International Conference

Information Interactions 2018
digital environment and information science

• information environment • data literacy • information literacy •
• social networks for researchers • information repositories • digital humanities •

23rd October
University Library in Bratislava
Ventúrska 11

Book of Abstracts

Editors
prof. PhDr. Jela Steinerová, PhD.
Mgr. Katarína Buzová, PhD.
Information Interaction 2018 – International Conference

Main topics
information interactions – information environment, data literacy, information literacy, social networks for researchers, information repositories, digital humanities

Topics
information environment and scholarly communication, information support of scholarly communication, information behavior in the digital environment, information literacy in the digital environment (digital literacy, data literacy and other literacies), information environment, information ecology

Objectives
present research results, discuss theory, methodology and practice, presentations of doctoral student’s projects, discussions, methodological problems of information science

Content
research papers, PhD. students’ research projects

Audience
researchers, doctoral students, computer scientists, collaborators, practitioners, managers of libraries and information institutions

The conference is held at the occasion of the 100th anniversary of the Czechoslovak Republic. Book of Abstracts was developed in the framework of the project Human Information Behavior in the Digital Space (HIBER) APVV-15-0508.

Organizing institutions
Department of Library and Information Science, Faculty of Arts, Comenius University in Bratislava and University Library in Bratislava

Program chair
Prof. PhDr. Jela Steinerová, PhD.

Organization chair
Mgr. Katarína Buzová, PhD.

Venue
Conference hall of University Library in Bratislava Ventúrska 11, Bratislava, Slovakia

Time
The 23rd of October 2018, from 9:00 until 18:00

Linguistic and stylistic editing is responsibility of the author of the abstract.
Programme and Table of Contents

Foreword

1st session
9:00 Opening
Jela Steinerová (Head of LIS dept., CU), Silvia Stasselová (General director of ULIB), Jaroslav Šušol (Dean of Faculty of Arts, CU)

Iryna Kuchma, Electronic Information for Libraries, UA

10:15 Information overload in the post-truth era
Tibor Koltay, Eszterházy Károly University, HU

10:45 Information environment and information behaviour of researchers in Slovakia
Jela Steinerová, Comenius University, SK

11:30 From 2D maps towards collaborative immersive virtual environments
Čeněk Šašinka, Masaryk University, CZ

12:00 “Tear down the wall!” Some models and obstacles of cooperation between libraries and publishers
Szabolcs Dancs, National Széchényi Library, HU

2nd session
13:30 How to catalogue a web archive? Some solutions for metadata management at the web harvesting pilot project of National Széchényi Library, Hungary
Márton Németh, László Drótos, National Széchényi Library, HU

14:00 From Information Science to Knowledge Science?
Marcela Katuščáková, Comenius University, SK

14:45 Evolution of the socio-cognitive structure of Knowledge Management
Carlos Luis González Valiente, National Library, CU

15:15 Information literacy in the perspective of education
Michal Černý, Masaryk University, CZ

15:45 A whisper of data
Nadežda Andrejčíková, Slovak University of Technology in Bratislava, SK

Doctoral forum (Slovak language)
16:30 Quantified self
Jakub Fiala, Charles University, CZ

15:30 Interpretation of alternative bibliometric indicators
Michaela Melicherová, Comenius University, SK

16:15 Specifics of perception of user interfaces by elderly population
Annmária Brijaková, Comenius University, SK

16:45 Library search tools for child users
Zuzana Struháriková, Comenius University, SK

17:30 Panel discussion
18:00 Closing
Foreword

Dear participants of Information Interactions 2018, dear colleagues,

it is our pleasure to welcome you all to our conference in Bratislava, Slovakia. Now we are getting together for the 6th year of our conference in order to discuss the main topics of the digital environment and information science and information practice.

Information interactions 2018 are aimed at discussing issues of research data management, information behaviour, information overload, complexity of the virtual environment, knowledge management, a collaboration between libraries and publishers. We have finally accepted 10 presentations from 5 countries (Ukraine, Hungary, Czech Republic, Cuba, Slovakia). Information interactions are specific in bridging gaps in interactions between research in information science and practice of libraries. We concentrate mainly on the practice of academic and research libraries which need changes in building part of information infrastructure for research and education.

Information interactions follow the trend of developing new interdisciplinary partnerships of information science and computer sciences, psychology, cognitive sciences, knowledge management, and other disciplines which can support the solution of practical problems related to digital libraries, information repositories, and information and data infrastructures for research and education.

An important part of our conference is devoted to the doctoral forum which aims to present projects of our PhD. students and discuss their methodological frameworks. We support young information professionals, their creativity and fresh views on information problems. Our school puts the emphasis on new trends in information science research and responds to challenges and needs of new information professions, especially digital librarians, research data managers, and data curators. As educators and researchers, we still ask new questions with regard to the future of information work, new library services, and new research topics. That is why we also
organized a panel discussion on the future of library and information work and research.

I believe that all the presentations and interactions will provide us with an opportunity to deepen our professional competence and finds interesting overlaps among different perspectives to information interactions.

I would like to thank the University Library in Bratislava for supporting our conference, to all sponsors and to my colleagues in the team of local organizers, especially to Katarína Buzová and Milan Regec. I hope that Information Interactions 2018 will give us again an excellent opportunity to learn, network, discuss, enjoy and have fun.

On behalf of the Local Organizing and Programme Committee,

Jela Steinerová

Professor of Library and Information Science, Comenius University, Faculty of Arts, Department of Library and Information Sciences
Iryna Kuchma

The What, Why and How of Data Management Planning

The presentation will cover good practice approaches to managing and sharing of research data, making them findable, accessible, interoperable and reusable (FAIR). Open data is already a part of good research practice. It helps to cut down on academic fraud and validate results, leads to more scientific breakthroughs, provides a citation advantage, increases re-use and has economic benefits. A set of tips and tricks will be presented and explained, such as the use of the Five Star Open Data Model to achieve FAIR data. And a number of common misconceptions will be addressed, starting from the most common one – “My web page is a FAIR way to share my data”. Better options for open data sharing will be provided such as domain, general and institutional repositories and data journals. Fears about being scooped if data are shared early will be addressed. “I don’t need to decide now if I want to share. I can wait and see what I want to do at the end of my project”, is another common argument that we often hear, but open data doesn’t just happen – data management planning helps decide what data needs to be kept and shared, where and how. This decision should be made as early as possible in the research process and it doesn’t need to be everything, as some researchers fear. Five steps to follow when deciding which data need to be kept will be provided. This presentation will also help researchers decide what data can be open and explain how a suitable open license could be applied. Thinking backwards is a useful data management trick that will be discussed – what data organisation would a re-user like? Tools and guidance will be provided including data organization and data description examples, metadata examples, data sharing and restrictions examples and archiving examples.

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In the light of the heightened interest in combating the phenomenon of truth decay with its varied manifestations is interesting not only in itself, but by then fact that it stimulates us to look at information overload differently. The opinions that information overload remains unrecognized or can be qualified to be a modern-day myth are on their way to become minority views, because of the thriving attention to the symptoms of overload caused by the post-truth era. Therefore, information overload is seen not only as a major impediment to efficiently using information in the business world, academia, and the professions, but as a result of the expansion of fake news, disinformation and the existence and influence of echo chambers and epistemic bubbles. In this context the above and other issues are described, taking the influence of big data and of the social media into account, not forgetting about such remedial measures as applying critical thinking through varied literacies and different heuristics, as well as personal information management, while also indicating that mitigating the effects of disinformation have their limits due to the proliferation of satisficing and least effort in information behaviour.

Keywords: post-truth, fake news, desinformation, literacies
Jela Steinerová

Information environment and information behaviour of researchers in Slovakia (presentation of the monograph on Information environment and scholarly communication: information ecologies)

The aim of the paper is to present results of the research study focused on the information environment of scholarly communication with the emphasis on information behaviour of researchers in Slovakia. Models of research information interactions are described pointing to common characteristics and differences in single disciplines. Research data management and data literacy of researchers is depicted based on an international online survey. We identify changes in the information environment of scholarly communication. The concept of academic information ecologies is presented, as well as an interactive model of the academic library. We derive implications for education of information professionals and information environment, especially development of the information infrastructure.

Keywords: information environment, information behaviour of researchers, research data management, research data literacy, academic information ecologies, interactive model of the academic library

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Maps are very common and natural parts of our lives. They are so ubiquitous that we are often not aware of how important source of knowledge and communication channels they represent. Over a few hundreds years, two dimensional static printed maps were used. With the introduction of computers and the internet, a revolution came. Geographic information system and later mobile map applications changed the ways of our behaviour dramatically. We have not yet fully exploited the current technology and another revolution is knocking on the door. Immersive virtual reality offers a new quality of experience, finds its utilisation in plenty of domains and has the potential to change behaviour of the whole society significantly. We have focused on collaborative immersive virtual environments which enable users from distant geographic locations to be present at the same time in one shared virtual space and to solve various tasks together. Join us for the ride...

Keywords: map, collaborative immersive virtual environments

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Szabolcs Dancs

“Tear down the wall!” Some models and obstacles of cooperation between libraries and publishers

Librarians tend to see themselves as Robin Hood (or Aron Swartz): they get it from the rich (publishers) and give it to the poor (users). But is it the real situation? Usually libraries charge money for digitizing resources of public domain, and make them available and re-usable only with restrictions, in many cases not only for commercial users. As long as they are obliged to partly budget their functions all their endeavours to obtain money for producing and making available metadata or digitizing resources from the public domain can be well verified, but the question is if there are any other business models? Examples of good cooperation between libraries and publishers around the world could prove the fact that by tearing the wall of mistrust we can find ways leading to win-win situations. One of these ways can be optimisation of data-flows between stakeholders and providing bibliographic metadata of high quality in exchange for data which we can exploit for copyright clearance or to detect gaps in legal deposit service.

Keywords: obstacles for cooperation, libraries and publishers, optimising data-flows

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How to catalogue a web archive? Some solutions for metadata management at the web harvesting pilot project of National Széchényi Library, Hungary

The web archives in libraries are representing a relatively new type of digital library collections. There is no common international practice of metadata-handling in this field. In some archives websites can be found only by URL and perhaps by full-text search. In some other cases regular MARC records are being created (however often only with a really limited number of data fields). The US-based library organization: OCLC initiated a Web Archiving Metadata Working Group in order to create a framework for metadata handling. Their recommendation has published at the beginning of 2018 by the title of “Descriptive Metadata for Web Archiving”. It served us as a major help through the web archiving pilot project of the National Széchényi Library. The data structure recommended by the OCLC is Dublin Core-based and offers guidelines to describe bibliographic data. We had to add more data fields for administrative and technological metadata types. Finally, we created more than one hundred test records in XML format at the levels of individual websites and sub-collections. In our presentation we are offering an overview about the cataloguing challenges of such a large, heterogeneous, quite fluid and flexible “document type” as the web itself. It is also important to represent that metadata generated by human intelligence or by different automatic and semi-automatic methods in which way can effectively help the browsing in a web archive and narrowing hit lists of a full-text search engine to the really relevant content.

Keywords: web archiving, metadata, cataloguing
This paper aims to identify the current attitude of the LIS community to Knowledge Management (KM) and analyse whether it is time to think of a transition from Information Science to Knowledge Science, as some experts have recommended. In our research were used the bibliographic analytical tools of Web of Science Core Collection, ALA database tools, analysed lists of LIS schools to identify 145 LIS schools, and collected data from their websites to analyse their curricula and the courses offered. At the same time, a content analysis of KM papers published by LIS community and papers on knowledge science was carried out.

The findings indicate a growing interest of the LIS community in KM, as since 2000 the research literature production in the LIS community on KM has been higher than that on Information Management. The number of LIS schools (33%) especially information schools (45%) offering KM courses has grown as well. As LIS study programmes have been extended to include KM and courses on similar topics required by the knowledge society, the LIS profession is expanding towards preparing knowledge professionals, and a shift towards the knowledge paradigm is predicted, we conclude that the discussion about the change of the name from Information Science to Knowledge Science is reasonable and needs our attention.

Keywords: information science, knowledge management, research literature trends, LIS curriculum, knowledge science

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Evolution of the socio-cognitive structure of Knowledge Management

The evolution of the socio-cognitive structure of knowledge management (KM) is described over the period 1986-2015. Records retrieved from Web of Science Core Collection were submitted to author co-citation analysis following a longitudinal perspective as of the next time periods: 1986-1996, 1997-2006, and 2007-2015. The top 10% of most cited authors by sub-periods were mapped in bibliometric networks in order to interpret the communities formed and their relations. KM points to be a homogeneous field as indicated by networks results. Nine classical authors are identified since they are highly co-cited in each time period, highlighting Ikujiro Nonaka as guru. The most significant communities in KM are devoted to strategic management, KM foundations, organisational learning and behaviour, and organisational theories. Major trends in the evolution of intellectual structure of KM evidence a technological influence in 1986-1996, a strategic influence in 1997-2006, and finally a sociological influence in 2007-2015.

Keywords: knowledge management, bibliometrics, author co-citation analysis, knowledge domain visualization, social network analysis, intellectual structure
Information literacy in the perspective of education

Information literacy has long established itself as a separate competence framework (as understood by for example ALA), which should be developed separately and integrally. A subset of information literacy was computer literacy, which was primarily related to, but how, information can be collected, searched, or processed. In recent years there has been a significant content and functional shift. The European Commission has released The Digital Competence Framework 2.0, which provides that information literacy is a wider, digital digital literacy component. At the same time, there is a significant shift in importance, as information literacy is related to competencies related to cyberspace. Search and process information from books or magazines in printed form, or interest in classical librarianship within this framework is not included. Thus, information literacy gains the dimension of a digital component (one in five) and is seen as a necessary part of civic skills. Jarvis sees information literacy as an essential element for securing and developing democracy. It is not about acquiring or evaluating scientific or professional resources (at least not primarily) but about the ability to orientate in the world. In this respect, it also links to Ilich or pragmatic school. In self-directed learning, information literacy plays a key role - if one is to learn through the network, people must be able to find and assess relevant information online, and people must also be prepared to face information bubbles. The purpose of information literacy is therefore to provide one of the learning competences.

Keywords: jarvis, information literacy, digital competence
Nadežda Andrejčíková

A whisper of data

Library information system is a great help especially in automation of professional library activities. At the same time it is a source of very useful information about library activities and individual processes. By means of library information system it is possible to become more familiar with the user and his behavior, or examine the connection between various phenomena. What data is hidden beneath the surface of user interfaces and how can it be used? This paper will present tools for data analysis and results that can be obtained from it. Come and hear, what the data whispers to us...

Keywords: data analysis, library information system, data

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Jakub Fiala

Quantified self

At the core of this dissertation project is a research conducted on a group of university students. It is primarily a qualitative research complemented by meaningful data mining on participants’ physical activity. This valuable combination of approaches provides not only the opportunity to answer research questions in qualitative depth, but also the chance to formulate these questions (Manovich, 2012). Information science offers suitable paradigm for this research, as it uses the digital humanities technique and bears the human experience perspective in mind. Indeed, results give an account not only about one's inner state, but also about broader implications and the relationship to the society (or contemporary self-tracking culture, as suggests Lupton, 2016). The interdisciplinary approach is suitably complemented by data mining. Considering its uniqueness in the combination of techniques, the research could hardly be realized in another field of study. Research Questions T1: How has the research participants’ physical activity (the number of steps taken) changed during the course? T1a: In the first phase; i.e. when they lack access to data measured by a self-tracking device. T1b: In the second phase; i.e. when they have unlimited access to data measured by a self-tracking device and to its platform features (e.g. a leaderboard of other participants). T2: What are the personality traits of those who are liable to be affected by the usage of self-tracking devices? T3: What incentives caused a change in participants’ behaviour according to their self-assessment?

Keywords: quantified self, digital humanities, data mining, physical activity

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Interpretation of alternative bibliometric indicators

The aim of this paper is to describe problems connected with interpretation of alternative bibliometric indicators for assessing of science. Represents theoretical basis of an alternative way of assessing of science, describes the potential of social networks and media to open up scientific communication towards the external environment. Identifies the need for new systems of science evaluation that can be flexible to the new, dynamic conditions of the digital and web environment. Defines the limits and potential of altmetrics for the area of evaluation of science. Describes the goals and draft of the methodology of the forthcoming qualitative research, which aim is to clarify the mechanism of altmetry and to interpret alternative indicators by recognizing the motivation of users to pay attention to scientific products in the online environment.

Keywords: altmetrics, alternative bibliometric indicators
This contribution based on the research done by Annamaria Brijaková, deals with the issue of perceptions of seniors’ user interfaces, focusing on identifying the basic problems and constraints that seniors encounter when using computers and the Internet to understand their mental models. The research was conducted using the method of user testing and comparing the e-mail interfaces using eye-tracking technology, together with the thinking aloud method. The aim was to find out how seniors perceive, interpret and interact with content on the web interfaces of selected e-mail services. Within partial goals, the speed of identification and use of target interface elements, the impact of visual hierarchy and element layout, element naming, graphic design style, and recognition of icons were monitored. Interpreted results identify and describe elements that create digital barriers to the perception and interaction of seniors with the interface of email clients.

Keywords: perception, eye tracker, eye tracking, user interfaces, graphical user design, usability, human-computer interaction, seniors
The paper deals with the current conditions for designing and implementation of a library search tool for children in Slovakia. The author, based on previous studies and interviews with child respondents and staff of selected libraries, summarizes the most important findings in terms of the assumptions for the children’s online library catalog as well as the preferences of the child user in relation to its design, structure, features and metadata. The paper also highlights the benefits and risks to pay reasonable attention in case of designing and implementation of the children’s online library catalog to be effectively usable by the selected user group. Finally, the paper summarizes recommendations for the future practice in designing library search tools as well as other interfaces for child user.

Keywords: library search tools, library online catalogs, child users, child readers, user friendliness, recommendations for designing of children library search tools
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Jela Steinerová, Katarína Buzová (Eds.)

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