

Crowds and their Disruptive Influence on the Development of Journalism

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Abstract. Journalism, as we currently know it, is going through the biggest change in its history: while messages of few people or organizations used to have enormous impact on the opinions of audiences in the past, now the internet has allowed entire communities and crowds to gain much of such influence. Consequently, traditional media try to engage their audiences in content production by different models of participatory journalism, such as user generated content, collective intelligence, crowd-sourcing, open journalism or networked journalism, and thus engage them with their

brand. While these models may differ in their final outcomes representing various forms of media products, the main principle, however, remains the same: to let amateur audiences take part in designing and creating journalistic content. Despite the fact that journalism has existed for 500 years and participatory journalism has been there since the Web 2.0 (around 10 years), the internet is disrupting many old business models and creating new ways to extract value from quality content.

This article discusses the value network of participatory journalism and analyses a number of cases or phenomena that we expect to have a significant impact on journalism: Scoopinion, Scoopshot, Pearltrees, Oma Olivia, and WikiLeaks-like platforms. From the analysis of these cases we derive trends that are steering the future direction of journalism: relevance, sharing, community-created content, a tendency towards mixing professional and amateur content, as well as richer content complementing text. We reflect these trends against the views of media professionals and finally forecast what kind of implications the ongoing redefinition of “journalism” might have on the journalistic process in the future.

Keywords: Journalism, Participatory Journalism, User-Generated Content, Prosumer, Business Model, Crowd-Sourcing, Future, Trends, Forecasting.

1. Introduction

On May 16th 2011 Stefanie Gordon sat on an airplane on her way to Palm Beach, Florida. Suddenly, above the clouds, she saw a space shuttle dashing toward space. She took her smartphone and captured the moment. After she had published the photo on her Twitter account, she started to get contacts from newspapers, online magazines, etc., wanting to publish her photo of the space shuttle.

This real-life story illustrates the simplest opportunity individuals have in contributing to content production also in “traditional” mass media. In this chapter we aim to shed light on and map participatory journalism from several viewpoints: audiences, publishers, distribution channels and content. We also take a look at seven cases that demonstrate the various possibilities of cooperative journalistic processes. In reviewing already established and new business models, we have looked out for trends that can predict how journalism will develop over the next ten years, and what role formerly passive audiences transforming into now more or less active producers play.

1.1. (Re)Defining Journalism

“Traditional” journalism is often defined from the viewpoints of the different levels that affect each other: “the communicator” (micro level), “the professional environment” (meso level), and the prevailing culture (macro level), which obviously affects both the journalist and the environment in which they are working (Deuze & Bardoel, 2001; Deuze, Bruns, & Neuberger, 2007). However, recent changes on the macro level – the cultural transformation from “elite expertise” to “do-it-yourself” mentality – combined with the fast technological changes enabling the participation of users and entire audiences in media production have forced both individual journalists and publishers to take difficult steps (Lewis, 2012b). While institutional and cultural conditions and interactions provide the ground for defining ‘journalism’, their current change given rise to rethink the definition.

Journalism as a profession can be defined based on the journalistic work process: “journalists are those individuals working within an editorial board or newsroom (be it full-time or freelance) who perform one of four core journalistic tasks: selecting, researching (or: gathering), writing (or: processing) and editing news” (Deuze & Bardoel, 2001).

For decades, journalist work processes have remained relatively fixed and thus also the business models based on journalistic work have been successful. The digital and technological changes, however, have set free both content and distribution processes, and now the former, largely closed and controlled process is suddenly open and accessible to everyone (Lewis, 2012b).

Lewis (2012b) opens up the conceptual construction of journalism to its current form through the journalists’ “boundary work”: the values and demarcations, which have been “codified” and “legitimated” for professional journalism. Objectivity, au-

tonomy and working as watchdogs have been three of the predominant qualifiers of quality journalism (Lewis, 2012b), and even though these are much rhetorical boundaries which strengthen the expertise of journalists, at the same time they make it difficult for outsiders to deploy them (ibid).

However, bloggers' work processes and conceptions of "journalism" have been studied and it was found out that if they perceived their work as journalism, they also started adapting journalistic practices: checking facts, referring to sources and editing content afterwards (when and if needed) (de Zúñiga, Lewis, Willard, Valenzuela, Lee, & Baresch, 2011).

2. *Participatory Journalism*

Crowdsourcing, participatory journalism, open journalism, or citizen journalism all refer to collaborative processes where professional journalists and amateurs produce content together. Deuze et al. (2007) define participatory journalism as "newswork where professionals and amateurs collaborate and interact with each other". Even though crowdsourcing (or collective intelligence) and citizen journalism are not new phenomena, the traditional newspaper and magazine publishers have not utilised participatory forms of journalism until recently. User generated content has been a part of e.g. news sites sections for comments, but has remained an unidirectional channel and unexploited. There are, however, an increasing number of business models and media concepts in which a) content generated by users is utilised by professionals and the users are even paid (see Case Scoopshot); b) content from professionals and amateurs is considered of equal quality (Case Instagram); and c) the journalistic work process is opened for amateurs (Case Oma Olivia).

Peer-produced content has increasingly become an important feature in many user groups. Adults value the peer level of news: the comment section under articles, discussion forums and discussions about specific news linked on Facebook. Teenagers, on the other hand, consider peer-produced content to be self-evident in all forms of media. They follow textual, visual and audio-visual content on their peers' video blogs (vlogs) and channels on YouTube, blogs and different kinds of social media (e.g. WeHeartIt, Instagram, Spring.me). In fact, they value a peer-based viewpoint so much that it affects the engagement with the traditional media negatively, e.g. with magazines, where peer-produced content (and/or producers they know) is often missing (Perälä & Helle, 2012). Therefore, many women's magazines, for example, have built for their readers an online community in which content produced both by peers and professionals is available. Such examples also show that crowd-curation, i.e. the process in which content is no longer curated by the publishers' gatekeepers alone, but also by its producers, is a viable option in the future journalistic process.

In the past few years especially magazine publishers in Finland have designed various participatory concepts in order to engage their readers and also to find new audi-

ences on online platforms. Lily.fi is a platform for bloggers, which was established in 2011 by A-lehdet (a Finnish magazine publisher). Lily.fi is an open blog portal, where anyone can start a blog. Already thousands of users have their own blog on the site. There are also 18 “recommended blogs”, which get paid for regular posting. The editorial staffs of Lily and the Trendi magazine also have their own blog where they curate both the content of the recommended blogs and the regular blogs, and in addition promote the journalistic content of the magazine.

The branding of the producers and bloggers as persons has increased hand in hand with blogging. Many bloggers have started as amateurs, and as the number of their readers, followers and visitors have gone up, the bloggers have become celebrities and could also be considered professionals in what they are writing about. Especially many women’s magazines have hired these celebrity bloggers for their web sites. What could be an easier way to get new online users than to get famous and familiar bloggers – who bring their loyal and engaged audiences with them?

Blogs as a medium or as business models become more professional also in terms of economy. Blog portals gather individual, known blogs under their umbrella, and can thus sell their audiences for advertisers. Individual blogs’ visitors are not a big enough audience for many advertisers, but as the portal can sell advertisers of the audiences of e.g. six fashion blogs, the exposures are beginning to pay off.

In the following years media companies will need to develop innovations and new concepts that enable audiences’ participation of and contribution to content production. In order to start valuing content – which is not necessarily produced by professional journalists in the editorial room alone but by engaged and loyal users, who even might be experts in what they write about – some boundaries must possibly be surpassed or redefined. Also, it must be considered what the meaning of journalism and content for the audiences is. A good example is a business-to-business magazine described in Scattergood (2013). It got tired of the race against time and frequently updating channels on the internet. Instead, they decided to modify their concept / model by starting to provide their readers access to several databases, while at the same time curating the content, of course. According to the latest studies (Lewis, 2012b), there are signs that journalism and journalists are consenting to the prevailing conditions. Renaming ‘journalism’ in some cases could be a solution: The Knight Foundation (US journalism foundation, independent from Knight Newspaper chain) has started to talk about the less ideological concept “information” instead of “journalism” that carries strong connotations (Lewis, 2012a). Traditional publishers need to take the prevailing cultural conditions and new models of content production into account and adapt to these. And in journalism, breaking or at least lowering the boundaries between professional and amateur content could be beneficial in improving the overall concept.

2.1. Participatory Journalism Value Network

The concept of a value chain has been popular for many years to understand and analyse industries. The focus of the value chain is on the end product and the chain of activities to produce it. Each activity adds value to the previous one resulting in an end product that is ultimately passed to a customer. A successful value chain examines the value and the cost of each activity looking for ways how to improve these and to find advantages against competitors.

In journalism, the value is usually co-created by a combination of the parties. Therefore, instead of a value chain, we here prefer to use the concept of a value network in order to analyse the creation of value in content production. In the value network of journalism, there are *producers* that are producing content that can be edited and combined by *distributors* to the final media product consumed by individuals or *consumers*. Consumers typically pay money for the content to the distributor that, in turn, pays some portion to the producer(s). In other words, the network creates the content and distributes it to consumers that directly or indirectly pay for the content to distributors and producers. The value network in journalism is illustrated in Figure 1.

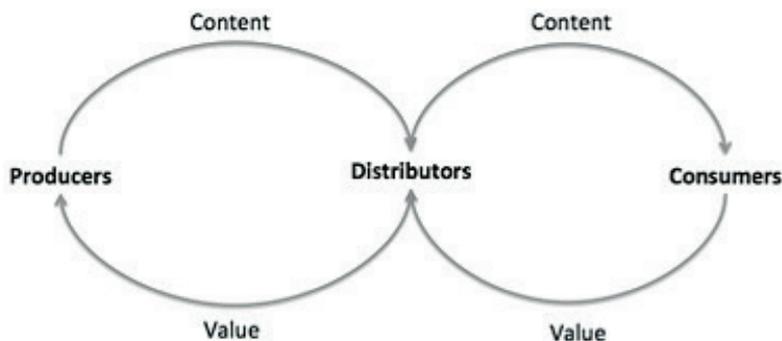


Figure 1. *Journalism value network.*

A participatory journalism value network can be described using the value network of journalism: the same parties can be identified; the same processes are there. However, the participatory journalism value network differs from its traditional counterpart in various ways:

- The borders are getting blurred between producers, distributors and consumers (Lăzăroiu, Păun, Goran-Băzărea, Danciu, & Marin, 2011). Users can take the role of producers, moderators, and readers at the same time (Detecon Consulting, 2010). These users can be called “prosumers”. Prosumers can

mean professional-consumers or producer-consumers depending on the context.

- The most significant consequence of an internet-centric world lies not in the domain of consumption, but in production (Hanna, Rohm, & Crittenden, 2011). This means that involvement of audiences in media production enabled by the internet is a huge shift in the paradigm of media production/consumption.
- The amount of user-generated/crowd-sourced content is rapidly increasing and also already becoming widely adopted by online news media for some time (Thurman, 2008). The “wisdom of the crowd” has been shown to lead to more precise and correct information in some cases (Surowiecki, 2005).
- One or more new business models will emerge. This shift replaces losses in print revenue with new digital revenues. The shift will take time and has created uncertainties in the industry (Rosenstiel & Jurkowitz, 2012).

The different components of the value chain will be discussed in details in the following sections. The roles of producers and distributors will be explained first. Sections describing the impact of participatory journalism on content and its value will follow.

2.2. Producers

In this section, we explore the question: who is producing journalistic content? There is a wide range of answers to this question depending on the type of journalism and its context. For this reason, we start by exploring the contexts in which journalism happens and then try to identify who the producer is.

The context in which we live is deeply influenced by internet technology, so it is logical to take the internet as the starting point for our analysis. Also, we note that journalism is a part of the media ecosystem (Hanna et al., 2011), and thus, we can broadly classify our context in two stages from the internet viewpoint, the *pre-internet stage* and the *internet stage*. In the first stage, we identify traditional media, which we call *legacy media*. Legacy media is characterized by a centralized production and well-controlled distribution channel as will be seen later. In the *internet stage*, media becomes linked to the internet not only in the distribution phase, but also in the participation of the audience in the production process. The involvement of audiences in media production enabled by the internet is a huge shift in the media production and consumption paradigm. Hanna et al. (2011) acknowledge that “the most significant consequence of an internet-centric world lies not in the arena of consumption, but in production”.

In a more broad sense, the concept of producer is related to two fundamental ideas, the existence of a product to be consumed, and the existence of an entity producing it. We call the latter the producer. To be more specific, we introduce a classification of contexts based on the internet as in Table 1.

Table 1. *Classification of contexts based on the internet.*

Participation in media production degree	Pre-internet stage	Internet stage
Little (or not at all)	Traditional journalism = legacy media	Traditional journalism and online journalism
Medium/high	-	Participatory journalism

In the pre-internet stage, we identify traditional journalism, in which the producer is an established institution, e.g. a newsroom where journalists perform one of the four core journalistic tasks (selecting, researching, writing and editing news). The production process is well-controlled under the supervision of the editor-in-chief, and any user participation can be performed only under the strict supervision of the institution, e.g. audience's opinion is expressed only in a "letters to the editor" section. User participation can and may exist but its content is completely controlled by the editorial staff.

In the internet stage, the internet as a bi-directional and distributed medium enables audiences to participate in the creation process (Hanna et al., 2011). This creates enormous opportunities for user participation. For example, the first manifestations of user participation in content creation are internet forums, chat rooms and blogs (Butler, Sproull, Kiesler, & Kraut, 2007). Another effect of the internet is the awareness of users as creators. In other words, users are getting used to the act of creating content, which is forcing traditional journalism institutions to make user participation as flexible as possible (Canter, 2013). By observing the latter definitions, we can identify two types of producers:

- Professional producers, which include established institutions and journalists with formal training in the profession and
- Non-professional producers, which include amateur users interested in creating journalistic content.

A note about the motivation of non-professional producers needs to be made. In the Bit Bang 4: Future of Internet report (Bit Bang 4, 2012), the authors identified a number of incentives that motivate users to participate in co-creation activities. The article classifies the motivations in two groups, extrinsic and intrinsic and the following examples were given: "Examples of extrinsic motivators include monetary rewards, user needs, career concerns, skill development, and reputation, whereas intrinsic motivators can include fun, autonomy, intellectual challenge, identity, addiction, etc."

Finally, we would like to briefly describe the relationships between the degree of participation and the type of journalism which is also stated in Table 1. In traditional journalism, which belongs to the pre-internet stage, we identify mainly professional producers working in media production. Furthermore, the degree of participation from audiences is very low and it is controlled a priori.

In online journalism, which belongs to the internet stage, the internet is heavily used as a distribution medium. For example, news distributed directly to mobile apps is well-studied in (Westlund, 2013). The degree of participation is similar as in the case of traditional journalism because the internet is used as a unidirectional medium. However, traditional news producers heavily use content produced by non-professionals in exceptional occasions e.g. the London bombings in 2005 (Canter, 2013) or the Japan earthquake and following Fukushima nuclear accident in 2010. One characteristic mentioned in (Westlund, 2013) is that traditional news producers feel pressure to produce content for all available platforms, e.g. for different mobile operating systems, such as iPhone OS, Android, Windows Mobile or the internet in general.

In participatory journalism (Deuze et al., 2007) content is produced by a collaboration between professionals and non-professionals. For example, a case studied in (Canter, 2013) indicates that the professionals hold the role of content moderators and the bulk of the content is produced by non-professionals.

2.3. Distributors

Distribution is defined as a mean of spreading the media product created by producers to audiences. Distributors are entities, individuals, organizations, or devices that have the role and responsibility of distributing the end media product. They perform this task using several methods and distribution channels.

In many value chains, the difference between producers and distributors is subtle, since their roles are highly related in many contexts. The value chain of participatory journalism is not an exception to this rule, and we note a significant overlapping between the creator and the distributor of the content in a specific channel. In the context of participatory journalism we are interested in the distributors of news. News distribution is one of the key factors of the new emerging model of journalism which we are describing.

The media landscape, and subsequently the news landscape, is marked by a never-ending sequence of changes, revolutionizing the information, communication and distribution technologies. Since the advent of the internet, the scenario of distributing news has changed radically. These changes extend to our view of us as a part of an *active* audience producing and distributing news itself. Indeed, this extraordinary internet evolution has given rise to a new breed of cyber village correspondents. Equipped with little more than a mobile phone and an inquisitive nature, these former audience members provide valuable content for media (Canter, 2013). Audiences have a growing expectation to be involved in the news-making process and are actively chasing discovery rather than passively just being informed (Canter, 2013). This expectation is at the heart of the production and distribution processes in participatory journalism, leading to redefinition of journalists as gatekeepers of news (Canter, 2013).

2.3.1. Methods of Distribution

The huge variety of distribution methods can be divided into two classes according to their appearance with respect to the advent of the internet: *pre-internet methods* and *internet methods*. *Pre-internet media* are also known as legacy media. *Internet methods* are the methods whose evolution has been remarkably significant after the birth and explosion of the internet, which is viewed as the turning point of media consumption, production and distribution.

The first used and reliable pre-internet distribution methods were printed newspapers. With the advent of radio and television, the distribution methods changed again; the distribution of news was amplified by the power of these two media. In 1983, the first mobile phone was commercialized by Motorola and, after that time, the market of mobile phones grew exponentially. In 1993, the first SMS text messaging service was launched in Finland by Nokia and, in 2000, the same company launched the first mobile news service via SMS. This was one of the main turning points for news consumption pushing many other companies to enter this market that created and provided many on-demand news and advertising services utilizing SMS text messaging. The way of consumption of news changed at the same time as the way of distributing news. The platform was extraordinary innovative, but still the role of audience was marginal with respect to this distribution method. The audience passively obtained information and news by the distribution channel.

The birth of the internet has had an immense impact on the society which is only comparable to the introduction of printing. The consequence to this development was the thriving of many websites that can be characterized by users sharing their opinions and information of various kinds, such as forums and blogs, as well as websites featuring news, such as online journals. Later, internet has witnessed another main internal revolution in terms of communication between individuals: the birth of social networks. The social networks modified the conception of communication and human relations, becoming also another way of spreading news and hence another method of distributing them. Another step toward the current situation was made when the mobile devices (for instance, the mobile phones known widely as *smartphones*) came with an integrated wireless internet connection. Since 2007, big companies such as Apple, Google and Microsoft have entered the market as powerful shapers of the mobile media industry alongside giants such as Samsung and Nokia (Westlund, 2013).

Today, many people have access to updated news in any place and at any time by connecting to the internet with a mobile device. Mobile news publishing involves multiple means of distribution, from customised news alerts by SMS or MMS to mobile news sites and convergent mobile news applications (which commonly and hereafter are referred to as apps). In addition to mobile news consumption gaining popularity, the production of mobile news services has also thrived (Westlund, 2013). From the perspective of news publishers, several mobile platforms have emerged on which they can, and increasingly do, feel pressured to publish their news. This

has created ever more complex and costly challenges for news publishers, who must explore new ground when developing attractive mobile apps (Westlund, 2013). The natural consequence of this market trend is an extreme competition in attracting the audience to their news.

2.3.2. Distributors and Consumers: Editing and Censorship

The need to satisfy consumers' demand of personalized news services and their request of taking an active part in the news-making process has led (online) journals to ask readers for creating content. Many examples of this participatory journalism, as defined in the first part of this report, has happened in the area related to investigative journalism (Vehkoo, 2013). The main feature of this collaboration is that once content is created the professional journalist edits it and then publishes its final and polished version. In other words, this is a model of distribution in which the professional journalist represents a gatekeeper, while the consumer is a non-professional collaborator whose product is edited, censored if necessary, and then distributed. This model has led to conflicts between professional editors and users (Deuze et al., 2007).

2.3.3. News Aggregators

Another level of distribution involving an entity called re-distributor of news is gaining a lot of attention by audiences as well; these entities are also called aggregators of news. News aggregators are websites gathering news updates and information from other sites, creating a unique and richer information space for the user, the personal homepage. The aggregator compiles feeds from various online sources, usually selected by the user, and automatically updates a user's homepage. News aggregator services are often offered by webmail providers. Examples of news aggregators are Google news, Reddit, Pulse and Scoopinion (Case B, in the section of participatory journalism cases in this report). It is worth noticing that social media are becoming strong news aggregators. For example, social networks are becoming a key gateway to news for younger people. In the United States 38% of under 45s and in urban Brazil 62% of under 45s say they find news this way.

The fast growing influence of news aggregators also creates conflicts with news providers. One remarkable example of these conflicts happened in 2011, when the Belgian Court of Appeals ruled that Google was infringing the copyrights of Belgian newspapers by linking to and posting portions of the articles on Google news.

Pre-internet media, i.e. TV, radio, and print, remain largely the preserve of traditional news organisations, while the online world has brought about new and enhanced competition. Globalization and the consequent possibility to operate in a global market without national boundaries have encouraged the growth of new players like Yahoo, Google News, and The Huffington Post. Blogs and social media are increasingly seen as a regular source of news. As demonstrated in Figure 2, the picture remains uneven, with traditional media most dominant in countries like the UK and Denmark. Aggregators and new players have had the biggest impact in Japan and

the United States, while social media have the strongest influence in Brazil, Spain, and Italy.

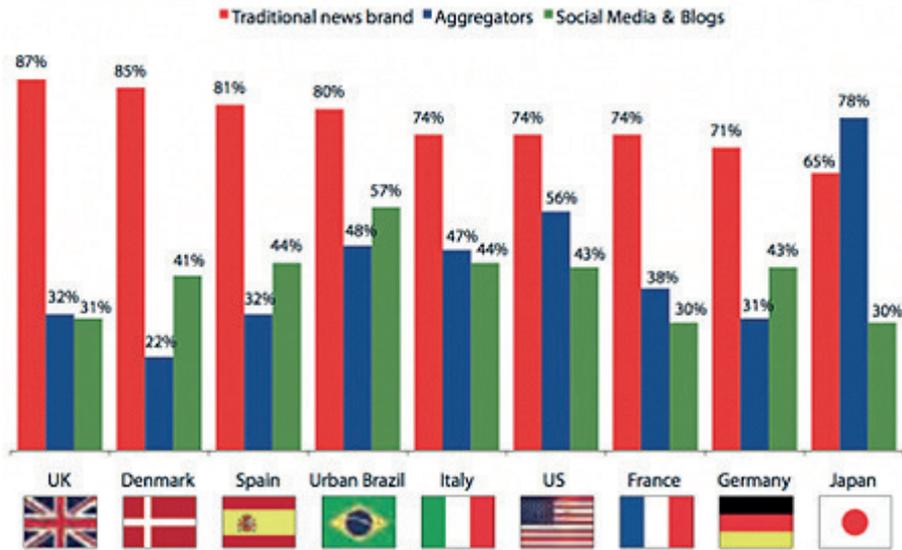


Figure 2. *Competition between distributors.*

2.4. Content

The importance of content in the journalistic process cannot be overstated. When looking back to the newspaper industry and TV media, one realizes how these models are more distribution-centric than content-centric. The situation is changing with a variety of new online distribution channels and with user participation in journalistic content production. The journalism industry is in a midst of turnover and the declining profit provides incentives to innovate and be creative. This enables more content-centric journalism to be prevalent today – consumers not only have more means to choose their preferred content, but they can as well be the creators of the content (thus prosumers). This section discusses how the changes in the journalistic landscape shape or create new types of journalistic content.

The journalistic content naturally gravitates towards the latest technology, such as internet, social media, mobile technology etc., and it therefore also changes its shape and agenda and, possibly, its quality. The traditional journalistic business model is based both on news content and, even more, on the advertising that came along. According to a report by the Newspaper Association of America (Rosenstiel & Jurkowitz, 2012), the print ad revenue continues to decline and the industry adapts by finding new avenues of income through online content and social media. A question

that arises in such a situation is: whether the readers are willing to pay for the quality content online, when they are not bound to pay for ads as before in printed journalistic material, or do the publishers need to turn to new types of content to engage their audiences. In participatory journalism, the content is produced by networks, a self-organized cooperation between the crowd and professional journalists. Moreover, the new types of content are also often produced for free. These are all factors that shape new types of journalistic content.

First of all, online journalism offers much more amorphous and fluid content compared to the newspaper. The diverse, steadily expanding user-generated content (UGC) comes in novel types of forms: comments, forums, blogs, short messages and microblogs, reports, reputation systems, multimedia content and social media sites. All those forms of UGC can serve as sources of journalistic content, distribution channels, or journalistic content quality and curation methods.

One of the first new types of content that come with the online journalism are readers' *comments* that follow the news. Comments provide two-fold benefits. On the one hand, readers are engaged in discussion and thus news content is expanded by an opinionated debate. On the other hand, publishers are welcoming the discussion as it increases their readers' engagement, while they can observe and analyse the comments in order to learn about readers' taste and preferences in order to be able to adapt their news site content accordingly. Publishers are experimenting with different types of commenting systems, which are either threaded or not, and the most popular format needs yet to be found. However, comments can also pose problems for a publisher, in particular, if moderation does not take place. One example of such a situation is the Delphy AS vs. Estonia case from Estonia (ECHR, 2013). Online journalism also includes a variety of *multimedia* content: images, video and sound. Such content causes inherently different journalistic experiences and user perceptions. More and more online news publications offer video clips of a news-worthy event, live interviews, or a good moment in sports or culture.

Compared to traditional news where agendas are set by professional journalists, readers choose their topics of interest themselves today. This has led to an increased popularity of regional and local content, and also enlarges niche content in general – a phenomenon brought by the internet not only to journalism but to other media, such as movies, as well. In the new setting, also more personal ideas emerge, and the volume is steadily expanding by increasing number of contributors. In such a vast amount of content, a new need of finding content of (personal) interest also emerges. Answering such a need creates novel start-ups that provide personalized and socially mediated news distribution, such as Scoopinion, which we discuss in case B.

Since the quality of journalistic content is highly determining its entire production process, and participatory journalism introduces changes in content quality, we discuss these changes in a separate section.

2.4.1. Quality of Content

The quality of the new types of journalistic content might require a different type of assessment compared to the professional journalistic content. In the context of participatory journalism, the quality of the collaborative process is difficult to access as the reporting quality is different between the involved and contributing individuals. Perhaps more importantly, the accuracy and the origin of different facts might be difficult to verify. While sometimes required, secrecy is not an issue when a single journalist develops a story. In case of more than one reporter, however, we have a more complex situation.

The gatekeeping function performed by publishers in traditional journalism is also changing in participatory journalism. Depending on the degree of user engagement in the participatory process, publishers might have little or no control over user-generated content. Their role shifts from being a content producer to content curator. Moreover, even the process of UGC curation might get outsourced to users. Other means of selecting content exist also, such as machine learning algorithms. When it comes to monitoring the content against vandalism and threats, or against violation of laws and other people's rights, professional journalist curators are still required. Wisdom of the crowd might be another answer to the content curation, where successful examples already exist. Rather recently we witnessed false news that went viral, and very soon the crowd reacted by finding the truth behind. An example of this case has to do with the Volgograd bombing, where the Russian state channel NTV released a passport photo of the suicide bomber – wearing a hajib. Online bloggers and users of Twitter rather quickly reacted that such a picture, according to law, cannot be from her passport, and soon after, a real and damaged picture from the passport turned online (Sean's-Russia-Blog, 2013). In the second case, as an opposite example, information that was crowd-sourced via reddit and 4chan and then reported quickly by a tabloid, turned out to be false. Namely, The New York Post wrote on the front page about Saudi person being arrested and showed pictures of suspect in the case of Boston bombing – both information proved to be false, as later responded by the police (Ryan, 2013).

While most often discussed in the context of news curation, the content that will more likely reach the readers might as well be only the content that is “more likely to catch on” (Berger, 2013). This is an important aspect to have in mind when thinking about the future of journalistic news content, under such circumstances when curation is becoming less viable. Perhaps the most difficult issue to control becomes copyright infringements and content rights. Some crowd-sourcing mechanisms that emerged in order to prevent the former are social vetting and registration of content contributors (with social ids).

2.4.2. Summary of Content Changes

The main concepts that can summarize the journalistic content changes in the era of participatory journalism are, thus, as follows:

- A wider range in **quality** and more challenges in **evaluating** it.
- **Richer content complements** text: media content and interactive content.
- **Copyright** and **trustworthiness** issues increase (even though the second issue can actually be avoided by the wisdom of the crowd in many cases).
- Increased **niche** content-types (local and regional news, high-school sports etc.).
- We witness a move from closed to **open**, and certainly expect only increased openness in the future.
- **Mobile** journalistic content consumption increases the shift from text to richer content types; however, text content will not be fully overtaken.
- Even though not so obvious, we think that the issue of **language divide** becomes more important in the new journalistic landscape.

In the end, we once again point out that, no matter of the changes it undergoes today: content is still the essence of journalism. The described changes increasingly stimulate a debate about whether content is and should be *“either free or fabulous”*. Answering this question, in turn, requires different and new business models.

2.5. Business Models

Traditionally business models in media involve companies’ competences, value created, products/services provided, customers served, relationships established with customers and partner firms, and the operational requirements (Picard, 2011). This broad conceptualization regarding media serves also as a source of inspiration in exploring business modelling in the current context. However, as noted previously, the traditional journalistic business model is based both selling professional journalistic content and, even more, on selling advertising alongside. Whereas the versatile and diverse nature of contemporary journalism calls for a novel understanding of business models, until recently, journalism has embraced more classic revenue streams and business models (Sirkkunen & Cook, 2012), such as:

- Advertising: banner advertising and corresponding cost per view, cost per click, or cost per action models, weekly and monthly rates, advertising networks, sponsorships
- Pay for content: Paywalls and subscriptions, memberships, freemium
- Affiliate marketing
- Donations, crowd-funding, philanthropy
- Selling data and services
- Selling technology
- Events
- Freelancing and training, consulting
- Merchandise

However, due to the participatory journalism value network (see Figure 1), novel conceptualizations of producers, novel digital distribution options and the nature of fabulous content, the current understanding about business models is too narrow to solve the contemporary challenges of journalism (Picard, 2011). For example the transition from print to digital results in revenue losses in journalism, as today for every \$1 gained in digital \$7 are lost in print revenue (Rosenstiel & Jurkowitz, 2012).

2.5.1. Business Opportunities in Journalism

As the paradigm change in journalism drives the growth of new business opportunities (see Figure 3), also the number of business model initiatives increases. As noted previously, novel business opportunities emerge for example in the following areas in journalism: content creation, content commentary creation, content curation and distribution (Downes, 2009), which all play a vital role in business modelling, either per se or as an element of a bigger ensemble. First, revenues from journalistic content may be created and harnessed by professional journalists, professional bloggers, non-profit journalists, and amateur bloggers. Second, the value from commentary can be created and harnessed by pundits/columnists, bloggers and scholars. Third, the monetary value from curation can be created and harnessed by professional journalists and editors, aggregators, group filters and almost anyone in the social media. Fourth, the monetary value from distribution can be gained through traditional media, aggregators and electronic word of mouth.



Figure 3. *Business opportunities in journalism (Downes, 2009).*

2.5.2. The search for a new business model

Osterwalder (2013) embraces the dynamics beneath business modelling through a metaphor of theatre in the sense that front stage is what people are interested in and it is what they are willing to pay for. More specifically, drawing from Osterwalder (2013) a business model in journalism has a front stage (which leads to revenues) and a backstage (which makes up for the costs). In this sense, we indicate that if stakeholders in journalism succeed in putting on a show and attracting audiences, this successful business opportunity exploitation will eventually lead to business models and profits. This ability to put on a show is vital especially in the digital space, where the ability to draw attention through evoking emotions is the key to attracting real audiences. This is in line with Kremers (2013), who highlights: “Trigger an emotion and your content gets shared and retweeted”. In this sense, as electronic word of mouth is best driven by triggered emotions (Kremers, 2013), stakeholders in future journalism need to seek novel innovative ways to enhance the media consumption experience in order to connect with audiences.

However, it is not an easy task to monetize value. This is a consequence of the complex and sometimes even chaotic conditions and interactions in contemporary journalism, where value is created by various stakeholders; especially also today, where the freemium business model seems to be the default business model on the web. However, as noted previously, new business models are developing. There are at least two different types of start-up driven business models that can be distinguished in journalism. While the storytelling models highlight original high quality content (news and stories) for audiences in value creation, the service-oriented business models focus on carving out new functionality without trying to monetize the journalistic content. In this sense, it is also vital to shed light on the value creation mechanisms of more established players such as Google, that combine elements from both storytelling and service-oriented business models while launching Newsstand, a Flipboard-style reading app for android with support for subscription walls for newspapers and magazines. Moreover, there are also other novel business models in the pipeline. For example writers turn to crowd-funding to develop stories and thus utilize crowd-funding service providers, such as Kickstarter, Indiegogo and Spot.us, for donations. Publishers turn to crowd-sourcing to generate the quality content to be published on their websites (Gunelius, 2013) and utilize websites such as Freelancer.com, which enables them to create a submitting contest for freelancers.

In light of the above, it is reasonable to suggest that business models such as philanthropy, donations and pre-revenue model will gain significance in the future. Moreover, according to Phillips (2013) the future of journalism is not about finding ways of doing away with journalists and journalism, or about undermining the quality of what journalists should do, rather than finding new ways to get citizens not only to participate but also to pay for the journalism we all need. As Sirkkunen and Cook (2012) highlight: “.. there is no single, one-size-fits-all solution but each news provider has to rely on a combination of revenue sources in order to grapple with fragmented

media markets, social connectivity and the internationalization of news production.” In this sense, successful business modelling in journalism requires a creative mind set and courage to do things differently. As web 4.0 will introduce personal agents and fine-tuned distributed search around 2020-2030 (Spivack, 2007), unforeseen intelligent features such as highly personalized articles and recommendations and other innovative ideas may emerge. As the speed at which developments occur are somewhat unexpected, it is possible that shifts in journalistic value creation have already happened behind the scenes resulting in new business models we cannot even imagine yet.

3. Participatory Journalism Case Studies

In this section we illustrate how participatory journalism is implemented, executed and practiced on the basis of several cases. We have examined the cases based on a similar “criteria” as Deuze et al. (2007). The viewpoints for this evaluation were: 1) the roles of the user participants and the professionals; 2) the motivation of the both parties; and 3) the success or outcome of the business model. We have also considered how the concept might work under different circumstances.

Based on the case analyses, we intend to identify a number of trends that are radical enough to shape the future of journalism.

Case A: Oma Olivia

Olivia is a Finnish women’s magazine. The concept of Oma Olivia (My Olivia) is to give the readers the possibility to participate in making the magazine. The co-creation process is composed of various challenges that involve readers’ output. Readers can choose, for instance, between angles for stories, a few interviewees or photos from the shooting session. The process of reader participation takes place on an online platform which was built specifically for that purpose.

The co-creation concept of Oma Olivia is not completely open; readers have pre-defined possibilities from where to choose but the professional journalists make the ultimate decisions and the writing / visualizing part of the final journalistic pieces. The motivation to collaborate is based on free will, but the “participating journalists” are awarded with different titles based on their participation level (e.g. assistant to editor-in-chief) (Bartlett, 2013). According to Aitamurto (2013), readers’ thoughts of the co-creation process were conflicting. Co-creating readers experienced that the magazine felt closer to them and a sense of a community was built around them. On the contrary, readers that were not participating in the making of the magazine felt as outsiders when reading the specific co-created issue.

During and after the first co-created issue the professional journalists’ views about inviting readers to the journalistic process were negative. They experienced that they had been forced to give their magazine concept and the journalistic decision making in the hands of amateur readers that could not possibly know what the core of the

magazine is. They were scared that the readers would ruin the magazine (Aitamurto, 2013). At the same time, after the first co-created issue, readers wanted to participate more (Bartlett, 2013).

Currently many of the co-creation challenges are sponsored by the magazine's advertisers and published not as journalistic content but as advertorials (Bartlett, 2013). For example, Alpro (a grocery company) is sponsoring a food challenge where the readers may first decide the theme and later on they can post their own recipes with photographs, and finally vote for the best recipe.

The aim of the co-creation process was, and still is, to engage the magazine's readers with the magazine and in making the magazine more. According to the CEO of Bonnier Publications the co-creation is also a selling point and the collaborative issue sells better than a "normal" issue (Bartlett, 2013). Oma Olivia started 2010, and at the moment the fourth co-created issue is under production. In the future, it is interesting to see whether the editorial staff will provide more space for amateur readers to collaborate, even if it requires more resources.

Case B: Scoopinion

Scoopinion is a news-reading start-up based in Finland. Their service provides tracking of reading behaviour after users install a browser plugin. Users may sign up directly to the Scoopinion site or through Facebook. On the Scoopinion site, readers then get recommendations of popular news based on the start-ups' proprietary algorithm. It takes into account users' own reading habits and those of their friends. Thus, Scoopinion represents a novel type of a socially mediated and crowd-sourced distribution channel for journalistic content. It distinguishes itself from other types of distribution channels (for example, news feeds) by focusing more on the content and far away from the sole clicks, thus aiming to provide a personal magazine for each user.

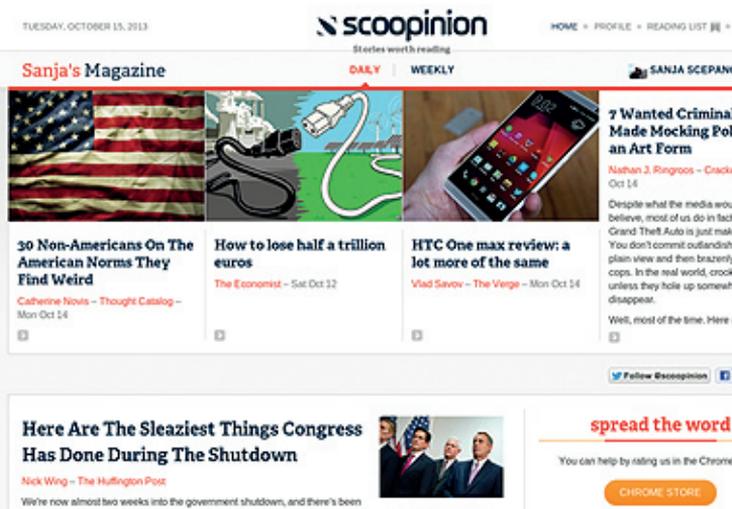


Figure 5. Scoopinion's homepage.

Users' role in the case of Scoopinion is passive. While they read news stories on whitelisted sites, Scoopinion tracks and collects data about their behaviour: how long, up to what percent they read the article, at what time of the day etc. The collection of all such user data provides a database against which Scoopinion runs its algorithms. Even though the users do not interact with the journalists directly, based on the database, the journalists get valuable insights about how their content is being read. They can, for example, see at which point in their article the drop off in reading happens, and learn how to improve and adapt their writing practice. The role of professionals is not changed prior to their articles being distributed through Scoopinion. However, as we note above, the valuable insights about reading their content has potential to cause professionals to adapt their journalistic practice to user demands later.

Readers, i.e., the users of Scoopinion, are motivated to find the content that matches their personal taste best in the sea of online news. Since Scoopinion is only distributing the online content from news sites, its lack of business connection to the professional houses might be one of the reasons of its slow growth. Professionals are motivated to find out about readers perception of their content and so connecting with them directly might be one viable business strategy for Scoopinion.

Scoopinion is still in a start-up phase, having a relatively small number of active users. It has potential to grow to a larger crowd-curated online magazine thanks to its unique dataset that provides novel reading behaviour information. The suggestion that we make for Scoopinion to connect with professional news houses could be realized directly by offering high-quality statistics and analytics on reading behaviour and attitudes toward news content. A possible disadvantage is that many news providers already track the reading behaviour of their readers themselves by increasingly offering/requiring a sign-up on their sites (often through Facebook).

If we think about numerous recommendation systems online that are implemented by different companies and in diverse fields, the idea of Scoopinion – to track user behaviour data and recommend news content – is not novel; rather, we can say it comes to the journalism context from existing ideas and the models outside. However, in our opinion, such a technology has not yet become popular among larger audiences for reasons that it is still emerging or finding the right form. However, it will likely have significant impact in the near future to support journalistic relevance, a trend that we identify and discuss more under the discussion on trends.

Case C: Scoopshot

Scoopshot helps consumers and photographers to reach image buyers in a new way. The idea is to make it easy for photo buyers to acquire unique photos and videos and reward the photographers for their best photos. It is a crowd-sourcing service for sharing eyewitness photos and videos, for example.

If a person has a photo on something interesting and topical, s/he can share it on Scoopshot that takes care of the distribution. It is by far a simpler approach compared to personally distributing a photo to all major local media companies and wishing to

be rewarded. A large number of media companies are using Scoopshot as a source for photos including Metro International, the Daily Star, and MTV3 Finland to name a few. To minimize the threat of using altered or stolen photos Scoopshot assesses an image's authenticity to minimize risk for media companies.

Users are providers of photo and video content. They interact with professionals by uploading their content to the Scoopshot service that distributes the content to professionals. The content is added to tasks like "Fiat photos" or local news that creates the context for the content.

Professionals use the content according to their own discretion. Sometimes amateur content can be the only content there is available and it must be used. Sometimes there can be multiple sources for the content and the professional can choose the one s/he favours the most. If content is selected to be used, the professional pays for the use and the creator gets rewarded, so there are no conflicts.

The motivations for users to provide content are at least excitement and money. According to Scoopshot "64% of readers stated that initiatives by newspapers to encourage readers to send in photos made newspapers appear more modern and innovative". Additional monetary rewards from good photos can be significant. The highest recorded earning has been around 20 000 USD.

The number of Scoopshot users (amateurs) and media companies using the service is increasing all the time. The service was published early 2013 and it claims to have over 300 000 mobile photographers and 60 media companies using the service.

Scoopshot does one thing extremely well: it creates a single channel from one user to many media companies. But there can be numerous users, so the number of the connections from one many media companies to many users is likely to be great. It is a prime example of creating a single channel between amateurs and professionals for two important modalities of content in journalism: photos and videos. This eases users' participation in journalistic content production, and similar one-to-many models would be applicable in other areas of journalism as well.

Case D: Pearltrees

Pearlree (est. 2007), the visual and collective library lets users organize and bookmark information, for example digital journalism, in tree-like structures. This collaborative curation tool allows users to collect, organize and share any URL they find online as well as to upload personal notes and photos. Users can synchronize their accounts with Twitter and Facebook and embed a pearlree into most CMS products including Wordpress blogs, Drupal websites, Typepad blogs and others. Pearltrees has moderate momentum, around 350.000 users.

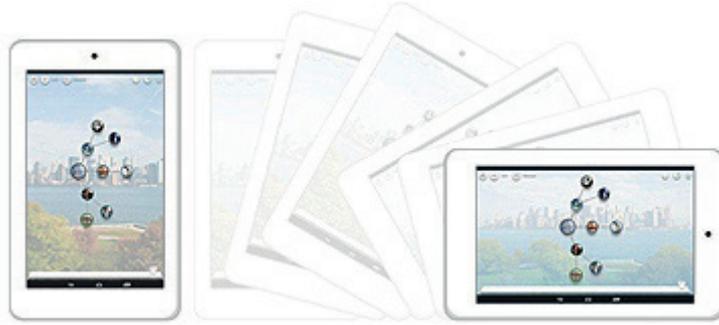


Figure 6. Pearltree iPhone and iPad screenshots.

Users are free to utilize any URL online (Youtube, Forbes, Soundcloud, blogs) as well as their personal sources such as photos, notes and videos as a pearl. Users cultivate their interests through combining single pearls into pearltrees, which highlight the chosen topic. Thus, users are able to frame and make sense of information they find attractive and worth sharing through Pearltree visualization. In addition users are able to decide whether they want to keep their pearltrees private or share them with the world.

Pearltrees welcomes everyone to create their pearltrees and cultivate their interests. Thus, in general, Pearltrees does not distinguish hobbyists from professional journalists. Moreover, in many cases pearltrees include both non-professional user-generated sources and professional journalist-generated sources.

The motivation of participants derives mostly from the basic human need to share content (Chakravarthy, 2011). This need to share is embraced in large scale especially in those cases, when pearltrees are open and accessible to the world. However, since people sometimes want to have control over their audiences, it occasionally may be more lucrative for them to choose their pearltrees to be private and share their views only with selected smaller audiences.

Pearltree is a pre-revenue company that, to date, has secured 12.2 million dollars in Angel and Venture funding in four separate rounds. In the future, privacy features will be introduced as an aspect of their monetization strategy. However, these things take time and therefore it is too early to evaluate whether this project is a success or not. Moreover, the definition of success is also a discussion of its own, since for some digital entrepreneurs the key driver is the ability to enable free expression.

Case E: WikiLeaks and Similar Platforms

Wikileaks defines itself as a non-profit media organization that was launched officially in 2007 (Wikileaks, 2013). This organization has attracted a large amount of attention from other media organizations and governments because it continuously publishes confidential information (thus disclosing the information illegally) such as secret diplomatic cables and secret war logs (Bruns, 2012; Hood, 2011) in news and raw form while maintaining the anonymity of its sources. The organization operates in strict secrecy given no names of their staff except for Julian Assange and Kristinn

Hrafnsson, and also provides high anonymity to its sources by the use of an advanced system of data encryption. What is interesting about Wikileaks is not what it is but what it does, and how it relates to traditional media players. What Wikileaks does and the effects and echoes of their actions is what we call the Wikileaks phenomenon.

The Wikileaks phenomenon has had large media success partly because it operated in direct partnership with major media organizations such as The Guardian, The New York Times, Der Spiegel, Le Monde and El País, also because its media spokesman Julian Assange is under legal prosecution.

Specifically for the Wikileaks site, user participation in the form of information sourcing is active but highly anonymized. However, users cannot edit the news or data once it is published. On the other hand, the leaked information is available to users and they can use the archives and do research using this information.

Professional journalists have an important role in the Wikileaks phenomenon because they filter the disclosed information, process it and present it in a format friendly to their public e.g. they present news related to their own countries and in their own language. Professional journalists benefit from the Wikileaks phenomenon because they can capitalize from it.

Wikileaks as an institution has altruistic motivations as can be inferred from its non-profit status. We can also infer that whistle-blowers (people sourcing the confidential information) share similar motivations as Wikileaks. Thus, the motivation of participation is very high; however, the risks of being labeled or identified as an outlaw by some countries are also high. Ordinary readers are motivated by their curiosity and their wish to be informed, and this motivation is pervasive and will be never fulfilled entirely.

The success or failure of the project is difficult to measure because there is not a clear indicator, e.g. money, involved. However, we can still make some inferences based on the available literature. Wikileaks as a non-governmental organization (NGO) may disappear. However, some authors, e.g. Hood (2011), hold that the Wikileaks phenomenon is here to stay and it will have a profound effect on the culture of transparency of governments and in global governability. The phenomenon is also perceived as successful because it generates important conversation, the anger of governments and also movies.

Many elements that Wikileaks uses are not novel; the leak of confidential information has always been present in societies. The novelty is in the amount of leaked information. Also, established news institutions have incremented the impact of leaked information by adding context and digesting the information for their audiences.

Case F: Instagram

Instagram is a social network based on photo and video sharing. In Instagram, users can upload photos and videos that can be later shared to other social networks such as Facebook or Twitter. This service provides users a tool to apply digital filters to the uploaded items.



Figure 7. *Instagram's logo.*

The role of users is to upload the items they want to share with the public, specifically videos and photos. There is no interaction with professionals. In this service, users cannot distinguish between a professional or a non-professional creation. Instagram is as user-centric as every social media. Instagram is an exceptional platform for advertising a brand. Even if professional journalists have not a specific role, professionals from many companies are using Instagram to increase their value and consideration among investors. Companies are able to attract job applications and stakeholders with the use of hashtags, posting photos and videos. While there is no immediate revenue in terms of money for a company, there is an earning in terms of value and image of a brand itself.

The intrinsic motivation of people to use Instagram is mainly the interest in sharing their lives or sharing their passion for photography. There are also external motivations for companies, which are to use Instagram to increase the popularity and the value of a company's brand. The service is successful: the monthly active users are about 150 millions. Though, the analysis has revealed that Instagram is not a relevant platform with respect to conflicts between professional journalists and amateurs.

Case G: Tripadvisor

TripAdvisor was an early adopter of user-generated content. It is an online travel service that provides directory information and reviews of hotels, restaurants, attractions etc. in different destinations provided by mainly the users of the service. Users can search for this information and leave their reviews and comments on the place they have visited. The reviews typically include a rating from zero to five, any written feedback and additionally photos. In addition to the directory information and user-generated content, it provides an interactive travel forum for users to ask detailed questions on whatever they wish. The service is free for the users. Advertising is the underlying business model.

Based on user-generated content, TripAdvisor produces different kinds of publications. The most well-known publications are Travel guides and Travelers' choice (see

Figure 8). Travel Guides are electronic guides to cities, such as Helsinki, or trip types, such as a family or a bargain trip. They provide information about hotels, restaurants and attractions in a particular destination. Travelers' choices introduce the best hotels, destinations, restaurants and beaches around the world. These publications are not as extensive as similar travel guides, but they are very up-to-date, based on the information from TripAdvisor services.



Figure 8. Examples of free TripAdvisor publications.

TripAdvisor is an example where crowds have been able to produce more up-to-date information about any destination compared to any printed professional travel guides. TripAdvisor guides are not as professional as commercial guides, but they are up-to-date and free. TripAdvisor publications are automatically generated documents. Professional journalists are not producing these publications, but can search information from TripAdvisor for their articles.

Users are not paid for their contribution, but they can earn badges based on the contributions they make. Additionally, top contributors are often active users of the service. They benefit from the reviews written by others and share their own reviews to help others.

In its factsheet, TripAdvisor claims to have over 260 million unique monthly visitors and over 125 million reviews covering more than 3.1 million accommodations, restaurants and attractions.

TripAdvisor has been able to create a very large travel directory covering the entire world. Currently it covers accommodations, restaurants and attractions. Similar models could be used for food, wine, music or other subjects.

4. Discussion

Predicting the forthcoming always includes a great deal of guesswork. In our approach, we are trying to predict trends shaping the future from the cases above. The chosen cases are radical enough to shape the future in some way. To increase the quality of our predictions, we challenged a few media professionals to comment our trends and to share their views on the future. Together with the trends and the feedback from the media professionals, we evaluated how crowds are changing journalism. It follows a discussion on the identified trends, then the reflection of them against the feedback from the professionals, and finally the description of our future predictions.

4.1. Trends

During the study process, we have identified trends that we believe will shape the future of journalism. Furthermore, we acknowledge that there are many other trends and predictions available in the literature and the internet. Our ideas are aligned with most of them.

Relevance: The amount of information is constantly increasing. We are already facing vast amounts of content available in Internet and it is not easy to find relevant content matching our personal interests. As the amount of information increases, we see that tools that help users successfully navigate this sea of content will significantly gain importance. At the same time, publishers and also journalists, face challenges in sorting out and curating the UGC. Navigating the sea of content is what we name the trend of relevance. Relevance means that a person will receive content that it is the most relevant based on her/his preferences. The preferences can be defined manually and information matching the relevance criteria will be shown. In the time of cloud computing and big data, data analytics is playing a significant role, and services that are able to provide the most relevant content are the ones likely to succeed.

Two of our cases, Scoopinion and Scoopshot, are dealing with the identified relevance trend. Scoopshot helps publishers to find relevant photo content among the crowd-sourced content. Scoopinion addresses the readers' need of personalized and timely relevant journalistic content.

Sharing: Scoopshot and WikiLeaks cases are both excellent examples of creating a "one-to-many" channel: any individual can use this channel to reach a great number of media companies or journalists to share something, whether it is a photo, a video, a gossip, a story, a research or pretty much any journalistic content. The effort required to reach professionals is very much less than finding appropriate magazines, appropriate contacts, finding contact information and contacting these people.

The case of Bradley Manning sharing confidential U.S. military information via a centralized channel is widely known example (Rothe & Steinmetz, 2013). The information to be shared does not need to be as rich & secret as it was in the Manning case (in fact, not a small number of magazines are reluctant to use such confidential information). Nevertheless, usually any content will be acceptable, as long as the sharing is easy and crowds find that the sharing meets some of their needs (money, reputation, etc.). The identity or hiding the identity of the sharer can play a central role in some cases.

Community-created content: Crowds are not just a random collection of individuals, but crowds are in fact a collection of communities, and thus content created by crowds can be seen as content created by (many yet distinct) communities. In addition, individuals can be part of many communities at the same time. As a trend, we want to emphasize the idea of communities creating content a bit more than the idea of crowds creating content. The reason behind this is that if a crowd has motivation to create a type of content, then this shared motivation is a base for the formation of a new community. Co-created content is also created for a target group, which it is likely to share motivations with the creator of the content, thus again there is an aspect of community. Early examples of online communities and their motivations can be explored in Butler (2007).

Oma Olivia is a good example of people creating content for people, in which the creators and audience feel part of a community. In TripAdvisor, many people feel that they are getting something in return, by submitting reviews to the community.

The idea of communities is also useful to explain engagement with a service. In the context of online interaction and co-creation, online services are successful if they find ways to motivate participation of users. In other words, users find a service useful if it satisfies their needs. For early online communities, some needs were identified in Butler (2007), for example the need for escape, visibility beyond their local work or geographical community, social interaction, self-esteem, future employment, as well as some sort of information, professional or economic payoff (Butler, 2007).

Richer content will replace text: Text will not be fully replaced by any other content, but the point approaches where text starts to complement richer formats instead of rich formats complementing text. Already 15 years ago, visual images have been said to replace text (Heller, 1996). The growth of services like Youtube and Instagram are examples of services where richer media is complemented by text, not the other way around. It has been estimated that 80-90% of consumer traffic will be video by 2017 (Cisco Visual Networking, 2013). On the other hand, there are also other richer content-driven digital services that complement existing text driven media. For example, Pearltrees allows users to frame and make sense of any type of information (text, drawings, photographs, videos, music) they find attractive and worth sharing. Pearltree's visualization allows users to collect, organize and share any URL (e.g. Forbes,

NYTimes, Youtube, Vimeo, etc.) they find online as well as to upload personal notes and photos. These tree-like content structures can be embedded into most content management systems including Wordpress blogs, Drupal websites and others.

Mixture of professional and amateur content: The amount of user-generated content is increasing. The quality of this content can vary greatly, but the amount of high quality UCG increases all the time. For example, not every blog will be a high quality one. But there will be professional blogs and amateur content that do not really differentiate quality-wise. This is the direction the traditional media will go. There is still room for high-quality content and curated content, but much of the professional content will be replaced by amateur content.

4.2. Feedback from Media Professionals

The analysis of the cases and identification of trends were one side in our process of predicting future. The other side were the interviews of media professionals. We presented our trends to a few media professionals, listened to their feedback and made final predictions based on the synthesis of these two.

Fernando Herrera: Fernando is ex-CEO for Rovio Entertainment and held several executive positions at Sanoma (the largest media company in Finland) corporation. Fernando agrees with most of the trends identified by us. In his opinion, community-created content is the most important, as organizing people for action and sort of a “community media desk” is something already needed. Regarding the pricing and content, he uses a saying: “the content in the future needs to be free or fabulous”. Summarization of content, due to the high information load and mobile screens not suited for reading text is a necessity. Fernando also suggests automatic content writing for niche sport content, for instance. Finally, when it comes to the changes in online advertising, according to Fernando, we can talk about a new type of scarcity – video advertisements being shown during the journalistic video are limited in time.

Tuomo Pietiläinen: Tuomo is journalist working at Helsingin Sanomat, the largest subscription newspaper in Finland. Tuomo believes that community-created content will be the most important trend of the ones identified. None of the trends is obsolete, but some are more important than others. Relevance was found to be the least important trend to him. Tuomo also believed in displays that can be folded into a pocket and are connected and interactive. This implies the development of appropriate technology that enables, shapes, and then drives such a future.

4.3. Future Predictions

Based on the identified trends and the feedback from professionals, we make the following predictions. The question “How will crowds change journalism?” will have many answers and these predictions will definitely play a partial answer to the entire question. However, the predictions that we make are:

1. Participatory journalism and traditional journalism will be more integrated. One significant driver for this is that the volume of user-generated content will increase; it is cheap, up-to-date and engages the audiences. To capture this opportunity, journalists will utilize more tools (such as one-to-many channels) from participatory journalism and the professional and amateur content will be more mixed in the future. We expect that those journalists who can adopt these tools will be likely the most successful ones in the future.
2. Content, in general, will be free. User-generated content and automated content creation will help reducing the effort of content production from journalists. However, high-quality and well-curated (relevant) content will have markets and this might change the role of journalists. UCG and automated content creation will reduce the number of content creators. We expect the number of journalists to decrease, and their tasks to be more focused on the curation and production of high-quality content. We believe that services that can automatically provide the most relevant content are the ones to succeed in the future.
3. Content is changing its form. Text used to be the dominant content form of journalism, but richer formats will be replacing it. The future journalism will integrate various different media formats. The written text will not vanish from journalism, but its role will change from a dominating one to a supporting one instead.
4. Innovation in digital journalism is, at least partly, driven by technology evolution. The development of display technology will change the consumption together with the development of automatic content generation and personal news assistants. Personal agents and fine-tuned distributed search are to be introduced around 2020-2030 (Spivack, 2007). These developments may result in unforeseen intelligent features such as highly personalized articles and recommendations and other innovative ideas. Comparing this with foldable electronic newspapers, “Google-glasses”-like displays or wearables, will likely create entirely new ecosystem(s). Together with such technology, and interactive content availability, we expect to witness in the near future, a personal news-assistant, possibly in a form of a robot.

An illustration of a few of these predictions is shown in Figure 9. The figure illustrates that as the volume of content increases, so does the volume of the integrated journalistic content (co-created by crowds and journalists). The volume of purely

journalistic produced content will decrease over time. It is likely that in the future we will still talk about professional journalism, however, in coexistence with amateur journalistic content, complementing each other.

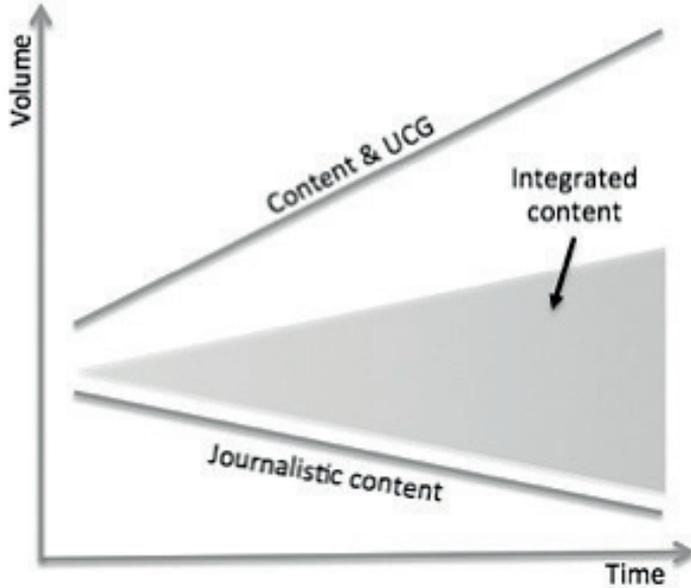


Figure 9. *Future predictions.*

At the moment, we are at the dawn of participatory journalism. Once people get more familiar with new technologies supporting participatory journalism, the volume, the quality and the consumption of participatory journalism will increase. Journalists will still have an important position in the field of journalism, but the power of crowds will increase.

5. Conclusion

We presented an overview of the current state in the changing field of journalism and identified the most important trends driving these changes in near the future. Our understanding of the current journalistic situation is based on literature review and on our example cases. Among many real examples of start-ups or new technologies that have emerged to satisfy the need of novel ideas in the journalistic content production process, we chose six diverse and representative cases. The cases we discussed were: Scoopshot, Scoopinion, Oma Olivia, Pearltrees, WikiLeaks, Instagram and TripAdvisor. Each of the cases provides a good example for one or multiple of

the important journalistic trends that we identified: relevance, sharing, community-created content, a tendency towards mixture of professional and amateur content, as well as richer content types complementing text. After our own discussion on the relevant trends, we interviewed media professionals to obtain both their feedback on the identified trends and their own suggestions. The result is that the professionals agree with most of the discussion and our trends, with the addition of a few more ideas of possible additional trends: summarisation, scarcity, and novel materials that will replace paper as a journalistic medium.

Finally, we would like to point out that technology needs to become commonplace and almost boring before people will start using it creatively. We think that novel technologies are already in place when it comes to journalism, and that it will take only a shortly time until both readers and publishers will start using it in innovative, radically different, and creative ways continuously shaping journalism in the future.

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