

# **The Experiences of the Innovation Journalism Fellowship Program 2004–2008**

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## **Abstract**

**This paper presents, and explores, the experiences of the international innovation journalism fellowship program during its first five years, 2004 to 2008. First, the paper summarizes the basics of innovation journalism, and the fellowship system. Second, the paper analyzes the work outputs (journalistic stories) and practices of the innovation journalism fellows since 2004. Finally, the authors present new themes for future research, and briefly sketch the best practices for innovation journalism.**

**In short, innovation journalism (injo) is journalism covering innovation, innovation processes, and innovation ecosystems. The concept of innovation journalism was coined in 2003 in Sweden, enabling a program, and a knowledge community across established beats, for exploring, in theory and practice, the best ideas of innovation journalism. Reporting on innovation combines many traditional news beats such as science, business, technology, culture, and politics. In part of the fellowship program, the fellows were hosted by US news rooms, giving them the opportunity to cover innovation processes and ecosystems.**

**In conclusion, this paper provides an overview of the program and its results, mainly by focusing on content analysis (N=410) of the journalistic stories made by the 38 international fellows during their work periods in the U.S. newsrooms. The main result of the study is the so-called 'Internet effect' in the work of innovation journalism fellows. This means that new journalistic (online) forms entered their work especially in 2005, and the importance of the Internet was clearly seen. The influence of the Internet has grown annually, and multimedia skills are needed from the fellows. However, the nature of the work has remained almost the same, even amplified. News as a journalistic genre dominates.**

## **Focusing on innovations**

In light of recent research on mass communication, traditional journalism has been under new pressure by innovation. With the rapid evolution of the Internet, the ability to mass communicate is no longer exclusive for media companies. It has become trivial to access technology that can be used for mass communication also for individuals in the mainstream population. Advertisement opportunities offered by the traditional news media are receiving growing competition from new models for promoting and performing sales. Audiences, especially younger age groups, are creating more content by themselves, and interacting with each other, rather than following old media consuming patterns.

Trust in traditional media has declined, and there is crisis in journalism (Meyer 2004; Hachten 2005). Not surprisingly, the problems described here have had their parallels in many countries around the world. Something has to be done, and soon.

New initiatives have emerged in journalism education and research in many countries. In the U.S., the best example is the Carnegie-Knight Initiative on the Future of Journalism Education formed by the journalism schools at Northwestern University, Columbia University, the University of Southern California, and the University of California, Berkeley. Harvard University's the Joan Shorenstein Center on the Press, Politics and Public Policy is also participating in the program.

The Innovation Journalism program run by Stanford Center for Innovations in Learning/H-Star with VINNOVA, the Swedish Governmental Agency for Innovation Systems, focuses on one topic: journalism covering innovation. The innovation journalism program is an international education and research platform aiming at improving the quality of journalism about innovations and

innovation systems. Innovation is claimed to be the leading driver of economic growth and the core activity of many leading industries. (Schumpeter 1934; Rogers 1962; OECD 1995) As McCombs *et al* have demonstrated with his agenda-setting theory of mass communication, the news media play a central role in the public agenda. (McCombs and Shaw 1972, Carroll and McCombs 2003, and McCombs 2005.) However, it can be argued that the news media have largely ignored reporting on innovation and what makes it happen, since it often separates technology, business, politics and culture into discrete beats, while the process of innovation is about how technology, business, politics and culture drive each other and interact. (Nordfors, 2004 and Nordfors 2008 ) . This adds an additional perspective to the challenge that journalism faces in the innovation economy: It is not only about mastering innovation by staying on top of an increasing flow of new media technologies and finding business models. It is also about mastering the narrative of innovation, delivering relevant news stories to news consumers in an innovation driven society about the forces shaping reality, and maintaining the agenda setting role of journalism by enabling public discussion and action.

The case study of the publication Biotech Sweden (Sandred 2004) showed that the Swedish national biotech innovation ecosystem represented a good readership and a favourable market for a business model describing innovation journalism.

The motto of the innovation journalism conferences at Stanford in 2007 and 2008 was “Journalism Driving Innovation; Innovation Driving Journalism”.

A 2004 survey indicated that a majority of Swedish news editors thought “innovation” was a synonym for “invention” (Nordfors 2005). Many people have the same mistaken notion. But

“invention” is merely the creation of something new, while an “innovation” is the process of *introducing* something new. Invention can be done by one person. Innovation always involves interaction between several people. This is a big difference, as most people who ever tried introducing something new in their surroundings will know.

“Introducing something new,” the simplest definition of innovation, can be found in standard dictionaries. But in recent decades “innovation” has grown from an ordinary word to a paradigm. Many definitions now reflect the paradigm. They basically represent the dictionary version, with variation in focus and field of application. The following, by Curtis Carlson and William Wilmot at SRI International offers a compact definition that combines business and technology (Carlson 2006)

**Innovation is the process of creating and delivering new customer value in the market place**

The origins of the concept of economical innovation stretches back to Joseph Schumpeter (Schumpeter 1934) who defined economic innovation as:

- 1) The introduction of a new good —that is one with which consumers are not yet familiar—or of a new quality of a good;
- 2) The introduction of a new method of production, which needs by no means to be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially;
- 3) The opening of a new market, that is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before;
- 4) The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created;
- 5) The carrying out of the new organization of any industry, like the creation of a monopoly position (for example through trustification) or the breaking up of a monopoly position

Innovation journalism (injo) is journalism covering innovation. It covers innovation processes and innovation ecosystems<sup>1</sup>, offering its audience an understanding of how innovation is happening and providing language and narratives that enables a public discussion. For innovation journalism the process of innovation itself is the central concept, treating business, technology, politics etc. as nested components within a news story. In terms of traditional newsbeats, injo is multidisciplinary. injo can be seen either as a horizontal newsbeat or as a mindset within traditional newsbeats, spanning the old beats. Injo identifies and reports on issues in the innovation ecosystems, such as emerging concepts, interactions of stakeholders, or innovation value chains. It spans themes such as science and technology trends, intellectual property, finance, standardization, industrial production processes, marketing of new technologies, business models, politics, cultural trends, social impacts, and more.

Kauhanen and Noppari (2007, 23) have used a different definition for innovation journalism, as journalism covering “Future Work”, in their seminal empirical work about innovation journalism in Finland. The authors of the present paper prefer to define innovation journalism as journalism covering innovation. We argue that ‘innovation’ and ‘future’ are not synonyms; the future is not only about innovation, and innovation is a central part of the present. This said, we credit the work of Kauhanen and Noppari for its solid empirical research, and for introducing an emphasis on the social nature of innovations, which complements the initial work on innovation journalism, which focused mainly on innovation systems, a ‘triple helix’ of industry, academia and politics bridging the cultures of business and technology (Nordfors 2003).

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<sup>1</sup> It can be claimed that “innovation ecosystem” is just another buzz word used by PR people. Therefore, more information about the different innovation concepts is needed here. There are different uses of innovation terms, metaphors especially between the U.S. and EU on industry and economy policy making. For example, Americans dislike the word 'innovation system' because it gives them a sense of central planning, specially when used by European government people. Freemarket people see the innovation system as an ecosystem, where the actors are autonomous. The free market can also be defined as an ecosystem. On the contrary, in the EU there are no real “ecosystems”, as may be observed in Silicon Valley, for example. Therefore one needs more active governance to get things going in the context of the EU. In conclusion can be said that there is no consensus on the exact definition of an innovation system, and the concept is still emerging. This is the case also with innovation ecosystems, but in this paper we chose to use the latter definition.

In this paper, we present and analyse the Innovation journalism program during its first five years, 2004–2008. First, we offer a short narrative of the recent history of the initiative, and define the key concepts. Secondly, we present the outcomes of the program so far by using content analysis. Finally, we discuss and recommend best practices for innovation journalism.

### **Innovation Fellowship System – Working in the U.S. media**

The Innovation journalism programme is run by Stanford Center for Innovations in Learning, a part of H-STAR – the Human-Sciences and Technologies Advanced Research Institute - with VINNOVA, the Swedish Governmental Agency for Innovation Systems.

The coining of the innovation journalism concept (Nordfors 2003) was combined with an effort to test the viability of a professional community of innovation journalism. VINNOVA, the Swedish Governmental Agency for Innovation Systems, initiated a fellowship program open to Swedish journalists covering innovation within different traditional newsbeats. The program model for the fellowship networks had been successfully tested previously (Nordfors 2003b)

The initial work of innovation journalism motivates the need for the concept of separation between technology and business news, which makes it difficult to discuss technology and business as co-variables. It stresses the importance of joining relevant parts of the business and technology beats to cover innovation. The political beat is included implicitly, as it was considered to have a considerable overlap with the business beat. Culture has now been added as integral to the over-all innovation process.

The concept of the “innovation system” stresses that the flow of technology and information among people, enterprises and institutions is key to an innovative process. It contains the interaction between the actors essential to turn an idea into a process, product or service on the market. There are several definitions, here is one of them (Lundvall 1992): “... the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge...”

In parallel with the development of the concept of innovation journalism, the concept of “Innovation Communication” is being developed in Germany (Mast, Huck, Zerfass 2005). Innovation communication is defined by them as the “symbolic interactions between organizations and their stakeholders, dealing with new products, services, and technologies”.

In all the fellowship rounds so far, journalists from business, technology and science beats have been mixed. In the program, the Swedish fellows are hosted by US news rooms, where they are offered the opportunity to cover innovation processes and ecosystems, mixed with workshops and a conference at Stanford University. The heart of the fellowship program is a discussion list including the fellows and the program director, keeping the group together even when the fellows are spread over the hosting newsrooms. Finland joined the fellowship program in 2006, Pakistan followed in 2007. Slovenia is scheduled to follow in 2009.

Considering the close ties with VINNOVA – a governmental agency, one particularly important cornerstone of the program is journalistic integrity. The contacts between the selected fellows and the hosts are to be handled directly by the each fellow; VINNOVA and the program management will not determine how fellows and hosts pair up, and neither will VINNOVA under any circumstance influence the choices of topics or the articles written by the fellows during the fellowship. A VINNOVA program committee chaired by Mats Svegfors, a former editor-in-chief of the major Swedish newspaper Svenska Dagbladet, is advising the program director throughout the

process, and selects the Swedish fellows. Similar program committees have been set up in Finland and Pakistan for nominating fellows to the program at Stanford.

Finland agreed in the end of 2007 to fund Finnish journalists to the program at least until the year 2012. Sweden made its pilot fellowship program permanent in 2007, after an evaluation process (Bergström and Johansson 2007), now running for three years: 2008–2010. Also Slovenia has set up a pilot fellowship program that will fund the participation of a Slovenian journalist. USAID is funding a multi-year program run by the competitiveness Support Fund in Pakistan, funding participation of Pakistani journalists, which adds a perspective of innovation journalism as a phenomenon relevant for economic development and competitiveness. Also many other countries from Asia, Australia, Europe, and Americas have demonstrated early interest in the Stanford innovation journalism program.

### **Content analysis and some interpretations**

Al together, 38 fellows from Sweden, Finland, and Pakistan have participated to the Innovation journalism program during 2004–2008. In all the fellowship rounds so far, journalists from business, technology and science beats have been mixed. The fellows had joint workshops at Stanford University, and worked from two to six months in various leading American media organizations , as well as in start-ups in Northern California (Silicon Valley), New York and Boston. For the first time in 2008 the fellows also collaborated in a joint-newsroom called Innovation Beat<sup>2</sup> under the instruction of established Silicon Valley innovation journalists, and the program leader. The newsroom was situated in Menlo Park at the facilities of SRI International.

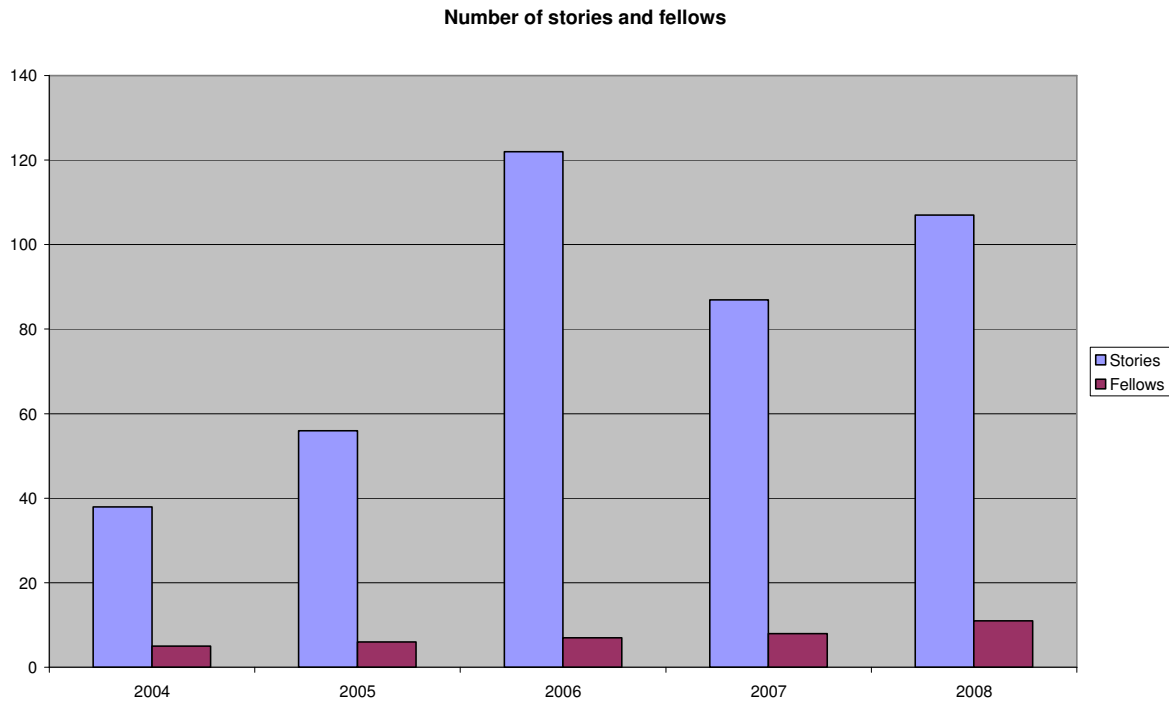
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<sup>2</sup> See more: <http://www.innovationbeat.com/>

Fortune, New York	5
San Francisco Chronicle	5
PC World, San Francisco	5
CNET News.com, San Francisco	5
Red Herring, Belmont, Silicon Valley	3
VentureBeat, San Francisco	2
AlwaysOn, San Francisco	2
Wall Street Journal / San Francisco, New York	2
Business 2.0, San Francisco	2
Bloomberg, San Francisco	1
GigaOM, San Francisco	1
PodTech, Palo Alto	1
Technology Review, Boston	1
IDG News Service, Boston	1
Science, Washington D.C.	1
Fast Company, New York	1

**Table 1.** The hosts and number of fellows in each news outlet

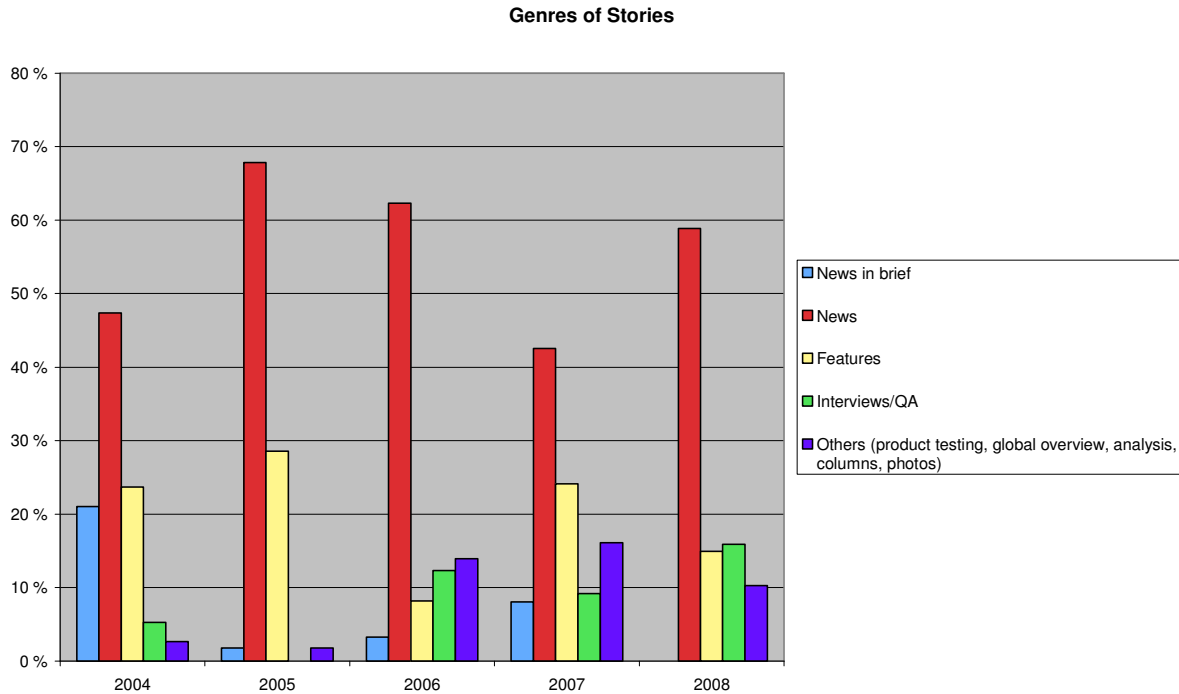
The fellows made wrote 410 stories during their five years' practising periods.<sup>3</sup> It can be said that news as a genre clearly dominated the work of the fellows. This emphasis on news was strengthened during the five-year period. However, the peak was in 2006 as can be seen in the figure 3.



<sup>3</sup> In 2008 the last story counted in made by the fellows was dated 9.7. It is possible that some stories were still published after this date.

**Figure 1.** The number of stories and fellows per year

What requires more extended examination here is why the news dominated this clearly as a journalistic genre. This was due significantly to the fact that news in general is the most common journalistic genre, and furthermore, it was obviously easier for the non-native English speaker fellows to produce their first short news stories in English instead of working on more time-consuming and demanding feature articles. In addition, it can be said that the non-timely, longer, and more literary feature stories were mainly published in the end of newsroom practising periods by the fellows. The other explanation for the domination of news is that the traditional media, newspapers and magazines, increasingly face more competitive online-media. What is also meaningful here is that the new kind of multimedia formats, such as video clips, podcasts, started to outnumber traditional newspaper stories starting around 2005. It must be stressed also that new multimedia oriented online publications hosted the fellows, but not magazines, or newspapers because Silicon Valley and the Boston area, especially, have reached the highest penetration of broadband internet connections in the U.S. At the same time the traditional news media in these very areas have suffered most from cut-backs, and layoffs. It can be argued that both Silicon Valley and the Boston area are the future laboratories of online news media.

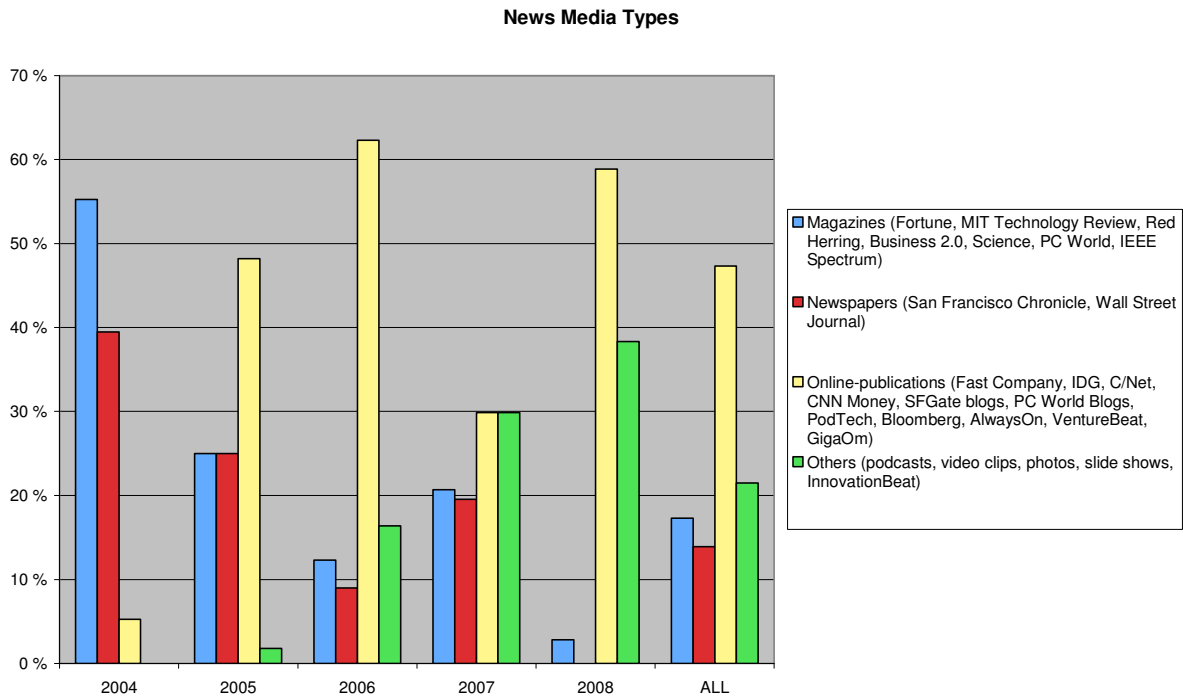


**Figure 2.** The genres of the stories in percentages

It was difficult to categorize precisely the journalistic products by different media formats, especially since 2006, because it was not always clear whether the story was published on paper, in the Internet, or both. In an e-mail interview, one 2006 fellow said that most of his stories were published in the online version of the magazine and only about five or six in the paper version. Half the paper version stories were based on online stories, but re-written.<sup>4</sup> Moreover, this study also found out that one story could be published in various online publications. In one case, a story made by a fellow was published at least in nine different online media all around the world. Of course, this indicates that the media companies try to be as effective as possible, and furthermore, that the story was interesting and good enough to be published in so many different outlets, and cultures. In context, an ongoing issue is emerging in which the crediting of another medium as a news-story source is considered grounds for the accusation of laziness on the part of a journalist, while failure

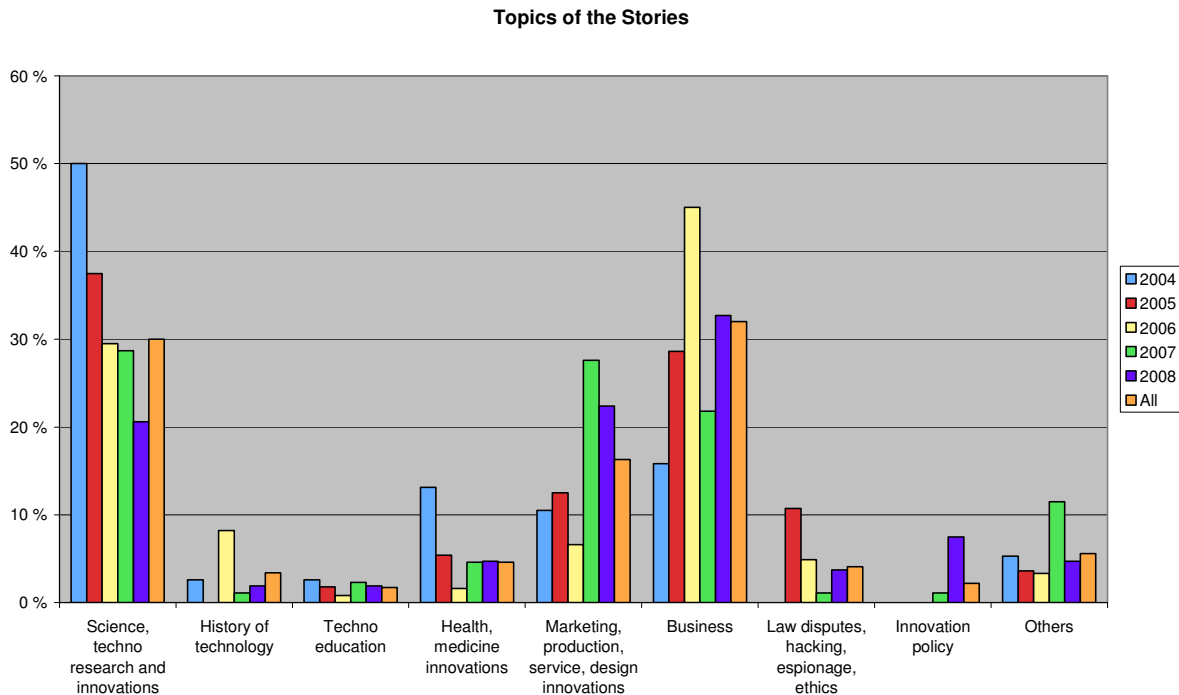
<sup>4</sup> E-mail interview. 02.07.2007.

to credit is considered grounds for plagiarism, and this tendency has been noted in media up to and including the New York Times.



**Figure 3.** The percentages of the stories/different news media types

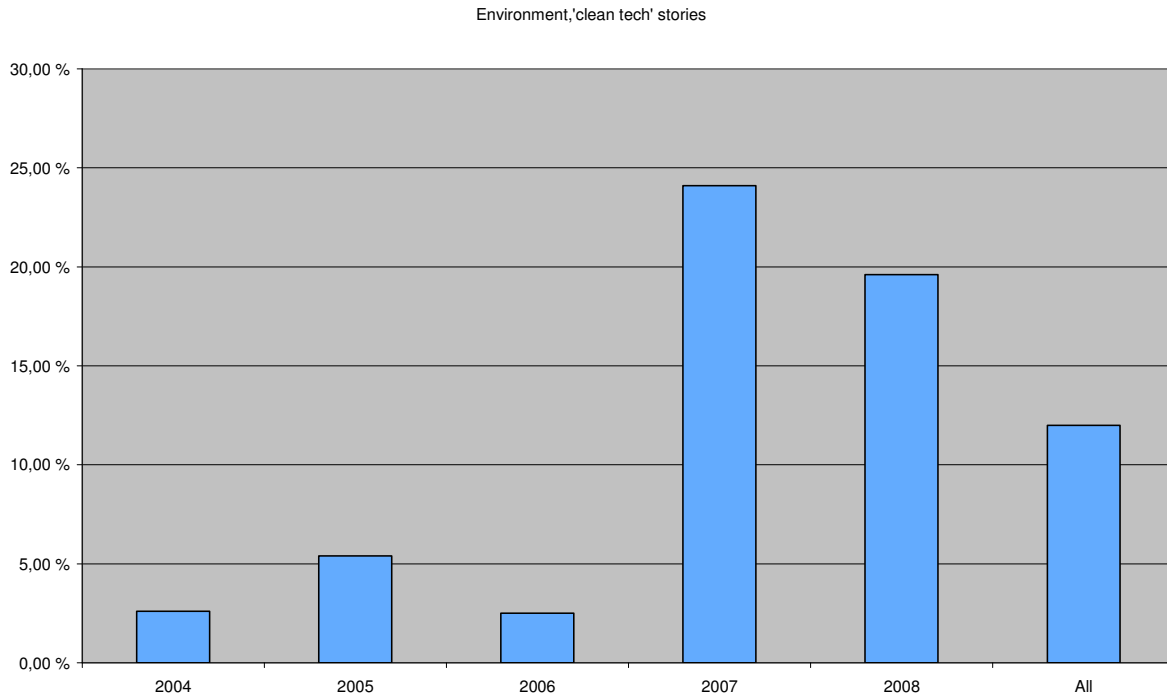
Another interesting trend was that in 2006 business news took the leading position of all topics. Before that, science, technology research, and innovations had been the main category for the fellow's stories. Health and medicine innovations as well as marketing, production and design innovations, still lagged behind business stories in 2006. This is exemplified by the fact that in 2006, the fellows selected to the program were mainly business reporters, so it was natural for them to continue their work with business topics. After the 2006 content analysis, the leaders of the innovation journalism program could emphasize more the importance of innovations as topics. This is clearly seen when analyzing the production of the fellows in 2007, and 2008. At that time, also, innovation politics entered more powerfully among the topics.



**Figure 4.** Main topics of the stories in percentages

It is also interesting to realize that the innovation journalism fellows started to follow “clean” or “green” tech issues and companies since beginning the fellowship program (categorized in the science, technology research and innovations -group). It can even be argued that they were among the first journalists in the U.S. mainstream media to point out the importance of environmental “friendliness” in business.<sup>5</sup> However, it can also be argued that “clean” tech, and global warming, did not become “normal” topics for the innovation journalism fellows until 2007.

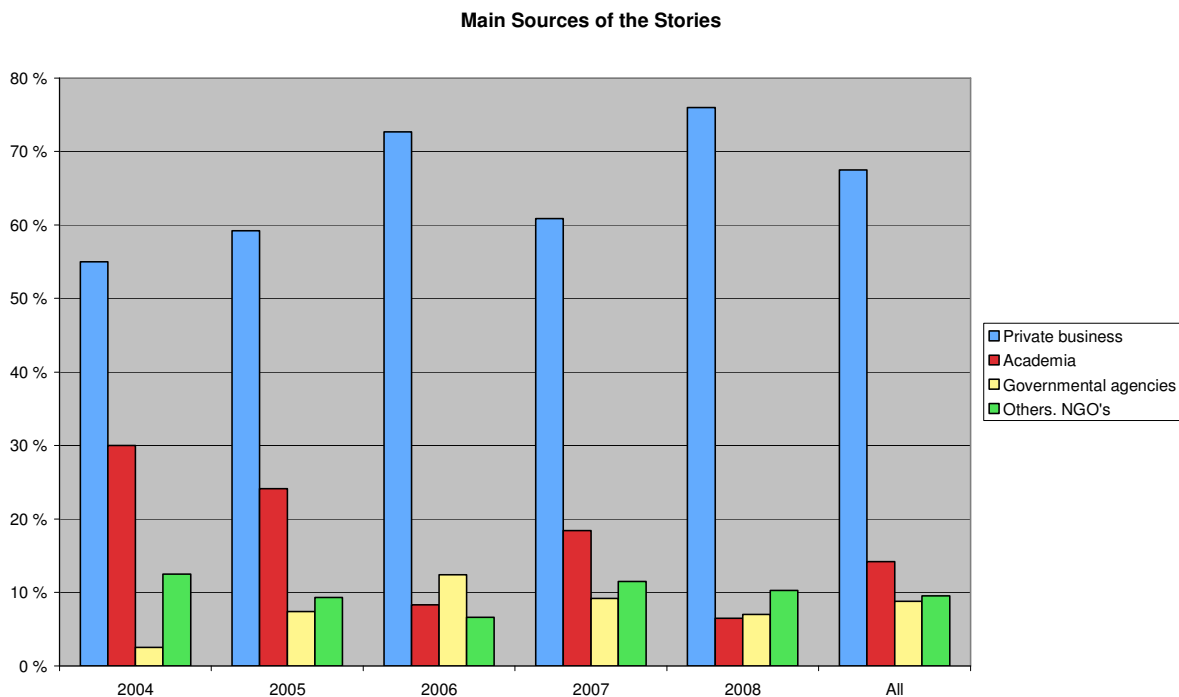
<sup>5</sup> See for example: Sandred, Jan. 31.3.2004. *Catching the green wave. Investment in environmental technology gaining momentum.* The San Francisco Chronicle; Forsberg, Birgitta. 20.1.2005. *Getting the lead out. European rules force electronic companies to clean up.* The San Francisco Chronicle.



**Figure 5.** The stories with strong emphasis on environment, “clean tech” in percentages of all stories made by the fellows

Moreover, the dominance of the business perspective is also seen in two other figures presented here. First, sources have always been focused on companies. However, companies are only one of the many players in innovation ecosystems. Especially, the role of academic research as a source has always been low. Many prestigious research institutions were near fellow’s work places, like Stanford University and UC Berkeley (Silicon Valley), Harvard and MIT (Boston), and Columbia University (New York). A tentative explanation for the low inclusion of research in the stories may be that most hosting newsrooms have little tradition of covering academic research in stories that refer to the performance of companies, and that many the Fellows came from similar professional traditions in their home countries. To arrive at a more fully informed understanding of this, the authors of this paper should gather more information by interviewing the fellows. In each case, innovation is not broadly recognized as a beat anywhere while the separation between traditional newsbeats is common everywhere. This poses the chicken-and-egg problem of bootstrapping a

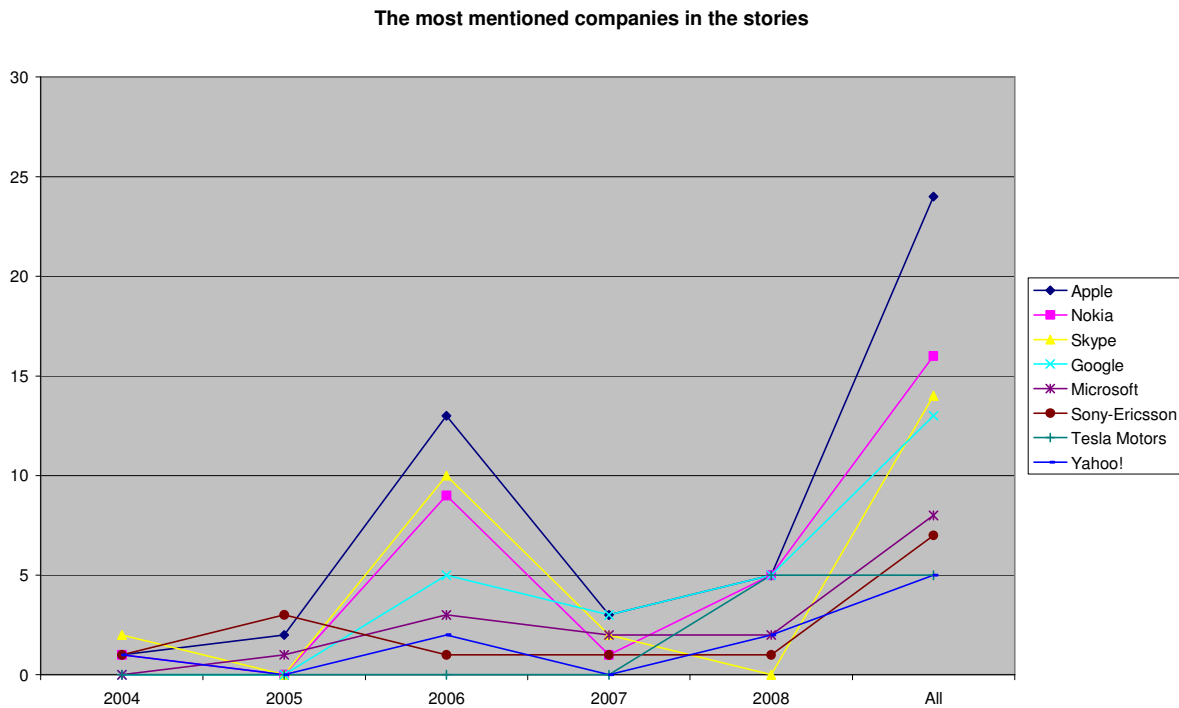
professional community of innovation journalists. The newsrooms that host the fellows are not always more enlightened than the newsrooms that the fellows come from. However, the fellows come to the program with an interest in covering innovation, and the hosting newsrooms are generally reputable news organisations working within a world leading innovation system. The key to co-developing the concept and community of innovation journalism may lie in having groups of fellows with a strong, shared interest in covering innovation, but with backgrounds in many different beats, interacting between themselves. It should further help to bridge the beats if each fellow is working with the hosting newsroom close to a different beat than the one he/she has back home.



**Figure 6.** Main sources of the stories in percentages

Next we can look briefly at the companies, mentioned the most often in the stories written by the fellows. In conclusion, Apple, Skype (eBay), Nordic mobile phone makers Nokia and Sony-

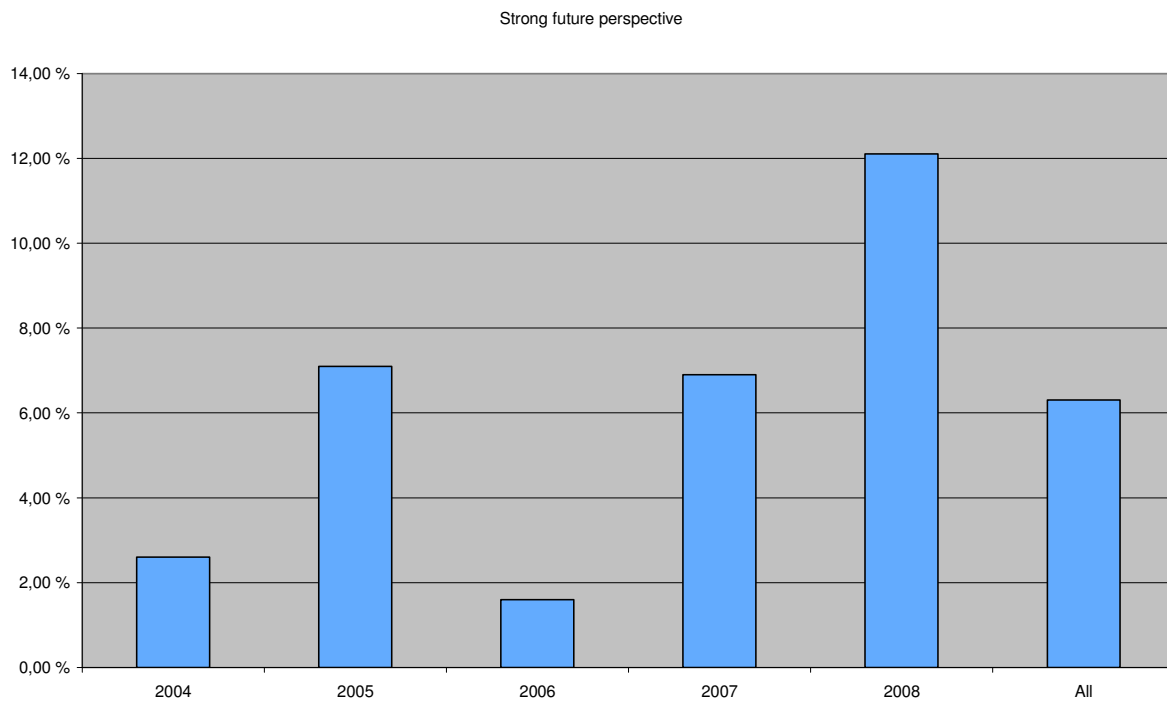
Ericsson, Internet technology giants Google, Microsoft, and Yahoo! dominated as news sources for the business news. The newest company to climb into the fellow's "top-list" is the Silicon Valley electric car maker Tesla Motors.



**Figure 7.** The most mentioned companies in the stories

Finally, also the futures perspective of the stories was examined, because innovation journalism has been defined by some scholars as a future-oriented genre of journalism<sup>6</sup>. Even if the number of the stories with a strong future perspective increased slightly during the five years, it was still, in 2008, exceptional to predict the future in the stories.

<sup>6</sup> Uskali 2005; Kauhanen and Noppari 2007.



**Figure 8.** The stories with strong emphasis on future in percentages of all the stories

## **Discussion and best practices for innovation journalists**

Before addressing this question—what are the best practices for innovation journalists?—, we emphasize that this paper is based mainly on the empirical findings of the content analysis of the stories written by the innovation journalism fellows 2004–2008. The experiences of the fellows must also be examined. In other words, interviews are needed to understand more deeply the outcomes of the innovation journalism program, and to illustrate better the best practices for innovation journalists.

In general, of course, innovation journalists are under the same kind of pressures as the rest of the journalists. News competition is demanding, and the deadlines are a constant factor, especially because of the influence of the Internet. Economic pressures are understandable, because sustainable business models for online news production are still lacking. Therefore, the work of the innovation journalism fellows is mainly about making news. However, this can easily lead to a situation in which almost all news about innovations, and innovation ecosystems, comes from the sources with the most PR, and other communication resources, in other words from big companies. This is clearly seen in the dominance of the firms as a single largest source group for the innovation journalism fellows. It can be argued that the other institutions need to expend more effort to get their opinions, perspectives, and knowledge about innovations, and innovation ecosystems into the agenda of the news media. It is not a big surprise that the Silicon Valley's marketing behemoth Apple was mentioned most often in stories written by the fellows during the five years analysed in this paper. To use wide variety of sources is the challenge also for the innovation journalists.

It is also important, for future research, especially from a policy perspective, to develop tools and methods to measure program impact. Has the innovation journalism program, so far, had

positive effects? It can be argued that the program should make an impact at least on the Swedish, Finnish, and Pakistanese media industry, for example in their news agenda-setting procedures. Therefore we should know more about what happened after the fellowship periods. Have the journalists been able to write more stories on innovation? Did innovation become more visible in the public debate? Were the fellows able to change their views on innovations, and their daily work routines at the office when returning home? Furthermore, have the innovation policies in societies improved, in other words, is there now, after five years, better understanding of research and innovation, or more innovation entrepreneurs in Sweden, or Finland? In conclusion, we need to find measurements and indicators of success on large goals for the program. Sophisticated metrics, with many surveys and interviews, etc., are not needed initially.

There has been a gap between innovation journalism scholars and practitioners, and some practitioners view the injo concept as 'too academic'. However, that is not necessarily a bad thing. There are good arguments for having, say, discussions about the role of journalists in dealing with the ways in which the media can influence economics, or policy in society.

The news industry is itself traditionally an industry without much of an innovation culture. News companies have not been better than other traditional industries in bridging the gap between scholarly discussions and everyday business, in their news reporting, or in running their own industry. The first is the challenge of doing innovation journalism in the news. The second is the challenge of running a program for innovation journalism at a university. Both are natural challenges which need to be addressed.

One of injo's theories is that if enough journalists are writing about innovation, their work should have an impact on society in the long run. However, most journalists are practitioners – they are

journalists who are not PhD scholars and thus there is a gap between the journalistic culture (trade language), practices, and the academic thinkers. So, one important question is: How to bridge the gap between the journalists and the academic thinkers? This could be pointed out as another possible future research topic.

Finally, we suggest, as promised, advice for innovation journalists based on our content analysis, and other observations. Obviously, this is only a starting point for creating the best practices, not only for innovation journalists, but for all journalists as well.

First, we emphasize that to us innovation journalism is a mindset. It can be applied within traditional beats, or as a horizontal beat. The important thing is to view science, technology, business, politics and culture as co-variables. They all affect each other, and often, in the area of innovation, it is not possible to separate them without losing the bigger picture. Therefore, the scientific choice of a researcher may depend on a quarterly report of a listed company, or the internal politics of a major funding agency. The success of an emerging technology may depend on a political decision combined with the choice of a certain business model, and vice versa. An innovation journalist must identify and understand which are the important players and key factors within the cluster of innovation to be covered, whether if it is about technology, business politics or culture. Understanding how one affects the other is the key to understanding the innovation processes and ecosystems.

It is self evident that journalists do a better job if they are interested in the topic they cover. If you cover innovation you do a better job if you are interested in innovation.

Innovation is a mindset and a culture, where increased value comes from “something new” rather than “more of the same”. Reporting on innovation in a traditional way from a traditional newsroom

that does not have an innovative mindset, is like covering the IT industry using a typewriter. You probably do a more professional job if you are interested in the topic, have a background knowledge and a better understanding of the conditions. There is an analogy with political journalism: it's covering a process where people and compete for the attention they need for their ideas to be accepted. Journalists play a critical role in the democratic process, as in the innovation process. They are actors, not only observers. Yet politics with the help of spin doctors and lobbyists can become a scripted event where spectacle can overwhelm substance, just as PR and marketing can do with innovation.

However, we believe that in today's hectic online news competition, journalists risk becoming minor players in the same unfolding drama they are attempting to critique. An innovation-journalism mindset should help journalists become more than reviewers in this process.

The critical factor in all quality journalism is time. Reporters still strive to beat deadlines and competitors, allowing little margin for reflection. The Internet, however, presents journalists with new opportunities more than mere critical reviews of official media releases.

We suggest that newsrooms should adopt continuous news editing desks, similar to the way wire service news and news in the blogging community is created and updated. A story changes as the day proceeds and stories should change and grow (on the website) through the day, based on their merits. Innovation journalists must learn to work in teams to stay on top of an evolving story.

Future readers, listeners and viewers (news consumers) demand features that address their individual interests. Content must serve readers at many levels. News consumers should be able to

quickly find relevant content; whether they can browse quickly, or dig deeper. This is particularly important for innovation.

Furthermore, thoughtful use of hyperlinks, a site approach (rather than a story approach), interactive tools, e-mail feedback, and online discussion forums can get readers increasingly involved in reporting innovations. The experience is exploring an issue and becoming involved in it, constructively, rather than passively reading a story from beginning to end.

And, finally,, who is a journalist? The definition of the journalist may need to be changed. On the web, it's everyone. It can be argued that some of the best news pieces on the web today are done by non traditional news organizations.

News organizations are by tradition non-innovative. Journalism is considered mostly a skill, learned by practice and with “established trade values” – the value in the organization.

It should be pointed out that “an innovative mindset” is not contradictory to the values in journalistic tools and methods like fairness, balance, and detachment. These values (or business propositions) establishes the media's credibility among news consumers and indirectly creates a market among advertisers who want their products and services featured in a credible medium.

An innovative mindset is more to have an open mind to changes and development on how you work and develop your business; it's about fresh ideas being put to work.

A corporate culture is driven by a lot of factors, such as which stage of lifecycle the organization is in – monopoly or commoditized services for example – the market conditions, the geography it operates in and the management team's priorities. News media has in reality operated in a monopolistic way for a long time and competition has between a few large companies.

News organizations usually do not realize the need to be innovative because either their survival is not threatened, or they have not realized that it's threatened. The ones that realize the need to be innovative fail to be innovative because they don't realize that it needs to be an inherent attitude rather than an imposed or integrated culture.

Innovation can be fostered only if the organization has sufficient diversity to be able to think different possibilities and solutions, but the established traditions (and lack of competition) in news media limits the diversity in the organization. No new ideas are going to come up unless you have people who inherently have different view points on the same issue. Traditional media companies preserve and encourage the established values, instead of having an innovative mindset.

For example, the lack of an innovative mindset or culture is one of the reason blogs and citizen journalism developed outside of news media. A persistent criticism of established news media is that they tend to be very strong gatekeepers and allow non-staffers to publish only the occasional letter to the editor. The idea behind blogs and citizen journalism is to allow individuals to publish whatever they want. Blogging allows citizens to open up the marketplace of ideas and contribute their opinions and ideas. With blogs a traditional news organization-type gatekeeper would no longer control the flow of news, information and opinions.

Perhaps the biggest challenge that news companies have in getting into an innovative mindset is that they are not threatened enough. No doubt 3M would have still been a leader if they hadn't invented Post It notes. But if 3M kept making abrasives as it did before 1925 – would it have survived so far?

Summarizing, we suggest this advice for the (innovation) journalists:

- 1) Be innovative yourself;
- 2) Enjoy mixing business, politics, technology, science and culture; the interaction between them is the key to understanding the bigger picture;
- 3) Try to “shop”, and use “enough” time for your work;
- 4) Use wide variety of sources, not only the easiest (PR) ones;
- 5) Try to include future perspectives in stories by predicting possible scenarios and outcomes, instead of only one. (This could, for example, prevent different, too enthusiastic new technology or other innovation-related “bubble” manias ;)
- 6) Remember that publishing a story in an online environment is only the beginning of the process; one should create interactive tools, e-mail feedback, and online discussion forums in order to get readers involved in reporting, feedback, and discussions.

### **Conclusion – the Internet effect**

This paper took a first step in analysing the work of the innovation journalism fellows 2004–2008. The primary source of data was 410 stories made by 38 journalists. The paper proposed six advice elements for innovation journalists.

Future research on the innovation journalism fellowship program should address also interviews as a source of information, and develop tools and methods for measure some kind of wider impact in the societies, and media environments.

It can be argued that one of the main results of the study was the so called 'Internet effect' in the work of innovation journalism fellows was already visible in 2005. This means that new journalistic (online) forms entered to fellows work already during that year. This was earlier than, for example, in Scandinavia. Later on, the influence of the Internet grew annually, and it can be argued that multimedia skills are now almost a necessity for the effective journalist. However, the nature of the work has remained almost the same, even amplified. That is, news as a journalistic genre dominates, and companies provide most of the news about innovations, and innovation ecosystems.

Another interesting finding was that the innovation journalism fellows started to follow "clean" or "green" tech issues and companies since beginning of the fellowship program, 2004.

Finally, in conclusion, innovation is the basis for sustainable growth and prosperity in society. Understanding innovation and the innovation process is critical to development and progress. Innovation is a mindset and a non-linear process. It could be argued that journalism covering innovation have a critical role in this process.

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