

Mazarakis, Athanasios; Peters, Isabella

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Quo Vadis German Scholarly Communication in Economics?

Athanasios Mazarakis & Isabella Peters
ZBW Leibniz Information Centre for Economics
{a.mazarakis|i.peters}@zbw.eu

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Abstract

In this paper we study the situation of scholarly communication in Economics and Business Studies in Germany. We combine findings from an online survey, focus group interviews and a panel discussion. Some of the results of the survey are that economists at German universities and research institutes most frequently use the online encyclopedia Wikipedia, content sharing services, video and image hosting services as well as video conferencing systems. In a professional context, economists primarily use highly specialized tools such as learning management and reference management systems. Almost one in three German economists is active in academic and professional networks such as ResearchGate or Xing (Siegfried et al. 2015). Focus group interviews and panel discussion reveal that social media content and platforms are mainly used passively but acknowledged for serendipitously finding interesting research papers. They are also valuable for staying up-to-date on the discussion of current economic issues. Scholarly communication and scientific discourse with colleagues from Economics and Business Studies does, however, not yet take place essentially on social media platforms.

Introduction

Scholarly activities are now increasingly performed online with the help of internet and social media tools e.g., online social reference management services or social networks (Van Noorden 2014). This approach of transferring scholarly routines to the (social) web is referred to as 'science 2.0' (<http://www.leibniz-science20.de>) - assuming that a new generation of science and scientific work has been catalysed. The uptake of social media and internet-based tools in science, however, varies between the disciplines with Biochemistry and Digital Humanities seeing increased use of social media tools (i.e., Twitter) and Sociology and Economics showing only marginal usage numbers (Holmberg and Thelwall 2014).

Based on these findings we deeper investigated social media use of German economists and will present the results of three different studies concerned with that topic. The first study was carried out via an online survey targeted at economists, medical scientists, and engineers and resulted in 766 completed questionnaires by economists (Siegfried et al. 2015). In general, this study aimed at describing the level of awareness towards social media in economic research, the intensity of use and the different types of social media use. Second, we invited focus groups of researchers from Economics and Business Studies to share their experience on how they utilize social media for their purposes. Lastly, we received evidence via a panel discussion on science 2.0 and Economics during a conference in Germany.

Study 1: Online Survey

The first study consists of selected results of an online survey (December 2013); the complete results can be found in Siegfried et al. (2015). In total, 10,297 test subjects in Economics and Business Studies received a personalised email including a link which invited them to participate in the survey. After data cleaning and plausibility check 766 valid datasets remained. Thus, the response rate among surveyed economists amounts to 7.4 percent. One in three were women (35.2 percent), nearly two in three were men (63.3 percent), and 1.5 percent of the respondents did not indicate their gender. On average, the respondents were 39 years old (SD = 11.48).

The key concern of the study was to gain an overview of the usage of social media in the daily work routines of economists at German universities and research institutions. The survey asked about 15 different social media services. In order to ensure a common understanding of the tools, the survey named, wherever possible, exemplary applications which are considered typical for the corresponding tool. The economists first had to state which tools they use, regardless whether for private or professional use. The highest usage was found for Wikipedia (95.8 percent), content sharing services (78.6 percent), video/image hosting services (77.0 percent) and video conference systems (74.7 percent). Least known and least used were social bookmarking systems (6.5 percent), that enable browser-independent management of favourite websites.

Regarding the usage context (professional or private), the study's findings show that in the working routines of economists highly specialised tools like learning management systems (54.6 percent) and reference management systems (42.2 percent) played a significant role. Nearly one in three respondents was active in professional and academic networks (32.0 percent). Almost one in four respondents used content sharing services (22.4 percent) and wikis (22.3 percent). Social bookmarking services (2.7 percent) and microblogging tools (3.4 percent) such as Twitter were not important for their everyday work.

The study also surveyed the type of use of the various services in the daily work routines of scientists. For this purpose it differentiated between the activities of "teaching", "research", and "scholarly communication". This question was addressed to all subjects who stated a professional usage for the various services named.

More than half of the economists used Wikipedia (58 percent) and learning management systems (52 percent) to prepare and follow-up on seminars and lectures. Wikipedia was also the most frequently used social media tool for research. Every other economist in Germany used Wikipedia for research (51 percent). Other important tools were content sharing services (47 percent) and reference management systems (43 percent). In addition, almost a third of the respondents considered internet forums and video conferences as important. Least relevant were microblogs (3 percent) and social bookmarking (3 percent). The tools of the Web 2.0 were not yet widely used for scholarly communication. Less than half of the economists in Germany carried out their routine communication tasks by means of the Web 2.0. We can state however, that more than a third (37 percent) of the surveyed economists used professional and academic networks such as Xing, Academia.edu etc. to network with colleagues.

For economists, the two most important motives for using Social media services were: “because it’s convenient” and “because it makes work or communication easier and/or faster”. The online encyclopaedia was rated as most convenient. 61 percent of all respondents who used Wikipedia for professional purposes did so mostly because it comes handy. Content sharing and cloud services received similar ratings, which 47 percent of their users rated as very convenient, as do internet forums (41 percent). 46 percent of all chat and instant massaging users used Skype, ICQ and co. primarily because it made their work resp. their communication easier and faster.

For nearly all social media services sampled in this survey the motives quoted most frequently for non-usage of a tool were: “because I don’t see a benefit in using this tool” and “because I have no need for technical support in this form at this point in time”. There was also a considerable number of economists who quoted “because I haven’t looked into it yet” as a motive for “non-usage”. According to this, more than a quarter of all subjects (26.4 percent) have not yet looked at reference management or social bookmarking services (25.9 percent). For one in five (20.3 percent), wikis (with the exception of Wikipedia) and web-based real-time text editors (19.1 percent) have not yet been worth a closer look. Subjects saw the least benefit in the usage of microblogs. 58 percent of the respondents stated they do not use Twitter because they see no benefit in this tool.

After the study gathered data about the usage of social media services, it asked where economists find information about existing social media services. The majority of scientists in Economics and Business Studies stated that they learn most often from “colleagues” and “friends” about the existence of new online tools. Presentations and academic journals were relevant only for one in five of the respondents. The question where they learned about social media services was answered as follows (multiple replies were possible):

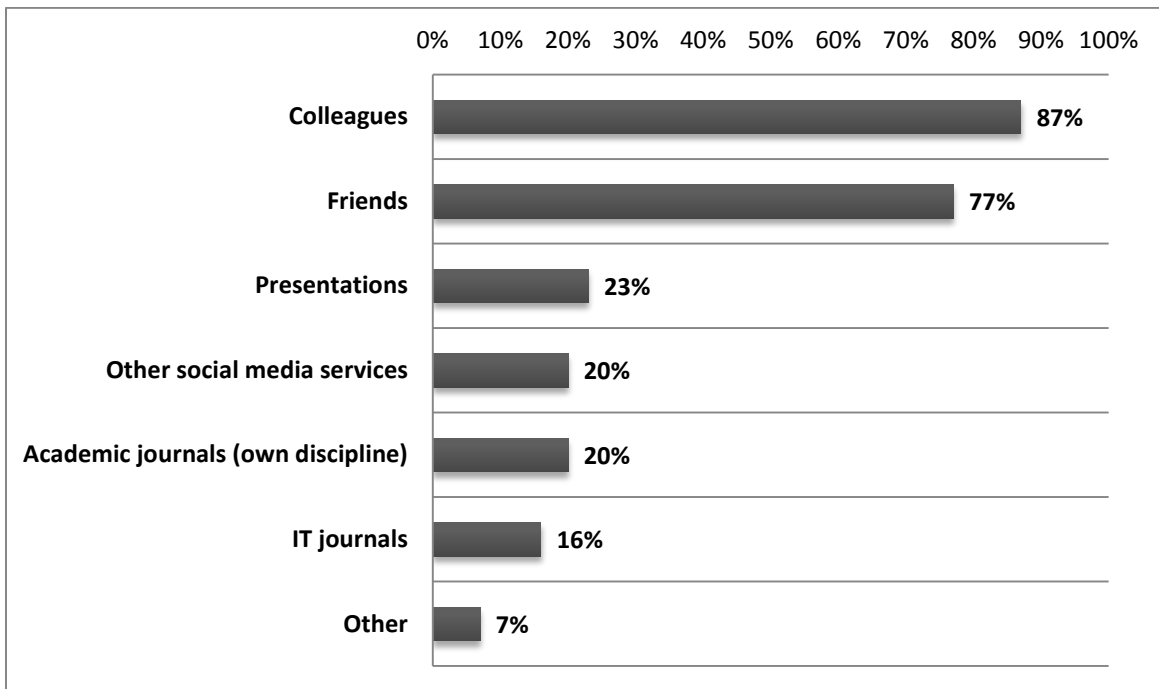


Figure 1: Channels providing information about new social media-services.

The survey revealed what social media services are popular among economists and which are used for work routines in teaching, research and administration. Although the survey contained open questions allowing subjects to express more detailed information on social media use in scholarly communication those questions often have not been answered what is not unusual for online-questionnaires. This can happen because for example open-ended questions can lead to responses that do not provide enough information (Lazar et al. 2010: 111). Hence, focus group interviews and panel discussions with experts were introduced to aid deeper understanding of social media practices for research, publication and teaching in Economics and Business Studies.

Study 2: Focus Group Interviews

In April and September 2014 we conducted two full-day focus group interviews each consisting of 5 to 10 experts from Economics and Business Studies. The experts came from different age groups and career levels (i.e., PhD students, Post-Docs, and Full Professors). The first focus group interview addressed economists, whereas the second one was dedicated to researchers from Business Studies. The interview questions asked about the digitalization of science (e.g., computerization of data analyses), research strategies (e.g. literature search), publication and communication habits (e.g., open access or Twitter use) and open science movements (e.g., publication of research data).

Both groups of experts stated that literature search was mostly conducted via popular search engines like Google, by consulting colleagues who have some expertise in the searched area or regularly publish working papers on this topic. Discipline-specific databases, such as EconBiz for literature related to Economics and Business Studies, were often unknown and not used. Social media channels, like Twitter or ResearchGate, helped to serendipitously find interesting papers and but were not systematically researched.

Free access to research results was conceived immensely important, thus open access repositories, such as Social Science-related SSRN or Economics-related EconStor, were frequently used. However, there was still some confusion about the real nature of open access publications and whether they were of acceptable quality. Often open access publications were misconceived as not having undergone peer review which is not necessarily correct. Hence, researchers, especially in early career stages, refuse to publish open access although they know that early publication of research results ensures credit.

In daily work and research routines social media services were almost of no importance to the experts. Tools which aid sharing of documents within research groups, e.g., Dropbox, were of great value but do not count as "social media" in a very strict sense. Twitter, Facebook, ResearchGate would help staying up-to-date on current discussion of economical topics in the society but were not perceived absolutely inevitable. It was also frequently mentioned from the experts that the evaluation of online-sources, either websites or social media content, is difficult and that they feel swamped when having to separate the wheat from the chaff. Here, economists especially seek, and anticipate, assistance from libraries and information experts.

Overall, the findings of the online survey were confirmed by the focus group interviews although the discussions revealed that younger economists tend to be more open-minded regarding social media services for scholarly practices and scholarly communication. Especially they see good reasons in using

blogs for getting aware of topics of public interest and including them in modern teaching. On the other hand, more experienced researchers recommended not to put too much effort in social media activities until the own career has been established, although they considered blogs as valuable tools for engagement with different target groups. Blogs also would support drawing attention to the own expertise and becoming visible on the web in order to get mandates in policy advice.

Study 3: Panel Discussion

The two hours panel discussion with three panellists focussed on “Science 2.0: economists’ research routines in the social web¹” and was held during the annual meeting of the “Verein für Socialpolitik” in Hamburg, Germany, in September 2014². The “Verein für Socialpolitik” is one of the largest associations for economists in Europe³. The panellists were active social media-users and maintained their own blogs or Twitter channels. Two were professors at German universities and the other was responsible for the social media-activities of an organisation for economic policy. They tackled following questions:

- Which scenarios are fruitful for social media use? Do you know positive or negative examples for social media use in Economics and Business Studies?
- How do you perceive the value of social media-discourse (e.g., in blogs) in contrast to established approaches (e.g., in journals)?
- How can we guarantee high quality in economical social media content?
- Should the scholarly reward system take into account social media activities?
- How do you perceive the potential of social media data for research in Economics and Business Studies?

Social media activities were considered extremely valuable when they were used to inform the general public and participate in the actual discussion of economical topics on the web. One panellist stated that economists should also consider themselves journalists or science communicators who directly address the public and correctly explain economical concepts, theories and scientific results. He justified that with the growing demand from non-experts for comprehensible and detailed high-quality content on the issues of today’s economy and with the economists’ obligation to transport their knowledge to the society⁴. Researchers in Economics and Business Studies are, however, not trained in writing for laypeople and big audiences and also often lack skills in effective use of social media, or more general, online tools and software.

The panellists admitted that almost no scientific discourse, and along with it no scholarly communication, takes place on blogs or in social media. Discussion would mainly arise between economists and, sometimes informed, laymen but colleagues tend not to comment publicly on blogs or other social media platforms. Since the experts believed that open scientific discourse, as inherently fostered by social media platforms, would ensure quality of research they regret the lack of exchange

¹ Original wording of the panel: „Science 2.0: Wirtschaftswissenschaftlicher Forschungsalltag im Social Web“. For information on panellists please refer to the conference program: http://www.vfs2014-hsu.de/images/Programmheft_2014.pdf

² <http://www.vfs2014-hsu.de/>

³ <https://www.socialpolitik.de/En/the-club>

⁴ Norbert Berthold summarized his arguments in his blog: <http://wirtschaftlichefreiheit.de/wordpress/?p=15473>.

within the community. They saw one reason in the missing credit for such activities preventing economists taking more active roles in social media discourse.

However, the passive use of social media content is prevalent and especially useful for detecting new research results and staying up-to-date, which has already been acknowledged by the focus groups. Also, tools for collaborative writing and content sharing were widely used. Social Media data has not yet become a distinct subject to economic research questions but was perceived as having great potential for marketing purposes and research. During the panel discussion the audience emphasized that visibility of economists and economic topics on social media platforms was a good chance to attract future students and spark interest in taking up studies in Economics or Business Studies.

Focus groups and panellists both distinguished between social media-products (i.e., blogs or tweets) with low and high reputation. Blogs or tweets with valued authors were more likely to be actively used and read than blogs from unknown authors. The reputation, however, must have been gained in the traditional “publish or perish” system with publications in high-ranked journals since social media publications are not accepted substitutes

Discussion of Results

It is a remarkable finding that social bookmarking services are not yet established means in scholarly work routines given that they aid fundamental activities of scholars: personal information- and literature management. In 2009 already, Bernius, Hanauske & Dugall stated that the majority of the German economists they surveyed had never heard of social bookmarks, and if they had they were unable to assess where they could usefully be applied. The result may stem from the anonymousness of the concept “social bookmarking services” among economists, since our survey revealed that reference management systems (which work similar to social bookmarking systems) as well as Wikipedia and other wikis and internet forums are quoted comparatively often as Web 2.0 tools for the purpose of literature search. Here social media could be considered an established tool, although the use of the Web 2.0 for the purposes of coordination/communication, of data/information sharing, or of data collection/evaluation is not yet very widely spread among academics. Only content sharing services are comparatively popular.

However, in particular for Wikipedia perception and actual practice widely diverge. Only 6 percent of respondents of the online survey of Siegfried et al. (2015) state that they use the online encyclopaedia primarily for professional purposes. In reality, 58 percent of the surveyed economists use Wikipedia for teaching and 51 percent use it for research purposes. It is also interesting that the professional usage of social media is often perceived as owing to “external pressure”. This influence has many facets, for instance as simplified way of communication if different persons/institutions use the same software.

For the non-usage of social media, the most important factors are that respondents are not willing to engage with these services because they see no benefit. Nicholas and Rowlands (2011) arrive at similar findings in their study of the usage of social media services in Great Britain. In particular, the common argument of “lack of time” shows up prominently here. This is a general phenomenon in the field of knowledge management, as Riege (2005) has shown already. Solutions for breaking down this barrier require that the top levels of management get involved.

Additionally the findings of the focus group interviews and the panel discussion uncover, that economists use social media tools rather passively. For example, most of the interviewees stated that they only use blogs to stay up-to-date or as supplement for teaching lessons but do not actively maintain a blog (or contribute to a blog aggregator) themselves. It is striking that almost no scholarly communication takes place in social media like e.g. in traditional scientific journals. The interviewees and panellists believe that this is due to the fact, that blogs do not exhibit high perceived impact in the economic community or are not comparably evaluated as journals via e.g. the Impact Factor. What is more, social media publications do not attract comments or engagement from peers but from a rather broad public, often consisting of laymen. This experience often frustrates researchers since they are frequently confronted with obsolete or scientifically disproved theories or concepts in lively discussions which have no scientific value for the discipline.

The denial of social media usage for scholarly communication corresponds to the little engagement in the open access movement, since both request a minimum amount of the open science principle⁵ in the researcher. The few contributions to open access publishing may also be due to missing understanding of what are the main concepts and requirements of open access (e.g., that open access does not mean lack of peer review or Impact Factor). Here, more information and education is key to enumerate and explain the goals, opportunities, and benefits of open access publishing.

Although at first sight, these results show no reason to believe that economists are in general open towards social media tools in research, these findings might not last as long as for example the participants of the focus group would like it to be. The digitization of society with smartphones and along with it instant access to social media is ongoing.

Also, MOOCs (Massive Open Online Course), which began as hype, might now be considered a well-established trend and form of education to propel social media use in academia. Given that world-famous universities like Harvard and Yale provide these courses and teach over 100.000 registered students a priceless increase of visibility for universities and also disciplines is achieved. This, and also the growing uptake of online-tools and social media in research and communication routines, supports the assumption, that FOMO (Fear Of Missing Out) might hit economic scientists as well, when the number of economic researchers with international reputation using social media will grow bigger.

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⁵ <http://okfn.de/open-science>

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