

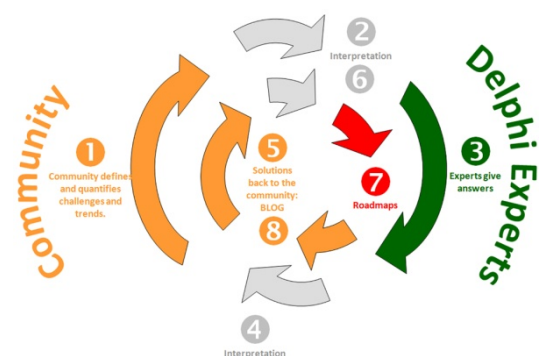
Challenges, Trends and Solutions for Science and Innovation Communication in Germany

ABSTRACT

A major survey on science and innovation communication in German-speaking countries was conducted among 300 science journalists and PR managers, scientists and communication researchers. The findings show trends in decreasing salaries, revenues and media coverage on the one hand, and increasing PR resources and direct online communication by scientists on the other. Furthermore, the survey made it possible to compare and evaluate possible future formats in science journalism. The findings are now being discussed within a Delphi study by renowned experts, researchers and practitioners in science and innovation communication.

1. Deduction

From a European perspective, NATURE's prophecies of a supposed "supplanting of the old media" (Brumfiel 2009) in spring 2009 were mostly seen as a US-specific trend of national newspapers in decline. A recent trend study, however, shows comparable changes being no less virulent in Europe than in the U.S. Initiated in the course of a conference (see Kolbert 2009) in Germany, the most comprehensive trend survey so far on science and innovation communication in German-speaking countries is being conducted since the end of 2009. As documented by the author himself (Gerber 2009), more than 300 science journalists and PR managers, scientists and communication researchers have provided answers so far, thereby revealing the community's most pressing challenges and opportunities. The survey produced trends concerning decreasing salaries, revenues and media coverage, increasing PR resources and direct online communication by scientists. It also made it possible to compare and evaluate possible future formats in science journalism. The findings of this survey are being discussed and transferred into roadmaps within a Delphi study by dozens of renowned experts, researchers and practitioners in science and innovation communication. As shown in fig. 1.1, the trend study has reached stage 4. Even though the study has just been carried out half-way so far, the analysis of certain statistics as well as findings from the survey and the expert's input already reveal a number of challenges and solutions, some of which are as follows.



2. First Results of the Survey

- Without a single exception every German publication about popular science and technology has lost in sold circulation between 20 and 40 percent within the last 10 years.
- When asked which aspects of R&D were most successfully communicated by the media, most respondents ranked the “economic potential of research results” for new products and services on top, followed by “topical news about recent results” and (with much less support) the “long-term social impact of science and innovation”.
- 80 percent of the respondents see a major deficit in science and innovation being reduced to research results, technologies and product features, whereas the processes and mechanisms of innovation and scientific achievement remain unclear. It is quite unfortunate, that of all aspects just this “science in the making” seems to be the hardest for the media to convey, given that scientists and science PR experts regard this aspect as the most important in inspiring young people to go for a career path in research and development.
- Freelance journalists in German-speaking countries are far more affected by the above mentioned developments than their employed colleagues. Only one out of ten would clearly recommend the job of a science journalist to young people. In contrast, employed journalists / editors mostly regard the economic crisis as the source of a structural crisis in science journalism.
- The recent economic crisis has had a serious impact on science events and science centers in German-speaking countries, suddenly being confronted with significant decreases in financial support, especially in sponsoring by companies and foundations.
- Almost every respondent in the survey anticipated the formats in science journalism to develop even more in the direction of staging and entertainment, pushing the existing titles further into smaller niches of special-interest journalism.
- According to the survey, the German community sees innovation communication as being most successful in reaching enterprises, but as quite unsuccessful in reaching young people.

3. First Results of the of Delphi study (with a decided focus on journalism)

- Several experts emphasize the growing importance of quality standards of an investigative, independent and thorough science and innovation journalism, i.e. good quality as a differentiator towards citizen journalism or corporate publishing. Some experts expect the increasing pressure for quality to lead to an accelerated consolidation of media products. However, one Delphi expert sarcastically noted that there was no “crisis in the media industry” after all, but only a “crisis in wood-processing industries”.
- Whereas most interviewees expect TV and radio to remain the most important communication platforms for innovation within the next decade, they also see a strong crossmedia trend towards linking existing platforms with online and interactive channels and platforms. It seems to be highly unclear to most experts how the profession of the science or innovation journalist will change in the course of these developments from a gatekeeper function to that of a moderator and information scout.
- Teachers’ capabilities of conveying media literacy is seen as a crucial aspect for enabling the next generation to assess or even validate information about new technologies from different sources. Linking media literacy to scientific citizenship could rationalize many irrational / emotional debates on issues like intelligent design or genetical engineering.
- As to the above mentioned demand for conveying not only results but also mechanisms of innovation, experts regard a basic understanding of research processes (e.g. with young people) as a precondition for understanding innovation processes.
- The borders between journalism, PR and marketing in the area of science and innovation will be further blurred, according to the questioned specialist. Through platforms like „Futurity“ (founded by US universities) or „Athenaweb“ (a free TV footage repository for science & technology, pushed by the EU), the relation between the players is already becoming much more complex than it used to be.

4. Outlook

The Delphi responses will be fully structured and interpreted by the end of July (Stage 5 in fig. 1.1).

The final results of the study (Stage 7 in fig. 1.1) are expected for the end of September 2010.

Meanwhile a succeeding trend study for 2011-2012 is being prepared. The project will then also be open for international cooperation.

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Alexander Gerber-Crawford has been covering science and technology issues in a wide range of publications since 1994 (app. 3.000 articles). He became Head of Communications & Marketing at Europe's largest association for ICT research (Fraunhofer) in 2004. Since Fraunhofer is obliged by its unique financing model to acquire two thirds of its research budget in the free market, Mr. Gerber-Crawford decided to develop the Science-to-Business channel *InnoVisions* with the objective of accelerating and focusing technology transfer and commercialisation of scientific results. Initially launched as a corporate publishing title in 2006, *InnoVisions* is by now an official media partner of almost every major innovation event in Germany.

As an Information Scientist Mr. Gerber-Crawford advocates against a one-way approach to science communication; he argues that both science and industrial R&D need to engage more intensively in an Open Innovation dialogue, e.g. by exploiting interactive technologies. Mr. Gerber-Crawford, furthermore, calls for the media to support public readiness for technological change instead of overemphasising the risks of technology at the expense of its opportunities. He also sees a huge media potential in accelerating innovation by fostering knowledge transfer between science and business.

In 2009 he initiated and coordinated the most comprehensive trend study about science and innovation communication, leading to the formation of a new research institute, the INNOKOMM Research center for Science & Innovation Communication. Mr. Gerber-Crawford is heading the institute as Managing Partner.