

## Scientific information management using information systems within the open access to knowledge context

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### ABSTRACT:

*A general feature of the Open Access as a new strategy of scientific communication characterizing international, national and institutional policies related to open access, the open access to information models is a new debate in academic society. A traditional paradigm of the scientific communication is characterized as well as the analysis of the defining factors upon which the need to upgrade the scientific communication system by changing the paradigm under open access strategy circumstances relies. This work is mainly aimed at presenting and analysing the academic community attitude towards copyright, generating a computer application by integrating two already available platforms, creating a useful information management tool for the academic community and analysing the digital repository by calculating and optimizing performance indicators in terms of digital repository users satisfaction with the scientific production of the academic community. **The qualitative research related to the Academic Community Behavior – Editors and Universities** describes various researches and studies related to academic community attitudes, expectations and knowledge in terms of copyright, own archiving and open access to information.*

**KEY WORDS:** *computer application, digital repository, open access, marketing research*

### INTRODUCTION

Within the mainframe of RoMEO project [3] we conducted various research and studies related to the attitude, wishes and knowledge of the academic community concerning the copyright, auto archive, and open access to information. [1].

The research took into consideration the two qualities of a member of the academic community: a researcher and an author. The study was conducted in 2003, on a population consisting in 524 authors in academic environment and 80 academic journals editors. The research base consists in A-P-U triangle, where A stands for the authors of the scientific publications, P – the authors, and U – the universities. [2]

Lately, there has been a particular interest in marketing research in various fields. Marketing concepts and methods have reached almost all humanities, from the economic field, where marketing appeared and developed, to the field of infodocumentary structures with their specificities.[4]

In the new context – geerated by the so-called crisis of periodic publications in academic field – a combination between the ascending spiral of subscription prices of the periodicals determined by editors (often for commercial reasons) and the descending spiral of subscriptions made by university libraries – the access to academic information is threatened. For this reason,

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the academic community have taken several initiatives aiming at finding a solution to maximize the access to scientific information. [5]

In practice, these initiatives aimed at setting up two mechanisms for processing the scientific materials: **Open access periodicals** and **institutional digital repositories** or Open access archives. [5]

”Transilvania” University in Brasov implemented the first institutional digital repository in Romania, encompassing the scientific production of the academic community. This repository is the result of research done by Marketing Department of Faculty of Economic Sciences.

Academic communities like Department of advanced mechatronic systems, Department of road vehicles, School of Law and Faculty of Computer Engineering adhered and developed this repository.

Marketing research aims at determining the attitude and behavioural barriers in order to access the promotion of scientific research and to increase its visibility by developing open access to information.

According to the concept of modern marketing, any activity should be developed starting with knowing the user behaviour.

Theory of user behaviour actually turned into a distinct marketing discipline. User behaviour is a complex area. Marketing research collects, processes and analyses information related to the users, while the information will become the base of effective development of marketing strategies.

From **March** to **April 2012** a quality marketing research was conducted on the opinions of the teaching staff from School of Law on the copyright and open access to information.

The research analysed the two roles of the academic community members, the researcher and the author. The research population consisted in 37 authors. The research base was the A-P-U triangle, where: **A** – Authors of scientific articles created in the academic environment, **P** - Editors, **U** - Universities.

Regarding the open access to scientific information, copyright issues were raised. Debates focused on the question “Who is entitled to own the copyright: A, P, or U?” The research took these aspects into consideration and monitored the attitude of the three parties involved in copyright ownership.

## RESEARCH RESULTS

An electronic survey with 10 question was created and published at the School of Law, on the address <http://www.surveymonkey.com/s/RVYJQHK>.

The results of the research, the answers to our questions are presented below.

1. What is your academic teaching experience?		
Less than 5 years	0.0%	0
5-10 years	73%	11
10-20 years	26.7%	4
More than 20 years	0.0%	0

Figure 1 *Academic teaching experience*

Concerning the academic teaching experience, it is confirmed that The School of Law is relatively young, with a continuous evolving teaching experience, and 73.3% of the respondents have a teaching experience between 5 and 10 years.

On question number 2, related to "Number of articles published as a single author", most of the respondents, 64.3% published 11-20 articles as single authors, while 60% published in collaboration less than 10 articles.

<b>2. Number of articles published as single author?</b>			
<b>Less than 10</b>		14.3%	2
<b>11-20</b>	<input type="checkbox"/>	<b>64.3%</b>	<b>9</b>
<b>21-30</b>	<input type="checkbox"/>	7.1%	1
<b>31-40</b>		7.1%	1
<b>41-50</b>		7.1%	1

Figure 2 Number of articles published by the teaching staff as single authors

<b>3. How many articles have you published in collaboration with several authors?</b>			
<b>Less than 10</b>		<b>60.0%</b>	<b>9</b>
<b>11-20</b>	<input type="checkbox"/>	13%	2
<b>21-30</b>	<input type="checkbox"/>	20.0%	3
<b>31-40</b>		6.7%	1

Figure 3 Number of articles published by the teaching staff in collaboration

<b>4. In your opinion, who owns the copyright for the articles you wrote?</b>			
<b>University</b>		0.0%	0
<b>Author, authors</b>	<input type="checkbox"/>	<b>73%</b>	<b>11</b>
<b>Editor</b>	<input type="checkbox"/>	20.0%	3

<b>4. In your opinion, who owns the copyright for the articles you wrote?</b>		
<b>I don't know</b>	6.7%	1

Figure 4 Owner of copyright for the articles published by the teaching staff

Related to intellectual property rights, 73.3% of the respondents believe that, in case of articles they wrote, the authors own the copyright. 20% believe that the editors own the copyright.

Nobody believes that the university, as institution, owns the copyright.

<b>6. What does rather interest you?</b>		
<b>Moral rights</b>	73%	11
<b>Patrimonial rights</b>	26.7%	4

Figure 5 Interests of teaching staff in copyrights

73.3% of respondents are interested in moral rights, while 26.7% are interested in patrimonial rights.

<b>7. When publishing, have you ceded your copyrights to the editor free of charge?</b>		
<b>Yes</b>	33%	5
<b>No</b>	53%	8
<b>You haven't ceded your copyright</b>	13%	2

Figure 6 Opinion of teaching staff on copyright cession

An interesting result was obtained on the copyright cession issue. 53.3% haven't ceded the copyright for free, while 33.3% have ceded the copyright for free. 13.3% haven't ceded the copyrights.

<b>8. Do editors ask for it?</b>		
<b>Yes, it is the publishing condition</b>	21.4%	3
<b>You haven't signed such contracts de</b>	78.6%	11

Figure 7 Editors' conditions for publishing

21.4% believe that editors ask for copyright cession, while 78.6% haven't signed such contracts.

<b>9. Would you agree to publish your articles in open access, meaning visible on the internet. It would increase the visibility and the chance for being cited.</b>		
<b>Yes</b>	<b>73%</b>	<b>11</b>
<b>No</b>	<b>26.7%</b>	<b>4</b>

Figure 8 teaching staff opinion on open access publishing

73.3% of the teaching staff from School of Law would agree to publish their articles in open access, while 26% disagree.

<b>10. Do you use open access articles for your research?</b>		
<b>Yes</b>	<b>73%</b>	<b>11</b>
<b>No</b>	<b>26.7%</b>	<b>4</b>

Figure 9 Teaching staff habits on accessing open access articles

73.3% of the teaching staff at School of Law use the open access articles, while 26% don't.

## CONCLUSIONS

The studies conducted in order to analyse the authors' attitude focused on:

- Understanding current practices on scientific paper writing and copyright;
- Understanding the wishes of academic community members to protect the scientific articles available on the internet and to be informed in their rights;
- Understanding the opinion of the academic community members concerning the free of charge use of other open access articles.

In consequence, one may notice a more obvious concern of the academic community for intellectual property rights. The authors are more interested in moral rights for their papers, than on patrimonial rights. Most of them consider their papers rather as an intellectual extension, and not an extension of their portfolio economically speaking, given the fact that there are very few cases in which authors are paid for a scientific paper.

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