holton, 2015]. It also reflects on one’s “spatial self”: place-identity expressed through social media [Hogan, 2010; Gordon, 2011; Schwartz, 2014].

In my work I am researching the first year undergraduates in Saint Petersburg universities, who move from other places to study in this city. My research question is how these city newcomers develop their new place identity, at the city level, and how do they represent this process on social media.

To carry out the research, I’m comparing two groups: first year students from outside of the city, and those who’ve lived here before. Studying social media profiles imposes its limitations: in this case, the precision with which we can be sure a person is local or not. Thus, to select these two groups, I’m using a “VK” social network site to find profiles that satisfy the following criteria: school graduated in 2016, studying in one of the 20 largest Saint Petersburg universities. For each university, a thousand top profiles are collected, along with each profile’s information on education path: namely, schools, and universities. Profiles were subsequently sorted by the city of school one graduated from into either local or non-local group. It is safe to say that all students who graduated school in 2016 and are studying currently at the university are first year undergraduates. Among them those who graduated school in St Petersburg are locals, and those who did in other places, are not.

The main source of information on place identity development and representation for this study will be posts on the walls on the selected students' profiles: texts, photographs, geotags. Posts, referencing spatial objects related to the city of Saint Petersburg, such as mentions of the city itself, local toponyms, street names, etc. are considered the primary indicators of the profile owner's developing place-identity.

The first expected result is the description of ways in which students new to Saint Petersburg express their place-identity development through social media. It is expected that the process of acquiring place identity development would manifest itself in a spike of posts on social media referencing places and experiences in the city. The quantity as well as content of such posts is expected to differ from the group of local students. I also hypothesize that this spike would wear off with time spent in the city, with city reference patterns getting more diverse across students in the non-local group.

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Сепрећ

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Abstract title: “System of Website Rating Based on the Social Value Criteria”

There is an uncontrolled influence of the information published in the Internet resources upon the consciousness of an inexperienced user. This poses a certain threat that impacts social, legal, psychological, educational and other areas of human life and activity. Government measures to restrict access to such resources do not encompass all possible ways to prevent the treat. As a result, new software applications targeted at informing or protecting the user from adverse impact of malicious resources are created by the interested developers. A software application that notifies a user whether the website content aligns with the social values and subject desirability criteria through a rating that digitally displays such alignment, can be considered as one of the ways to prevent the threat. The purpose of this study is development of a system that would allow to rate the content of web sites on the basis of various social criteria, using algorithms that incorporate an automated and expert opinion estimation with results presented in the HTML page. A comprehensive approach to estimation of the website content singles out this system among similar solutions. The computer aided system of the website content estimation gives a more accurate and qualitative data through elimination of a human factor and potential for processing a large amount of data. Also, the system eliminates errors occurred during computer aided estimation through utilization of the expert opinion. Furthermore, the expert society helps address concerns related to website content and its alignment with ethics, which cannot be addressed via the automated approach.

Study conducted in the area of the linguistic analysis of the content of web resources in conjunction with the authors, allowed to generate a set of criteria, positive and negative in nature, that reflect compliance of the web content to the ethical standards of the society; to determine requirements to desirable thematic content of the text, and to establish weighting parameters on the basis of social surveys for each text. The sets of criteria have been determined as a *set of society ethical standards* and a *set of desirable content criteria*. These sets of criteria can be used as a foundation to building the computer aided system of information internet resources rating based on the *desirable content* as well as on the *society ethical standards* parameters. Since in both cases the content of information items is under consideration, the applicability of the thematic analysis for multi-criteria evaluation of the documents should be studied within the framework of the targeted purpose. Considerable attention is presently given to the probabilistic methods based on frequency of syntactic constructs in the text of the document, especially when computer aided means are used for the processing. Building the

computer aided website rating system through the compilation of indicators, derived from a simplified internet-resource thematic analysis model is deemed possible to take this task forward.

The proposed system of the thematic analysis and content evaluation will allow the user to obtain a good understanding about a certain consistency of the reviewed information internet resource with ethical standards and commonly shared criteria to desirability of the content.

The following results were attained as a result of the study and development of the system:

- Structures of elements and subsystems were developed for the system of website rating on the basis of social value criteria.
- Basic components and system design classes were developed.
- Options for application and implementation were developed.
- Information model of the evaluated internet resources was developed.

Certain RoSI (Ration of the Social Importance) application modules were developed.

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