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SCIENTIFIC INSTITUTION'S WAYS OF COMMUNICATING WITH THE ENVIRONMENT

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Summary

The Internet has given its users ways for fast and inexpensive publication of information, dissemination of their creativity, experiences and thoughts. Blogs have become one of the forms particularly popular over the recent years. Impact of blogs on the audience has turned out to be so significant that they quickly have begun to be used as a marketing tool, both in the area of public relations as well as advertising.

By definition, blog imposes a significant simplification on the message conveyed, both in terms of content and language, making them more legible, comprehensible and interesting for each recipient. This makes this form of communication extremely attractive for science, especially in the context of its commercialization and dissemination of information on the scientific and research achievements.

For science, scientific and research institutions and scientists a certain dualism arises in the approach to using blogs as a means of communicating with the environment. On one hand, blogs provide a quick, simple transmission of information and knowledge, on the other hand, most people feel that scientific blogs lack credibility and seriousness usually associated with messages coming from the world of science, research and experiments.

For many years, blog have been extremely popular, even the required form of communication used by the American and Western scientists. There is a growing awareness of the merits of blogging on the subjects of science in Poland. However, in the opinion of the respondents of the research presented in the article, the dominant tools for the dissemination and promotion of science are scientific conferences and publications, namely those which by their very nature limit the range and spread of information.

Keywords: scientific institution, marketing communication, blog, commercialisation of science, research, marketing

Introduction

Commercialization of science required by market economy has led to a situation in which research achievements, the activity of research and development units are more and more often regarded from the point of view of marketing — in order to function it is necessary to attract clients by informing about and promoting one's own products. The changes taking place in contemporary media have forced also scientific institutions and scientists to introduce substantial changes to communication with the recipients. These changes concern both the used forms of informing about and advertising one's activities and achievements, as well as the method and the language of messages addressed at various target groups. New media have brought a broad range of possibilities of reaching recipients interested in particular subject and facilitating the system of communicating with them. Blogs have become a very popular form of marketing activity in the recent years.

Blog is a simple and fast way to appear on the Internet market, which is now the most absorbent, common market with a global coverage, which allows reaching the recipient around almost the whole world.

Blog has become the materialization of a futuristic vision of Vladimir Odoevsky from 1837 presented in the book "Year 4338" which predicted the existence of a network of magnetic connections making it possible for everyone to publish their diaries¹. This is because blog (originating from the word weblog) is defined as Internet log, diary, commentary. It appears in form of an Internet website which is often updated and which contains many posts marked with dates and arranged in chronological order.

Depending on the author and the purpose of posts, the following kinds of blogs can be distinguished:

- Private typical diaries
- professional run by experts on a particular subject, they serve the purpose of building the image of the author as a specialist in the area of particular subject. Often such blogs are written by journalists, or politicians expressing their opinions and commenting on the reality by means of Internet posts.
- partner run by a private individual in cooperation with a company and ordered by the company
- corporate prepared by a company for the purpose of improving communication with recipients and building own image²

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The more popular a particular blog becomes, the less it resembles a typical diary associated with writing down daily experiences, author's impressions etc. Over time it transforms into a kind of public debate. A good example of this phenomenon were blogs written after the September 11 attacks. Series of posts describing private tragedies evolved into discussion concerning terrorism, Islam and foreign policy of the United States³. Thus, blog is becoming more and more of a source of information about the world, political, sports, cultural events, source of knowledge and advice concerning various areas of life. Thus, depending on the subject of a blog and its character, many kinds of publications can be distinguished, among them the most popular are:

- diary the most typical blog, which emphasizes the individual character of the author and presents his experiences
- information constitutes a kind of encyclopaedia consisting of a list of terms and their explanations
- instruction a kind of blog which provides advice and training materials
- overview source of analytical knowledge from a particular area, in which feedback from readers is particularly appreciated
- problems concerns problems associated with the discussed subject
- interview subject presented in form of a conversation with an expert
- biography focuses on the presentation of both widely known characters and personalities, which are interesting for a particular group of Internet users
- bibliographical constitutes a kind of bibliography and guide around other blogs
- discussion it is based on building a community interested in and participating in discussion on a particular subject.

The development of technology has led to a situation in which every Internet user can publish not only text, but also photographs (photoblogs), videos (videoblogs, vlogs), can record audio messages (audioblogs). Computer is not the only tool that can be used to run a blog, as now it is also possible to write and read blogs (moblog) by means of mobile phones. This makes the message even more attractive and attractive form is particularly important in marketing activity.

If we assume that a research-scientific institution and scientists function on the market based on rules analogous to those applying to other market entities, ways of promoting activity and achievements typical of market should also be the same in both cases. It seems that due to the characteristics of scientific units, the language and

substantial content of messages, frequent situations in which recipients don't understand the messages, the implementation of promotion programmes based on assumptions complying with the rules of marketing can contribute to the improvement of communication with clients, creating the image of a scientific unit as a modern institution following the latest trends and taking advantage of the possibilities offered by, for example, the Internet. In scientific units blog can serve analogous functions as in corporations:

- informing providing current information associated with the discipline, which is the domain of a scientific institution
- building relations form of implementation of the strategy of public relations, that is, building durable contacts with the environment and its positive opinion about the activity and research-scientific achievements
- knowledge management blog is an element of the system of bilateral communication, which a scientific unit uses to not only provide knowledge, but also to obtain knowledge from answers and discussion of the readers⁵
- news room 2.0 blog serving the purpose of cooperation with the media⁶.
 Thus, scientific blogs can be classified in the same way as corporate blogs:
- devoted to a research-scientific unit presenting all information about an institution and its activity, current events, achievements, etc.
- devoted to particular actions presenting a particular sample of activity of a scientific institution, which for various reasons should be propagated among blog's readers
- written by a scientist personal in character, presenting the author as a private person, focusing on the subjective opinion of the author presenting information, or commenting on facts, the surrounding reality
- promotional usually written by the public relations, or marketing department, which are supposed to build relations with the environment, providing recipients with promotional and advertising information concerning bot the whole institution and a chosen area of its activity
- thematic prepared by experts on a chosen subject, serving as a source of knowledge building the image of an institution as a specialist in a particular discipline⁷.

Blog's characteristics

The authors of the research carried out by the Institute of Literary Research of

the Polish Academy of Sciences and Gazeta. pl pointed to the following aspects of blog as a means facilitating communication: quantitative ("there are more opinions", "everybody can have a say in a debate on any subject"); qualitative ("expressing one's opinion has become easier", "blog enables extreme subjectivity"); temporal ("utterance is more spontaneous and fast", "blogosphere forces journalists to react faster"), formal (multimediality, brevity, "simplification, shallower message") ⁸.

Blog's most important and highly appreciated feature is its interactivity, the possibility of establishing bilateral communication. One of the best examples of interactivity is the possibility of writing comments on the author's post. These comments often complement knowledge, clarify doubts, often park a discussion in a greater group of Internet users. From the point of view of utilization of blog as a means of promoting science, the reader's response is first of all a signal that the information reached the recipient and caused a particular reaction, second thing is that the response is an expression of this reader's opinion — positive or negative — concerning the promoted institution, or the promoted product.

Regular updates on blogs in combination with the above-mentioned interactivity leads to building an Internet community based on common interest in the subject proposed by the author of a blog. Establishing durable relations with readers makes it possible to obtain precious information, which may lead to attracting a recipient described in marketing as a loyal client. The trust of such a recipient, continuous contacts, including him in the created community also contributes to raising the efficiency of promotional activity, as properly formulated messages are targeted at more adequate auditorium.

Efficient communication through a blog can be achieved thanks to the facility and high speed of posting content on the web. This allows immediate modification of content and reaction of the author to possible changes, continuous contact with readers taking part in the discussion. This aspect of blogging becomes especially significant in crisis situations. Blog can be faster than other media and can become a credible source of information about conditions, reasons and ways of solving a crisis. Thus, it is recommended to consider this form of communication in the strategy of conduct for times of temporary crises in an institution's activity.

Blog, due to its informal character, guarantees the independence of statements. Thus, they can be used in situations, in which the publication of information or comment in other media may encounter formal limitations, or internal regulations. At the same

time it allows greater openness and directness of opinions expressed in posts. However, this also leads to certain risks associated with lack of control over texts published by Internet users participating in a discussion. If the goal of a blog is the promotion of an institution and its achievements, negative comments can unfortunately be detrimental for the institution.

Blog is a dynamic form of Internet communication diversified in terms of language and style. Many publications emphasize the "human" character of blog and the institution, which runs a blog — an institution with real people with names and not just products, offers and the intention to attract a client⁹. Basing on the prestige and renown of its employees an institution builds its own prestige; scientists are thus the most important attribute for the creation of the image of a friendly organization open to contacts with the environment, eager to share experiences and knowledge.

Lack of strategy of promotion and arranged substantial content of messages conveyed to readers by means of blog posts can lead to another threat — the publication of confidential information (professional, commercial, technological) on the Internet. In this case openness may be more detrimental than helpful.

Scientific blog is a marketing tool of scientific-research institutions in which direct promoting is avoided¹⁰. For this reason, this form of Internet communication is classified as public relations activity understood as informing the public opinion about the positive effects of research works. A post which bears the characteristics of an advertisement often makes the recipients assume negative approach, lose interest or even discourages them from reading such publication.

Blog's advantage emphasized by Grzegorz Mazurek is the synergy of this form with other Internet marketing tools. Appropriately chosen keywords also contribute to such positioning of an institution in search engines, which guarantees high frequency of hits and visits on page¹¹. Interesting information contained in a blog, the fact that it is easy to find on the web launches the mechanism of spreading this information also in other media. As the survey carried out by Fusion PR in 2007 shows, 78pc of the surveyed journalists read blogs, which makes it possible to assume that they drew information for their publications from blogs. Every third journalist recognized blog as a credible source and 35pc of the surveyed journalists declared that they were writing their own blogs. ¹² Based on these figures, it is possible to conclude that blog is an efficient tool for building media relations.

One of blog's characteristic features, similarly as in case of other forms of

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Internet communication, is language — simplified, colloquial and at the same time comprehensible and legible for every recipient. Language is an element which in case of science constitutes a communication barrier. Specialist terminology, specific for each discipline often leads to lack of understanding with a partner without specialist knowledge. According to the authors of the above-mentioned report titled "Blog to blog", the language of blogs is characterized by the following features:

- Internet language using so-called emoticons, netspeak, that is, colloquial Internet language, phonetic transcription, abbreviations
- colloquialism, everyday language colloquial expressions, irregular sentence formation, simplicity, informal language
- transparency which is achieved thanks to simple expression of thoughts, legible, vivid, comprehensible language, humour, dynamics.

Unfortunately, what is typical of many blogs is sloppy language, that is, bad style, spelling, grammar and punctuation, as well as using foul language and the so-called newspeak¹³.

Despite the last, negative aspect, due to its vivid, often natural, humorous language, blogs attract the attention of readers. From the point of view of marketing activities, it can constitute an attractive way of providing information important for the author and raise the interest of recipients. For messages concerning science, up till now associated with seriousness, specialist terms, often high level of abstraction, blog and its characteristic manner of expression constitute a substantial change, which may make science friendlier, more comprehensible and closer to the recipient of conveyed contents.

Efficient marketing activity of a scientific institution, similarly as activity of commercial entities involves not only editing a blog, but also participating in discussions initiated by other network users and monitoring posts concerning the scope of activity and interests of scientists. According to Glenn Fannick, by means of blogs organizations can follow the activities of their partners, contractors, clients and learn opinions about themselves¹⁴.

Thus, blogging focuses on three basic actions: 1) initiating and directing discussion by launching and editing a scientific blog; 2) learning the environment by reading and participating in discussions on other blogs; 3) getting to know the rivals and partners,

as well as opinions about oneself by monitoring blog posts and accompanying discussions.

Michał Łebkowski identified the following image benefits from writing a blog:

- showing oneself/institution as a modern entity using modern communication channels
- distinguishing oneself from the competition
- showing "human face"
- managing reputation fast reaction to messages concerning an institution, its achievements, products/services, people
- managing public relations, including media relations. ¹⁵

Scientific blog

"Certain Polish professor, an experienced economist working for an important public institution, admitted to the author of the text in secret that he is a huge fan of blogs. Asked why he doesn't write blogs himself, he said candidly: I shouldn't. He is not the only person with such attitude. In Poland it would be a shame for a scientist to write a blog, but in the USA it is a shame for scientists to not write a blog." 16 — this quote from an article published by Forbes very well shows the condition of Polish scientific blog. Blog is becoming an ever more popular form of marketing contacts with the environment applied by units running business activity. However, research-scientific units and scientists are not fully using blog's communicative potential. This opposition can be traced back both to lack of trust in this kind of dissemination of knowledge, as less serious, unsuitable for science, as well as treating the Internet as a not very credible source of information. For this reason what we can observe is a kind of dualistic approach to blog — scientific blog as a fast, simple form of disseminating scientific knowledge and the opposing approach, which undermines scientific blog's credibility and seriousness, which up till now have been ascribed to messages from the world of science, research, experiments.

Blogosphere, which can be found on the websites of universities to a large extent serves the purpose of building internal communication. It plays blog's typical role of facilitating communication, in this case — between lecturers and students — but only to a small extent it is being used to promote the scientific achievements of a unit.

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Below several examples of Polish websites publishing scientific blogs and an example of an American blog — one of numerous blogs written by scientists — are presented.



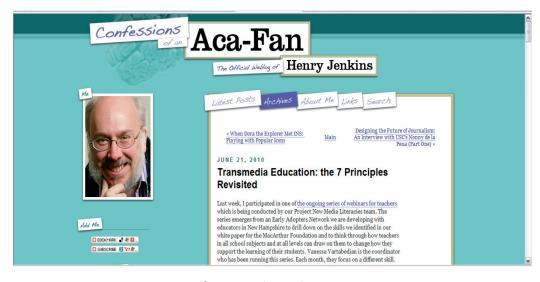
Source: http://nauka.webcri.net



Source: www.ihuwb.blogspot.pl



Source: http://naukowy.polityka.pl



Source: www.henryjenkins.com

It is very clear that for the world of science, in the context of its development, the dominating methods of presentation of the achievements of scientists and their selfpresentation are scientific publications and scientific conferences. This to a large extent limits the dissemination of information and achievements among the group of recipients who aren't experts on a particular subject, don't have knowledge concerning the discussed area and thus don't understand specialist language used by authors and speakers. In this respect blog offers much greater possibility of reaching broad audience, even random audience under condition that several basic conditions are satisfied. First of all, information has to be formulated in such a way that it attracts the attention of the reader, the second condition is that the language of posts has to be clear and comprehensible for people without adequate knowledge on the subject. The third condition is that deliberations have to be casual, sometimes humorous and avoid the similarity to a scientific paper. Blog's specific rhetoric can contribute to stimulating the interest of recipients in the discussed subjects and facilitate the comprehension and understanding of the presented information. The credibility and proper interpretation of the information is guaranteed by the author-scientist building a group of loyal readers, who find this way of conveying knowledge as more attractive and accessible.

"When the achievements of science lie somewhere on desks, we lose the chance for development, making a step ahead, or learning something interesting. For this reason the dissemination and commercialization of the results of research plays such a huge role. Thanks to dissemination we learn about new discoveries and thanks to commercialization we can use them in everyday life. After all, science is supposed to serve the people.

What still has a negative impact on the current situation is the stereotype that obscurity of scientific research proves its high quality, elite status and exceptional significance. It is time to end this way of thinking. Europe is evolving in the direction of »open access«, that is, open science, accessible for others, sharing own results with others, informing about them."¹⁷ — this is how professor Lena Kolarska Bobińska, here playing a double role — that of a scientist-sociologist and a politician, in one of posts on her blog explains that science needs to move beyond the standard forms of presentation.

For the scientist blog is also an attractive way of presenting his knowledge, interests and opinions. Internet posts concern not only the discipline that is the domain of a scientist, they also discuss problems associated with the surrounding reality, author's own experiences and thoughts. Personal character of posts in a significant way breaks the barrier between the scientist and usually regarded as inaccessible and often as incomprehensible and the reader. 'Science has always been my passion, so I became



Source: kolarskabobinska.natemat.pl



Source: ryszardtadeusiewicz.natemat.pl

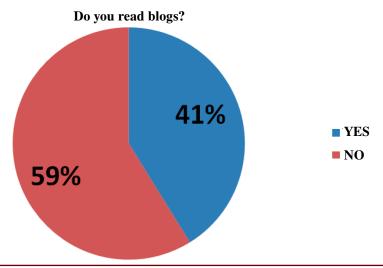
a scientist. When I found out how much fun there is in science, I started trying to convince as many people as possible that science is fun. [...] I'm also trying to popularize knowledge using various means: books, newspapers, magazines, radio, television and lectures. There have been a total of 400 printed papers and about that much in form of various presentations — live and in the media. [...] Now I have been chosen to write on this blog.

I'm wondering whether the Readers will accept me?" 18— in case of professor Ryszard Tadeusiewicz from the AGH University of Science and Technology writing a blog seems like a perfect tool for sharing one's knowledge and experiences with the environment. Comments under the texts written by professor Tadeusiewicz show that the problems and subjects from the world of science, university, teacher's experiences discussed on the blog contribute to building awareness, developing knowledge, looking for answers and discussing various aspects of science, which is also an element of culture.

Scientific blog — pilot research

The research was conducted in September 2010. It is a kind of pilot research and its goal preliminary identification of the opinions of the surveyed people concerning Internet blogs as tool for the communication of scientists and research-scientific institutions with the environment. The surveyed sample covered 51 people. This is not a representative group in terms of sex, age and education. However, the survey was carried out on purpose among the employees of universities, research-scientific institutes, as well as students and employees of companies taking advantage of scientific achievements. This group was treated as the one which due to its interests and professional needs would constitute the best point of reference for the identification of attitude towards information contained in blogs devoted to messages from the scope of various areas of science.

Picture 1. The preliminary opinion of respondents on Internet blogs as a tool communication researchers and research institutions with the environment

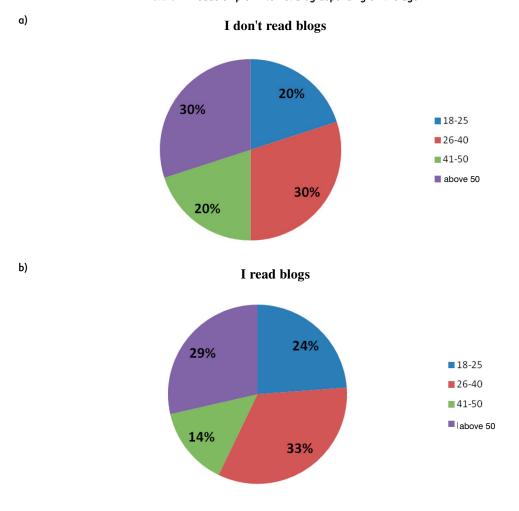


Out of 51 people 41pc declared that they read Internet blogs. The distribution of age groups of people who don't read blogs was evenly spread among two age brackets: 26 to 40 and above 50. In each of these groups one third of respondents gave a negative answer. The remaining 40% was also spread evenly among the two other age brackets.

The group of people aged 26–40 dominated among positive answers — 33pc of respondents. A little smaller group are people older than 50 who constitute 29pc of blog readers. However, it is necessary to remark here that both dominant age groups were also the most numerous.

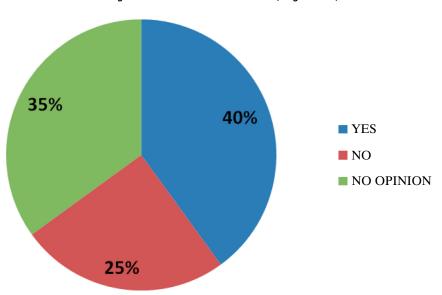
Readership of Internet blog depending on the age is presented on the following two charts.

Picture 2. Readership of Internet blog depending on the age

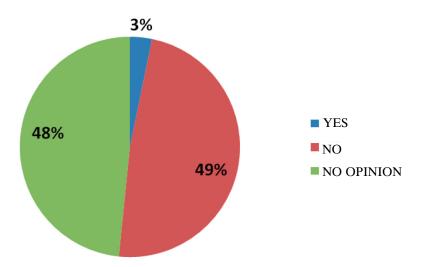


The most popular subject among the readers of blogs is definitely politics. Political blogs are here understood as blogs written by politicians and their comments on the events taking place in the government, parliament, political parties and Poland's foreign policy. Further areas that readers are particularly interested in are culture and sport. In the group of women blogs devoted to beauty, fashion, cooking are popular. Among the youngest respondents diaries discussing social issues, "concerning life" and private blogs are most popular. Only one respondent admitted to reading scientific blogs.

Asked whether blog is a credible source of information, most respondents didn't express their opinion. This concerns both people reading and the people not reading blogs — 22 people didn't express their view. A major group — 20 people — definitely denied that Internet blogs are credible. The analysis of these figures in the division into groups reading and not reading blogs (which is presented on the charts below) reveals that the trust of respondents in the information provided by means of blogs is small. 40pc of readers regard blogs as credible, but 60pc either undermine (25pc) the credibility of blogs, or have no opinion on the matter (35pc). The results looks much worse — which could be expected — among people who don't prefer blog as a source of information. Almost a half of the surveyed concluded that blogs are not credible and almost a half were unable to express their opinion on the matter.

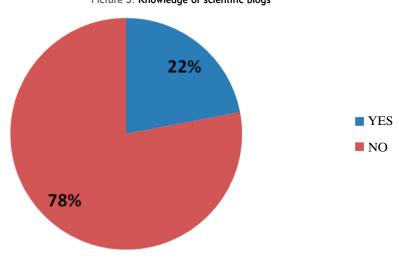


Picture 3. Is blog a credible source of information (blog readers)



Picture 4. Is blog a credible source of information (people not reading blogs)

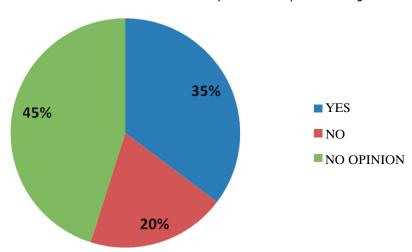
Only 7 people reading blogs know blogs devoted to science, or written by scientists. Out of 51 respondents 22pc declared that they knew posts concerning various scientific disciplines. Among them are also people who don't read blogs. Thus, it is possible to assume that they came in touch with such blogs, but are not interested in learning about their content. Considering rather poor utilization of blogs as a tool for the promotion of scientific institutions, scientific achievements and building the image of scientists themselves, the result of this research comes as no surprise.



Picture 5. Knowledge of scientific blogs

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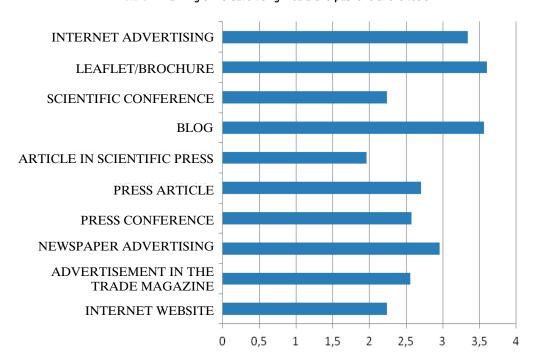
A consequence of opinions expressed with regard to the two above-mentioned issues, that is, the credibility of Internet blogs and knowledge of scientific blogs is another question — should science promote itself by means of blogs. 35pc of the surveyed gave positive answer and every fifth gave a definitely negative answer. A major group — 45pc of respondents — didn't express their view.



Picture 6. Should science promote itself by means of blogs?

Low evaluation of blog as a tool for promotion of all aspects of activity associated with science shown above, corresponds to the classification of efficiency of the forms of promotion made by the respondents. It confirmed that the utilization of blog still raises many doubts and the respondents don't associate it with efficient influence on the recipients. In the ranking of 10 advertising and PR tools, blog placed second from the bottom. Only brochure/leaflet was recognized as less efficient promotion tool. The respondents were also sceptical about Internet advertising. This suggests that commercial use of the Internet still raises many doubts, even though Internet website was highly appreciated and recognized as the second best tool of promotion. The highest mark was awarded to article in scientific press. Slightly worse marks were awarded to scientific conference and advertisement in branch magazine.

Pilot research has confirmed that Internet blog, despite growing popularity is not regarded as an efficient tool of promotion. Especially in case of promotion of scientific-research institutions, scientific achievements and scientists' image. At the same time,



Picture 7. Ranking of 10 advertising media and public relations tools

apparently, there is a tendency to highlight traditional tools as best means of influencing the recipients and propagating information concerning science. What is noteworthy in this context is the fact that forms such as an article in scientific press, scientific conference, restrict promotional activities to the scientific environment and thus limit the coverage of dissemination of information.

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