



Best Practice in Police Social Media Adaptation

Photo: David Adams

© 2012 by COMPOSITE Project

Authors: Sebastian Deneff⁶, Nico Kaptein⁸, Petra S. Bayer¹¹, Leonardo Ramirez⁵



This research is partially funded by the European Commission as part of FP7 in the context of the COMPOSITE project (contract no. 241918).

More information:
www.composite-project.eu

5.8.1.1: See affiliations on page 7.

Summary:

Best Practice in Police Social Media Adaptation

This document describes best practice of European police forces in adapting social media. The description of these practices stems from a workshop series and other events where police ICT experts met with academics and industry experts; and from a study of the Twitter usage of British police forces during the 2011 riots. Grouped in nine categories, we describe different uses and implementation strategies of social media by police forces. Based on these examples, we show that there have been numerous ways in which police forces benefitted from adopting social media, ranging from improved information for investigations and an improved relationship with the public to a more efficient use of resources.

Contents

Introduction: The COMPOSITE Project	4
Our Approach: Methods and Limitations	8
Results: Best Practice in Police Social Media Adaptation	12
Discussion and Outlook: Learnings & Open Issues	30

Introduction:

Studying Organisational Change at European Police Forces

The research project COMPOSITE investigates organisational change in European police forces. One specific part of the project focuses on changes related to the introduction of new information and communication technologies. A trend study revealed, among others, the topic of social media as a relevant topic of organisational change. The broad adoption of social media by the public and the increasing effect that this adaptation has in police work, requires police organisations across Europe to define and implement strategies for social media adaptation.

The COMPOSITE Project

As part of the European Commission's seventh framework programme, the European research project COMPOSITE (Comparative Police Studies in the European Union) studies a broad set of phenomena to better understand organisational change in police forces. Over a period of four years (2010-2014), researchers from 15 partnering organisations (Figure 1, page 7), including universities, institutes, corporations and police academies, compare current developments with police forces in Belgium, the Czech Republic, France, Germany, Italy, the Republic of Macedonia, the Netherlands, Romania, Spain and the United Kingdom.

Beyond the context of this report, COMPOSITE comprises work packages to identify environmental policing opportunities and threats as well as internal capabilities and knowledge sharing capabilities. The research also includes dedicated work packages on structural and cultural changes, the identity of the police forces and their legitimacy as well as leadership practices in police organisations.

Other work packages look into the dissemination of research findings and into the transfer of the results for training and consulting officers. Additional information about recent project results are published on the COMPOSITE website at www.composite-project.eu.

The work package 'Technology Adaptation', which provides the frame for this report, investigates those aspects of organisational change in police forces that are tightly linked to emerging information and communication technology (ICT). Police forces, in all the participating countries, are increasingly confronted with the challenge of adopting a broad range of new ICT in order to reduce the cost of maintaining out-of-date ICT systems and to keep up with and make best use of the rapid technological development. A diverse set of legal, cultural, economic and societal issues increases the complexity of technology adaptation for police forces.

In order to identify pressing issues, to compare efforts by the police forces and to find solutions and approaches across Europe as well as to identify needs for fur-

ther research, the work package started out by mapping current ICT trends bottom-up and identified social media as an important issue¹.

Studying Social Media Adaptation

Social media have been defined as "internet-based applications [...] which [allow for] the creation and exchange of user-generated content"². In only a few years, social media networks have seen an unprecedented adoption rate when compared to other media. As Erik Qualman pointed out: "It took radio 38 years to reach 50 million listeners. Terrestrial TV took 13 years to reach 50 million users. The Internet took four years

1 Deneff, S., Kaptein, N. Bayerl, P.S., et al. 2011. ICT Trends in European Policing. ICT Trends in European Policing. COMPOSITE, Deliverable 4.1, European Commission FP7 Contract No. 241918

2 Kaplan Andreas M., Haenlein Michael. 2010. Users of the world, unite! The challenges and opportunities of social media, Business Horizons, Vol. 53, Issue 1, p. 59-68

to reach 50 million people. In less than nine months, Facebook added 100 million users.¹ This wide adoption and the associated influence on everyday life make social media a highly relevant and pressing issue for European police forces. Given the speed of development, social media are, however, still a new topic for the police.

While all police forces are increasingly confronted with social media in daily operations, the ways and speed of integration of social media for policing vary greatly. As our trend report indicated, selected police forces in some European countries already make very active use of social media. In other countries, police forces are still deciding on policies how to deal with social media. To this day, there is no common social media practice for European police forces. Consequently, we have seen a lot of interest in our research and demand to us from the police for case studies and best practice reports. Given

en that some countries in recent years have been adopting social media platforms and gathered first experiences, while others consider doing so, the topic provides a good field for exchange of best practice. Given that most activities in social media take place in certain countries only, the transferability of these practices remains an open question. It will be part of our future research to understand if and how culture affects police work on social media within the forces and for the general public.

The ongoing discussions on social media and policing touches different aspects. On the one hand, police forces can use information on social media to support their investigations. Here, existing protocols for police operations such as surveillance, under-cover investigations or forensic analysis are currently being updated and rolled out to cover social media. While this kind of social media adaptation requires training, it does not constitute a fundamental change in the identity of police forces. Instead, it extends existing practice to a new field. On the other hand, police forces need to engage the social media space to interact with

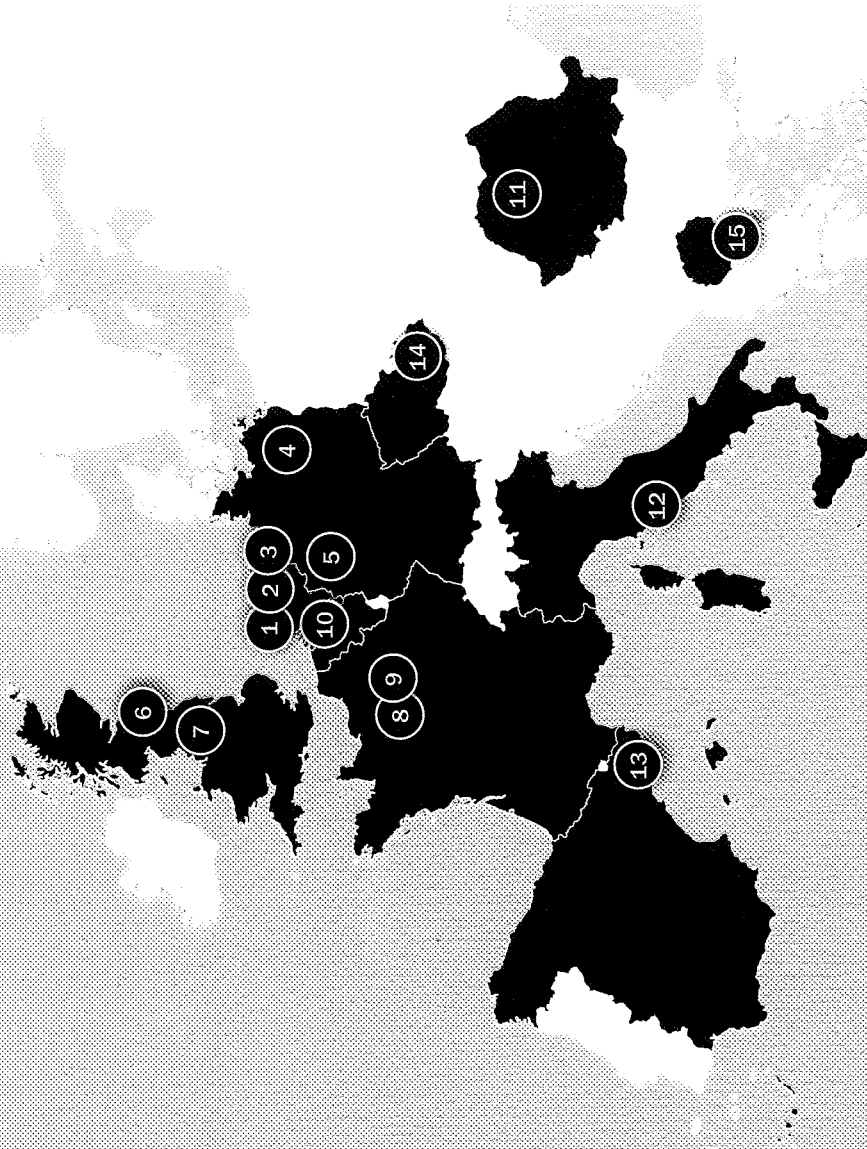
the public, as increasingly social media changes the relationship between citizens and state agencies. The on-going technological change thus requires considerable organisational and cultural changes in police organizations—not only in terms of work practices, but also in terms of their relation with the general public and the role that they have in society.

Report Structure

This report is structured as follows: First, in the chapter 'Methods and Limitations', we will explain the process and rationale behind the workshop series and the extraction of best practice. We will also explain the limitations of our approach and of our results at this point. Second, we will describe problems and the related practices that have been applied by police forces and the ICT industry for the topic of social media. Third, we close this report with the chapter 'Discussion and Outlook', to reflect on the identified practices and to put them into the context of ongoing research within COMPOSITE and beyond.

1 Qualman, E. 2009. Social Media: Fad or Revolution? <http://searchenginewatch.com/article/2066771/Social-Media-Fad-or-Revolution> [Retrieved April 11, 2012]

Figure 1: COMPOSITE Project Consortium



Project Consortium

- | | | |
|---|---|---|
| 1 Erasmus-University
Rotterdam, Netherlands
(Coordinator) | 6 University of Durham,
United Kingdom | 12 Fondazione per la Ricerca
sulla Migrazione e sulla
Integrazione delle Tecnologie,
FORMIT, Rome, Italy |
| 2 University Utrecht,
Netherlands | 7 Sheffield University,
United Kingdom | 13 ESADE Business School,
Barcelona, Spain |
| 3 Police Academy of the
Netherlands | 8 Capgemini Telecom Media
Defense, France | 14 Masaryk University, Brno,
Czech Republic |
| 4 Fachhochschule der Polizei
des Landes Brandenburg,
Oranienburg, Germany | 9 Centre National de la Re-
cherche Scientifique,
Paris, France | 15 University St. Kliment Ohridski,
Skopje / Bitola, Macedonia |
| 5 Fraunhofer-Institut für Ange-
wandte Informationstechnik
FIT, Sankt Augustin, Germany | 10 University Antwerpen,
Belgium | |
| | 11 Babeş-Bolyai University, Cluj,
Romania | |

Our Approach:

Methods and Limitations

In our initial trend study, we identified social media as one of the most relevant topics for a workshop series on best practice. Results from COMPOSITE workshops in Germany, UK and France as well as other conferences and seminars across Europe formed the empirical base to extract practices from. Additionally, a case study conducted during and following the 2011 UK riots allowed to add insights from a situation where British police forces used social media during a crisis situation. By nature of its methodological design, this report is limited in terms of its validation and transfer of best practice to other contexts. Our report thus functions as a crayon box, a modular toolset, that allows other police forces, researchers and industry to look for solutions that fit their particular needs best.

Trend Analysis

Our first COMPOSITE report on technology adaptation, 'ICT Trends in European Policing', provides the foundation for this work. Grounded in a series of interviews with ICT experts with police forces and industry representatives, the report details six trends of technology adaptation of the police forces. It lists the integration of IT systems (1), the adoption of mobile computing (2), the use of surveillance technologies (3), the application of digital biometrics (4), the crosscutting issue of user acceptance (5) and the emerging challenge of social media applications (6) as major topics of current and planned police ICT projects. In the report, we discussed how these issues are relevant and thereby pointed to open issues for future research.

In order to deepen our understanding of these trends and in order to facilitate discussions with experts to identify more specific issues to be addressed in the second half of COMPOSITE, we organized workshops on selected topics that bring together police officers, industry people and academics. To decide on the topics, we created a list of

potential workshop contents with a number of proposals for each trend. This list became part of a feedback form on our trend report that we issued to the COMPOSITE end user board, on which police officers from the ten participating countries help to ensure that the project's research addresses questions relevant for the police. On the form, we asked police officers to rank the trends in their current and future relevance and to rank the workshop topics according to the need for exchange on a European level and the interest to participate in the workshop. Evaluating these forms showed that the topics of social media (i), the use of mobile computing to support officers in the field (ii) and the topic of integrating police ICT systems (iii), had the greatest relevance and interest.

In addition to the feedback from the end user board, we also received requests from other police organizations that underline these findings. As a public download, the trend report received wide attention and we count several thousand downloads for the file, to this day. This high interest was especially driven by our description of

the trend of social media adaptation by police forces and the reports in public media about this aspect. In the following several police academies invited us to participate in workshops and seminars on this topic. We therefore decided to start our workshop series on this topic and to combine findings from these external events with those from our own workshops.

Workshop Series, Seminars & Twitter Use during the 2011 UK Riots

Overall, in the period between June 2011 and April 2012, we organized three COMPOSITE workshops on social media adaptation and participated in eight other, external workshops, seminars and conferences.

The COMPOSITE events:

- » 1st Workshop on Social Media as a Tool for Police Communication, June 14-15, 2011, Sankt Augustin, Germany
- » 2nd Workshop on Social Media as a Tool for Police Communication, November 1-2, 2011, Manchester, United Kingdom

<p>» Workshop: Social Media at the French Police, December 6, 2011, Paris, France</p> <p>Participation, presentation and discussions in other, external workshops and seminars:</p> <p>» CEPOL Conference on Cyber-crime, Cybersecurity & Social Media, Madrid, Spain, June 28-30, 2011</p> <p>» Workshop “Social Networks” at the Hesse State Criminal Office, Wiesbaden, Germany, September 27-28, 2011.</p> <p>» CEPOL Seminar 95-2011 on Social Media and Policing, October 24-28, 2011, Lisbon, Portugal</p> <p>» Elective course “Internet and Social Networks”, College of Public Administration, Bremen, Germany, November 9, 2011</p> <p>» International Seminar 4/2012, “New Media and Crime—Crime on the Internet”, Police College, Münster, Germany, January 19, 2012.</p> <p>» European Police Congress, Berlin, Germany, February 14-15, 2012</p> <p>» CEPOL Webinars, “Strategic Impact of Social Media” and “Social Media in Policing” April 3, 2012</p>	<p>For the COMPOSITE events, we sent out open invitations to our end user board, police forums and other police contacts across Europe. We specifically invited police officers of all ranks from police forces who either (a) already have had experience in and could report on their efforts for the specific topic, or (b) were confronted with the task to handle the issue in their forces and could present their challenges and questions. During the workshops, we asked participants to prepare a presentation and also allocated time for group discussions on shared issues identified from these presentations. Participation was not limited to police forces or countries represented in COMPOSITE; instead we aimed for bringing people together from a variety of countries and backgrounds. As we could only partially fund the workshops, participants had to cover their own travel expenses. We therefore chose a number of different places for the workshops distributed in Europe to allow for participation from different countries. In total, almost 100 attendees from Austria, Belgium, Canada, France, Germany, the Netherlands and the</p>	<p>United Kingdom took part in the COMPOSITE workshops.</p> <p>The external events were organized by the respective police schools and organizations and ranged from short trainings and a discussion with young police officers (in Bremen), to a weeklong workshop with senior police officers from all across Europe (with CEPOL in Lisbon). These events focused on the different aspects of social media on a policing context and its different impacts on police work.</p> <p>For our analysis we took notes during the workshops and collected participants’ presentations. We also captured materials and conceptual sketches that were produced during the workshops. To produce this report, we aimed at identifying patterns in problems and challenges related to the three areas of new technologies; and in the presented solutions that were presented to address them. To improve the quality of analysis, several versions of the best practice descriptions were discussed among the authors who reviewed and revised them based on their different professional and cultural backgrounds as well as their own</p>
--	---	---

experiences in research on ICT adaptation, organisational change and within and beyond the context of policing. We then also contacted the forces and officers mentioned in the report to ensure factual correctness and that the published information is not classified and can be published. We further added to our analysis of social media adaptation by police forces a case study of the use of social media for policing in a large-scale crisis situation. Following our initial workshop on the topic in June 2011, we became increasingly aware of the social media activities of a number of police forces across and beyond Europe. When, in August 2011, riots started in the United Kingdom, we captured all messages on the social network Twitter that were sent from the police forces in London and Manchester as well as a large number of messages that were written by the general public and addressed to the police forces in the respective cities. While a publication on this analysis is currently pending, the results helped us to solidify our findings from the workshops as in the data provided an empirical, real-world example of social media use by police forces who had been less (London) and

more experienced (Manchester) in using Twitter as a means to communicate with the public.

Limitations

Despite all this careful work, this report and its results, by nature of its methodological design, have limitations. First, despite its title of describing 'best practice', the workshop setting did neither provide the opportunity to validate the described practices in their implementation nor did it allow to thoroughly define the criteria or means of comparison that make a practice a best practice. Second, the workshop setting did not allow for an extended description of the environmental setting, thus making it difficult to judge and estimate how transferable and applicable a given practice is in a different context. This holds also true for the analysis of social media communication during the riots in the United Kingdom, as this case study focuses on one particular country only. Finally, this report builds on a selected empirical sample that requires further validation and extension to other contexts, in order

to better explain the issue of non-adaptation.

For the above reasons, this report is not to be confused with a step-by-step manual on how to implement social media. Instead, we understand individual best practice as subjective records situated in their respective contexts that, before generalization, require further research. At this point, a best practice that works in one particular context might not work in another. The presented practices indeed include sometimes seemingly contradictory elements and show that police forces address common challenges in different ways. Our research, at this point, does not allow us to argue which of the practices is better, or if there are universal solutions, at all. While this might seem to contradict the idea of best practice at first sight, our goal, however, is not to present best practice that is universal but rather present the variety in best practice applied by different forces in different countries. Our report thus functions as a crayon box, a modular toolset, that allows other police forces, researchers and industry to look for solutions that fit their particular needs best.

Results:

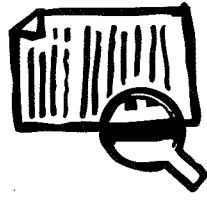
Best Practice in Police Social Media Adaptation

From our analysis result the following categories that describe best practice in police social media adaptation:

- » Social Media as a Source of Criminal Information
- » Having a Voice in Social Media
- » Social Media to Push Information
- » Social Media to Leverage the Wisdom of the Crowd
- » Social Media to Interact with the Public
- » Social Media for Community Policing
- » Social Media to Show the Human Side of Policing
- » Social Media to Support Police IT Infrastructure
- » Social Media for Efficient Policing

We start each category with a short summary and then detail the principle with several examples.

Social Media as a Source of Criminal Information



The information that is available on social media provides police forces a rich source of criminal information for their investigations. These investigations in social media require a legal framework. Police forces transfer existing regulations that apply to police operations in physical spaces including undercover operations to the virtual space. While complex IT investigations are often handled by special departments on a regional or national level, police forces currently train local officers for more simple social media investigations, to handle the high demand of requests. The complexity and process of how to obtain data from social network providers varies for the networks.

Investigations performed by the

police can benefit greatly from information that is available on social media. Information about offenders and crimes found online has shown to be valuable for police operations. Police officers from various forces across Europe report that in many cases criminal information can be found online that without social media would have required a much greater investigative effort or would not have been available at all. Performing such investigations in social media extends existing policing practice. As with the existing practice, all police operations take place in an environment that is highly regulated and follows legal procedures. To perform operations on social media, police forces therefore transfer and apply laws that define their current work to the virtual environment of social media. At the CEPOL seminar in Lisbon, Portugal and during workshops in Germany, Axel Henrichs of the Police Academy in Rhineland-Palatinate, Germany detailed the legal framework that he developed for social media investigations as a training material for police officers. The framework clarifies the relation of police operations with regulations of commercial social media platform op-

erators and distinguishes between different levels of interference with the individual's right of personal data and intervening in telecommunications. The framework also differentiates between different types of inventory and usage data accessed by the police to select the applicable law. For police forces there is the need to further educate police officers to perform investigations on social media. While police officers, who perform IT forensics or work in the field of cybercrime, are often organized in specialized departments on regional or national level, simple social media investigations in open sources are about to become standard, no-specialist activity on a local level, as the demand for such capabilities increases and cannot be handled by IT specialists alone. As police officers report and as becomes apparent from all national cyber security analyses and strategies, developing these and more specialized skills appears to be one of the major challenges for the years ahead.

For investigations, the police can make use of open sources that include all information that is publicly available. While software in-

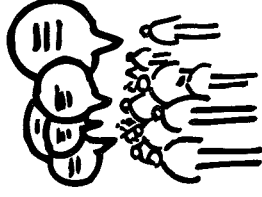
dustry vendors such as Radian6, Attensity, Kapow, Palantir, IBM, SAS, SAP, Oracle (and many others) provide tools to support the combination of information from different online sources and information in police databases as well as to analyse the data, some of the officers we spoke to perform these investigations manually, in ways that theoretically every citizen could follow.

For closed sources, such as private messages exchanged on social networks, IP addresses that identify the computers from which users access a social network or email addresses and phone numbers, the investigation requires the collaboration with social network operators. European police forces report that the interaction with social media providers in their respective countries is not complicated as it follows national laws and orders from prosecution authorities. Getting data from operators outside the national boundaries and outside Europe is, however, more complicated. Facebook, for instance, as the most popular network, operates under U.S. law. Accessing closed sources therefore requires European po-

lice forces to follow official procedures for international police support and it can take long before the requested data can be made available, if at all. Facebook has a team to work with law enforcement agencies. Facebook collaborates with police forces across Europe in international operations, for instance against child abuse and child pornography. When contacted by a law enforcement agency, Facebook offers to freeze the users' data so that it can be shared with the police once the official international police support request has been provided.

Overall, this type of investigation on social media has already been introduced and is currently being introduced to the forces we spoke to. While existing legal frameworks need to be transposed to social media and police officers will need additional training, the workshops and conferences did not bring any serious problems or deviances to the fore that would put social media as an additional source of information into question. Indeed, there seems to be great consensus about the ways in which investigations on social media extends existing practice.

Having a Voice in Social Media



While there are many different and specific ways of using social media for policing beyond an information source for investigations, they can be framed under the general concept of using a social media as a communication tool with the public and thereby establishing a police presence and voice on social media. While this concept is currently being used only in selected forces and countries, the largely favourable public response and the largely positive results make the mere fact that police forces work on establishing their own voice on social media a best practice in itself. Forces that are active on social media are able to confront a number of pressing issues that relate to the increasing ubiquity of social media and their relevance in citizens' lives.

To this day, a large number of European police forces do not make active use of social media beyond the use of social media as a source of criminal information. There are, however, pressing issues that more and more forces across countries describe as their motivation for making the first steps or extending their activities on social media beyond investigations and as the key driver for establishing their own 'police' voice on social media.

First, regardless whether or not a particular force chooses to establish a presence on social media, the adaption of social media by normal citizens who discuss and share issues of their personal and professional lives online confronts all police forces. Given the broadness of this phenomenon, matters that are relevant for the police or even specifically relate to police work will not be excluded from this space. Put shortly, no matter if a police force chooses to be active on social media, police matters are being discussed, nevertheless.

Second, and in consequence, police forces across Europe see themselves confronted with bogus

accounts and social media channels that specifically provide police-related information. This is relevant in small towns as well as in major cities. In Berlin, Germany an unofficial Facebook page with police news lists more than 15,000 fans. In the Dutch region Haaglanden an unofficial Twitter feed by a self proclaimed police fan lists 2,500 followers. There is little that police forces can do to avoid that other players fill the empty spots aside from being active and becoming the most popular source by themselves. Without a credible presence of the police, the space for rumours and speculations in social media is ever growing.

Third, social media empowers the normal citizen to perform actions that traditionally would only be performed by the police. Specifically, for search warrants in case of missing people, the police have been confronted with relatives and friends who use social media to start actions on their own. These actions then lack the professional experience that the police have and it becomes increasingly difficult for normal citizens to distinguish trustworthy from non-trustworthy information.

Fourth, police forces increasingly are confronted with the fact that communication via traditional media sources does no longer reach the relevant people. For many police operations it is especially relevant to provide information and get information from younger people. These people simply do not subscribe to local newspapers any longer and often get their news solely via social media. Police forces therefore need to have a voice on social media in order to be able to communicate with their target audience.

Fifth, social media increasingly impacts everyday life. Police forces are confronted with the real world effects of social media. Police officers from across Europe report that they are confronted with large-scale parties that were organized on social media, that stalking on social media has real-world effects, that suicide attempts are announced on social media and that child abuse is increasingly reported online. All these and many other issues are relevant for the police and require police forces with competence in social media that can listen to citizens on social media and are also able to speak up. Even-

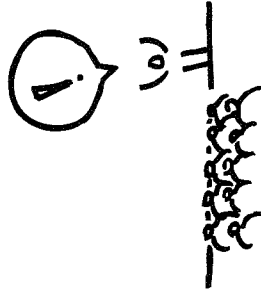
ryday social media use prepares for the times of crises, where social media have shown to become suddenly very relevant. Social media helps people to self organize, to get and share important, current and local information. As our analysis of the UK riots in the summer of 2011 clearly indicates, during times of crises police forces highly benefit from established connections and trained practices on social media.

The experience that police forces across Europe have gathered strongly indicates that indeed establishing a voice on social media allows tackling these issues described above. As we will detail on the following pages with examples from police forces in Austria, Belgium, Canada, Finland, Germany, Iceland, Ireland, the Netherlands, the United Kingdom and Switzerland, the first steps that some police forces have already made have provided high benefits for them, have improved the relationship between citizens and police forces and have shown to be cost efficient, too.

The following examples indicate that having a voice on social me-

dia is an effective way to impact this space and to provide a credible source of information. Having a voice on social media has allowed preventing online-organized events. The voice of the police on social media receives a high level of trust that supersedes bogus information distributed online. Police forces are able to fight rumours on social media. Search warrants on social media get a greater response on social media than on traditional media. Having a voice on social media prepares and enables successful operations in the event of large-scale crises. Even in cases when police forces makes mistakes online, a mutual dialog on social media about how policing is and how it should be allows for improving policing and increases the level of trust.

Social Media to Push Information



As media consumption, especially with the younger generation, shifts from local newspapers, television and radio to social media, police forces face the challenge to disseminate information to these audiences and thus increasingly need to use social media if they want to communicate to certain citizen groups. Here, social media provide the possibility for police forces to publish news on their own without the press as an intermediary and push this information to a large number of readers. Using social media, police forces can embed their information in the new media channels that citizens use frequently in their daily lives.

The first and probably most straightforward use of social media as a communication tool for

the police is to publish police-related information on social media accounts that police forces set up and that citizens can subscribe to. Depending on the local popularity of different social networks the police forces that we spoke to either did so on Facebook or Twitter. While there is a wide selection of networks available, choosing these most popular networks allows a police force to minimize the maintenance efforts while reaching the largest number of people. Additionally, police forces have been using YouTube channels to publish videos and Flickr for publishing photos. This type of activity is usually associated with the communications department of a force and social media in this way become an additional outlet of information that previously was prepared for press statements or the website of a force.

Many forces in Belgium, the Netherlands and the United Kingdom have published this type of information since 2009 or 2010. Police forces in Finland, Iceland, and Ireland report similar activities. The Criminal Intelligence Service of Austria has established a Facebook presence, as did, very re-

cently in December 2011, the city police of Zurich, Switzerland. While many of the activities of these forces in the meantime go beyond publishing press statements on social media, as we will show in the following, most of them started in this way as their first step of using social media as a communication tool.

To kick-off this effort initially, the Greater Manchester Police, the Vancouver police and the Zurich city police, have had very positive responses and could build initial momentum through so called 'tweet-a-thons' that lasted 24 hours. During that time, the forces published all activities on incoming alarm calls and police operations in Twitter messages in order to show the public the broadness of police operations and tasks and in order to build special attention from the media that further increased the number of their followers.

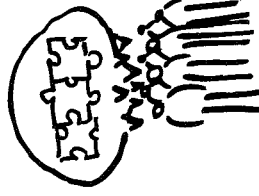
Pushing information out to a large number of people becomes especially relevant in times of large-scale crises when citizens need to be informed in time and look for a credible source of informa-

tion and advise. In 2011, riots happened both in different cities in the United Kingdom and in Vancouver, Canada. As we studied the Twitter use of the London Metropolitan Police and the Greater Manchester Police ourselves and as we had representatives from the Vancouver police at our workshop in Manchester, we can provide accounts from both events. All these forces used Twitter to publish information on their operations and to provide information updates to citizens. This information has received great interest by the public and all police forces saw significant rise in their follower numbers (up to 100,000 for the Greater Manchester Police from about 20,000 before the riots). For all three forces, the public welcomed this new type of police service. Also during the riots, monitoring the discussion of the general social media audience, allowed the forces to issue statements that were trusted and have shown to be an effective tool for fighting rumours.

By adopting social media as a tool to push information to the public, the police can communicate to a large number of people with relatively little effort and financial in-

vestment. While not every citizen is using social media at all or is a member of the popular networks, social media encourages sharing information across people and networks, so that even citizens who are not directly subscribed to a police force's information can also receive the updates through their friends. By using social media in this way, police forces become more independent from the press and open an immediate connection to the general public. As the riots in Vancouver, Canada and the United Kingdom show, this asset can become especially relevant in crises situations.

Social Media to Leverage the Wisdom of the Crowd



Social media provides police forces the opportunity to get information from the general public. Once pushing information to selected audience who can easily further share the messages with their individual groups, police forces are connected to large crowds of people who they can ask for information. Identifying suspects or issuing search warrants on social media has been highly successful for police forces. The incoming information does not necessarily need to be handled digitally, either. Instead, common phone communication allows maintaining current procedures to verify the data and to distinguish between useless and useful information.

While publishing search warrants and asking the public for help is

a common police practice, social media brings a powerful lever to this existing practice. Indeed, as an officer of the German Hannover police reports, social media may revitalize the instrument of public support in police operations that is currently not effective. For the Hannover police, a review of the current effectiveness of search warrants revealed that there is only very little response to search warrants posted in newspapers or in public places. On the other hand, search initiatives initiated by citizens on social media have shown to have wide impact while the lacking professional experience of the police. These two reasons, specifically, have been the drivers of the force to start their own Facebook presence, which they primarily set up and use to publish search warrants. Even though the force only published a few messages every month, they have passed 100,000 Facebook friends who commonly share the police messages with their friends. In the search warrants the police asks the people to use a regular police phone number to report information, people use Facebook comment function usually as a means to report in which region they shared the information

and express their general empathy with the case. Evaluating their Facebook activities, the Hannover police found that useful information is usually provided within short time periods after posting. During the evaluation period they gained useful criminal information in eight cases for which, interestingly, the normal press announcement did not result in any useful response.

It remains, however, an open question how well this approach would work in the case of more police forces following this approach in the Germany, given that the popularity of the forces would probably not be as high.

For many forces in the United Kingdom or the Netherlands, publishing search warrants on social media for daily operations has become a standard activity and is a common part of an overall social media or communication strategy. For them, cases that receive a lot of public attention constitute a special challenge.

An officer of the Avon and Somerset Constabulary, for instance, reported of the case of Joanna Yeates, a woman who went missing some days before Christmas

2010 and was found murdered on Christmas day. The force in this case used Facebook advertisement as a means to ask the public for information and also used YouTube to show video footage from CCTV cameras, in addition to the information provided on the website and thereby could gather criminal information for the case.

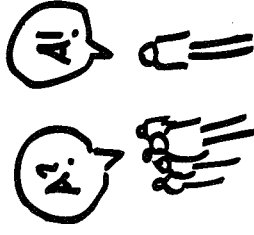
Beyond individual cases, crowd sourcing has become the central tool to identify suspects in the aftermaths of the 2011 riots in the United Kingdom. Both forces of our Twitter study, the Metropolitan Police (MET) and the Greater Manchester Police (GMP) used Twitter extensively to support investigations and to seek information on offenders. Both forces also used the photo-sharing site Flickr to publish photos of perpetrators captured on CCTV. The general public was asked to help in the identification of these people. They posted messages such as: "New CCTV images of people police need to identify on our Flickr page <http://bit.ly/mx8U> Pls look and RT" (MET) or "Can you help identify these people? Check our Flickr gallery of wanted suspects and call 0800 092 0410 <http://bit.ly/>

oyfZIN" (GMP). GMP further promoted their crowd sourcing efforts and launched a campaign entitled 'shop a looter'. Large posters in the city showed the faces of suspects and asked people to help with their identification. Twitter was used to announce the campaign. Both forces provided phone numbers or links to their websites where the public could submit information.

In addition, people actively submitted hints as Twitter messages. GMP replied to such messages and provided a short notice that the information had been taken into account, often together with a personal thank you note. MET did not reply to such messages in their feed, leaving open whether this information had been taken into account. Reflecting their efforts on social media in the aftermaths of the riots and describing the impact for the investigations, officers of the MET and GMP stressed the importance of using Twitter and that this type of communication has been extremely helpful for identifying suspects. As we learned from officers of the Vancouver Police, they had a comparable experience in the aftermaths of the 2011 riots in Vancouver, Canada.

Overall, social media appears to provide a powerful framework to ask the public for help in investigations. While the responses, as in the cases of riots, can be numerous and create a lot of data to deal with, they have shown to be helpful and provided critical criminal information that could have not been gathered with traditional means.

Social Media to Interact with the Public



For the police, social media has the option to engage in a two-way, interactive dialogue with citizens. The communication with the public allows the police to answer questions of an individual in a way that it becomes shared knowledge and is accessible for others, too.

Most forces enter the social media by pushing messages in a similar way that they previously offered press announcements. When using social media for longer periods, police forces tend to use social media in a more interactive way by directly and publicly engaging in dialogues with individual citizens.

This is a consequence of the ways social media are designed. Twitter, for instance, allows anybody to craft messages, which mention an

other Twitter user. This user then is notified of that message and can choose to reply. In many cases this conversation, different from email, takes place publically, so that anybody else may choose to read it, too. Facebook, too, by default allows the individual the comment on posts of other users or simply express their appreciation by pressing the 'like' button. After all, the social media have been named social for their ability to allow for interaction between people. During a discussion at the CEPOL training, Nick Keane, social media expert of the British National Policing Improvement Agency (NPIA), therefore described this type of interaction as the more "mature" use of social media by a police force.

By entering the social media space, police forces need to make a number of choices about the kind of messages that they publish, which tone and form of address to use, how they respond to feedback from the public and if and when they should remove public comments that do not follow their guidelines. While making decisions for some of these variables can sometimes follow general police regulations, in other cases the

answers are not that clear and especially engaging in open dialogue is more challenging than simply following common procedures and officers rely on their skills and judgment, more than on guidelines only.

For the police, this interactive dialog offers the chance to engage in a dialogue with the average citizen that they might, typically, have had less contact with. For the citizen, social media communication offers a new way of interaction with the police, to ask questions and learn more about a work that they, typically, know only little about.

On December 2, 2011, the Zurich city police started a 'tweet-a-thon', a campaign during which they reported during 24 hours most of the police activities on that day on Twitter and Facebook. This activity had been prepared by a study of Michael Wirz, the chief communication officer who has been researching the expectations of the public for social media police communication before. The 400 messages that the Zurich city police posted during these 24 hours were in 55% of the cases answers to questions by the public. Citizens

asked questions about the current police operation and also general questions that touch police matters. They also commented police work. As shown by an evaluation of this interaction by the police in cooperation with the University for Applied Sciences in Business Administration Zurich, Switzerland, the responses were either neutral (60%) or positive (40%). Only a marginal number of messages (<0,1%) sent to the police were negative such as people putting in question whether this type of activity on Twitter should be part of police work.

Our own study of the Twitter communication of the Greater Manchester Police (GMP) during the 2011 riots provides an example how such interaction can become extremely relevant during times of crises. GMP addressed concerns of Twitter users directly, as shown in the following. A Twitter user asked the police: "*@gmpolice is it true that chaos has started in town, carphone warehouse has been done over already??*" and GMP replied "*@USR1 nothing at the moment follow us and we will let you know if there is anything to report*". As in the previous cases,

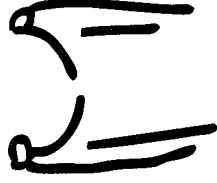
when engaging is such direct communication, citizens have shown great interest in the interaction with the police and generally have been supportive.

Such open dialog also provides a tool to resolve conflicts and provide direct feedback to police work. In the aftermath of the 2011 riots, the GMP posted a highly controversial message on Twitter ("*Mum-of-two, not involved in disorder, jailed for FIVE months for accepting shorts looted from shop. There are no excuses.*"). This message triggered a wave of criticism for its harsh comment on a sentence given to a mother. After removing the message and apologizing, GMP asked their followers for direct feedback of their Twitter communication during the week of the riots and how they could improve communication. The dialogue that followed this request for feedback showed in great detail what followers thought about the Twitter communication of the police showing both appraisals for embracing social media for police work and the personal type of communication, as well as detailed criticism and suggestions for further enhancements.

As we will further detail in the practice descriptions on community policing and the 'human side' of policing, social media as means to start an interactive dialog between police forces and citizens seems to provide a new channel that, while it also makes the police more approachable for public criticism, can enhance and increase mutual trust and understanding between police forces and citizens.

Social Media for Community Policing

trends result from arrangements and connections that emerge spontaneously and are difficult to control and foresee. This mode of work usually contradicts with the ways police forces tend to operate. Bound to legal and procedural frameworks, a strict hierarchy and clear lines of command, police organisations, traditionally, are organized top-down.



Community policing is a concept that suggests a close collaboration between the police, the general public, and other organizations to increase safety in society. Policing, thus, is not a matter of the police alone but rather a joined effort of different public actors. Community policing requires officers on a local level to develop a personal and close connection to citizen groups. Social media have been successfully used by a number of police forces to support community policing. Additionally, police forces have extended their community policing efforts to online communities.

Social media, by nature, are a bottom-up phenomenon. The individual is free to communicate and connect to other people, larger

For community policing, however, social media can empower the local officer in doing his job. In particular in the Netherlands and the United Kingdom, either social media officers have been appointed, which are responsible for social media communication in their local communities, or social media have become a standard tool for a community police officer. In these cases, local officers, often using mobile computing devices, post messages on social media networks on their own behalf, independent of the communication or press officers of their force. They talk to citizens about their current operations, their whereabouts, so that they can be contacted, and post safety remarks when they come across local safety issues. While these officers are

free to publicly post their own message and only follow higher-level guidelines, the headquarters usually monitor what their local officers are posting on social media and in some forces also have access to their officers' accounts and thereby can independently change messages. This monitoring also takes place among local officers and thus serves as a means to share knowledge and best practice among each other and to be aware of current policing matters in other districts.

Ed Rogerson is a community police officer of the North Yorkshire Police, UK. As an early adopter on Twitter, he publishes messages under the short name "@hotelal-pha9". He reports that he is tweeting when he is out on patrol and what he is investigating. He also published crime appeals, gives crime prevention advice. He published good news stories of police work and engages in conversations with the public that also include games and quizzes. Ed Rogerson emphasizes that social media, comparable to a jacket in bright colours, increases the visibility of the individual officer and makes the public aware of his existence.

Jenny George (@GMPHeywood), is a police community support officer with the Greater Manchester police and one of the more than 50 officers who use Twitter to engage in their local community. Reporting about her work on a mobile phone and communicating with her local community has become a standard practice during her everyday job.

Serge Buitenhuis, a police officer of the Haaglanden regional police in the Netherlands, reports similar activities for his force and the use of their Twitter channel (@Politie_HGL) and Facebook page. He emphasizes that these efforts are driven bottom-up and that the local officers are free to explore social media a tool to support their work.

Marga van Rijssel, who is running the Dutch website www.politie20.nl, which specifically deals with police intelligence and complex IT issues and thereby also covers the topic social media for police work, additionally reports of meetings that are being organized with citizens in local communities to define the best use of social media for police work.

While most activities dealing with community policing and social media understand social media as a tool to support traditional community policing, some also understand social media networks as another type of community in which the police also needs to have a presence. This type of activity is sometimes described as "virtual community policing". Marko Forss of the Helsinki police, Finland reports of such activity of their force and that they currently have three officers working full time for virtual community policing. Starting April 2011, 16 officers from 12 police stations are additionally involved in the work. Virtual community policing takes place on the networks Facebook, IRC-Galleria, Messenger, Hommaforum and Demi. Here, the police actively seeks contact to people online to answer questions and file crimes. The virtual police station in 2011, for Helsinki alone, has recorded 246 acts of which were about 51 sexual crimes, another were 50 "virtual warnings", usually related to bullying each other. Overall in Finland in 2011, 15-20% of all internet related child

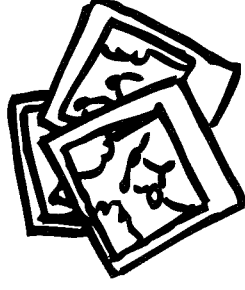
sexual abuse cases were reported through the virtual community-policing group.

In a similar, yet smaller scale initiative, Boudewijn Mayeur of the regional police Limburg Zuid, Netherlands has opened a virtual office in the social network habbo hotel. In the virtual world that is used by young children mostly, children use avatars to walk around and talk to each other. Boudewijn Mayeur has a special virtual character that identifies him as a police officer and operates a virtual office with opening hours at certain times every week at which online users can talk to him. His service is popular and the children talk to him about issues within and beyond the virtual world. He also establishes a training program during which he invites selected users who actively support his work in the network to jointly train other police officers in real, physical meetings.

The different and wide usage of social media as a tool for community policing in some countries, however, should not convey the image that this is common practice in European policing. Indeed, our workshops indicate that such

bottom-up approaches and local initiatives are unimaginable in most countries, as they do not fit with the current practice and hierarchical work structure in which police organizations usually operate. It therefore remains a question for our future research if and how such approaches could potentially be adopted by other forces.

Social Media to Show the Human Side of Policing



When using social media, police forces need to choose the tone of their messages that they use to talk with the public. Usually, police communication is characterized by a formal and impersonal tone. Typically, communication relates to facts from current operations made in official statements. The experience of different police forces shows that social media not only calls for a different tone, it also allows police officers to talk about positive news, emotions, police culture and experiences of daily life. As a result, the public describes and welcomes the police as a human organization that can be trusted.

On social media, police forces need to adapt both the style and content of their messages to the

medium, especially when aiming for a two-way communication. Here, police officers report that they entirely rephrase press announcements and use an informal tone. Additionally, they have received a lot of positive feedback when posting contents that are not directly or immediately connected with current police operations. Personal messages about an officer finishing his shift or handing over to colleagues before going on vacation, receive encouraging feedback. Messages about things related to police culture, such as antique photos of police officers, information about police equipment, other police events also receive this type of warm feedback by the citizens.

The Greater Manchester Police (GMP), for instance, promoted the anniversary of their police museum and other social events related to the police. They posted links to images showing historic police cars and GMP officers of the past. Noteworthy among these messages that are not directly related to police operations was the following message that was posted on August 13, 2011 in the aftermaths of the riots and the aftermaths of

a message that received a large amount of public criticism: *"It won't be long before Jack is helping out, he is training hard. flic. kr/p/a19R3N"*. "Jack" turned out to be a young police dog currently in training. Discussions ensured and followers asked questions about its race and age. Later that evening, after several additional tweets about Jack, GMP also issued a video of the dog. On August 15th, GMP posted a message in which the shooting star Jack could be seen at the anniversary of the museum. Our analysis of the followers' replies shows that the police dog could ease the dialogue that some hours before had suffered from an inappropriate message.

Beyond such special cases, Stefán Eiríksson, Chief of the Reykjavik Metropolitan police reports that positive news that in most cases would not be distributed by the press receives lots of attention on social media. Citizens then who are interacting with the police welcome the human side of policing.

Our own study of the UK riots about the social media use of the Greater Manchester police con-

firms these results. Directly after the controversial message and their request for feedback, the Greater Manchester Police received numerous questions and comments about their Twitter communication. The informal way of communication was discussed, as was the problem of having different officers writing messages that might have different tones. The response was largely positive. Users asked for the continuation of the more 'human' police communication approach, showed empathy for making a mistake, and were forgiving about the tweet. Users for instance wrote: *"Hats off to @gmpolice embracing social media. Someone made a mistake, tweet removed and apology issued. FFS it's human behaviour", "@gmpolice everything right, more transparency = more faith in you guys", or: "@gmpolice very useful to keep friends @ daughter in Manchester up to date. Thank you. Makes you look more human and part of your community."* This closer connection has direct impact on the relationship between the police and the general public. GMP officers reported that their perceived support in the community benefits greatly from the approach. Local

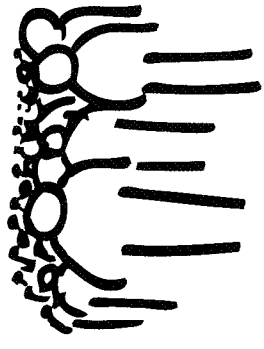
citizens went so far to bring food to the police station to support the officer when working long shifts.

And while such more formal evaluations of the perception of social media use by police forces are yet to be conducted for other countries, the experience of other forces suggest that this is not solely a British phenomenon. The responsible public relations officer of the Hannover police, Germany, reports a boost in popular image. Beyond the city's border across Germany the Hannover police is reportedly perceived as a 'cool' and up-to-date force. As we will describe in the description of efficient policing in greater detail, Stefán Eiríksson Chief of police at the Reykjavik police in Iceland also draws a direct connection between the high levels of trust their force measures and their activities on social media.

Engaging in an open dialogue with the citizens allows the forces to widen the topics that they communicate about with the public. Communication moves away from being purely related to police operations and instead touches a larger number of topics that related to

citizens' and police officers' everyday lives. This open communication appears to improve the levels of trust that citizens have in their police forces.

Social Media to Support Police IT Infrastructure



In cases of large-scale crises or in cases of investigations that receive special attention by the public, police systems for communication with the public come under stress. Increased attention for the information of a selected force may exceed the geographic boundaries and can go way beyond the local community that the police force is usually responsible for, as local news can be virally distributed through social media. Usually, the IT infrastructures behind Police websites are not able to cope with the peaks in demand. One successful way of dealing with the high demands has been the use of various social media sites that can better balance high loads in their global infrastructures.

Social media are not only tools for police communication; they can also become a threat to related IT infrastructures. Within minutes, local news can be virally spread and become global news. These sudden peaks in demand can have a major impact on the IT infrastructure of police forces that they use to communicate with the public and hinder their ability to communicate.

For the murder case of Joanna Yeates during Christmas 2010 who first went missing and later was found dead, the Avon and Somerset Constabulary had to deal with high peaks in demand. In that case, the public's interest overwhelmed rented infrastructure for the website making it inaccessible during peak times. The police therefore chose to use a set of social media networks to publish important information. YouTube served as the network to distribute CCTV footage and asking the public for information. Also the police actively used Twitter and Facebook to communicate. After a first suspect turned out to be uninvolved, the police therefore chose to submit the message, when they had captured the second sus-

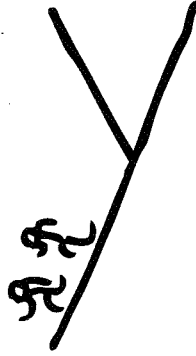
pect and collected enough evidence to charge him with the murder, through Twitter. The carefully crafted tweet ("*We have charged Vincent Tabak with the murder of Joanna Yeates #joyeates #yeates www.avonandsomerset.police.uk/joy*") went immediately viral and spread across the Internet. Using this set of social media platform allowed the police to be the central voice and remain communicating even in cases when their own website was unreachable.

This issue is, however, is not only relevant for smaller forces who suddenly see high interest from a national or global community. During the 2011 riots in London, the Metropolitan police (MET), for instance used Flickr to publish images of suspects. With announcements on Twitter, the photos were extremely popular. As a social media officer reports, the MET uploaded a first batch of images on August 9, 2012 at 12pm. Within 12 hours, at the end of the day, there had been more than 4 million views. For this, even the police even reached the limits of Flickr and had to distribute the images so that they would show up. The MET's website traffic increased

dramatically during and just after the riots. Hosting images on a separate server through Flickr helped ensure their site was not overloaded and could run at optimal levels, thus ensuring the public could still gain policing information and advice.

As these examples show, and while these cases are surely exceptional, the freely available global infrastructures of social media networks allow police forces to handle the peaks in demand and make them communicative even in exceptional cases.

Social Media for Efficient Policing



Currently, as we have described in our report on opportunities and threats, police forces across Europe are confronted with the task of performing their work with reduced financial resources, due to budget cuts following the economic downturn. By using social media, police forces have been able to increase the efficiency of their communication and develop a closer connection with the general public despite shrinking budgets.

Often, when adopting a new technology or putting additional effort in using it, police forces need to account for the effectiveness and benefits of these activities, given that they are publicly funded. Here, some forces explicitly addressed the issue and underlined that the use of social media as a commu-

nication tool is an efficient means of policing.

Operating in one of the harshest economic environments in Europe, the Icelandic police face heavy budget constraints. They report that they specifically have been using social media to engage with the general public in times when the force had to reduce the number of officers on the street. Stefán Eiríksson, chief of police at the Reykjavik police, draws a link between the measured increased levels of trust of citizens to the police to its active use of Facebook. While all other public bodies for which trust was measured saw decreasing levels of trust in the aftermath of the banking crises, the police could sustain the perceived level of trust. The free availability of the networks and the high adoption rate of social media in Iceland and Facebook in particular support this strategy.

Also operating in an environment where the police currently undergoes a 25% budget cut, the Greater Manchester Police in the United Kingdom ensures that their social media work has been conducted without any additional budget and

has been successfully used to gain effectiveness in public communication. As Kevin Hoy, web manager of the Greater Manchester Police explains, the comprehensive communication and social media strategy of their force is implemented without any additional budget or personnel. Money that previously was spent on prints and the physical distribution of information can be saved when replaced with social media campaigns. Police officers implement their communication on social media into their daily practice. The police officers who volunteered to use social media for community policing report that they are very interested and motivated in using this new medium as part of their daily job. This motivation in some cases also makes them contribute to social media communication beyond their normal shifts.

In Hannover, Germany the police reports that their social media work requires extra efforts but that those have been handled without additional personnel. They stress that the total amount of work has been limited but that it is not evenly distributed. While in daily operations the social media efforts are

very low, in times when the police receive attention for specific cases, the efforts can be quite high. Here, he also underlines that a enthusiastic team drives their social media activities that is committed to sometimes add extra the required efforts.

Currently, social media efforts are driven by officers who are motivated to make use of this tool as a new means to communicate with the public. Often, these efforts cannot benefit from additional resources and have to be realized despite shrinking resources. Interestingly, as the case from Iceland demonstrates, social media has been become a tool to deal with budget cuts.

These reports of individual police officers, however, cannot replace a long-term evaluation and cost-benefit analysis of these efforts. Also, extended social media efforts that go beyond the personally motivated officers will, of course, require resources and additional training. The integration into daily policing routine, thus, for many forces remains an open challenge.

Discussion and Outlook:

Learnings & Open Issues

This report has provided a first glance at the phenomena of social media adaptation by European police forces. For most forces, social media remains a new topic and strategies and practice thus continue to emerge and mature. The early adaptation that we describe in this report, nevertheless, points to promising results, especially regarding the effect of the public police relationship. Our report, however, also shows the need for a broader perspective on social media adaptation in European police forces that study more deeply the obstacles for adaptation and also includes the perspective of police organisations for non-adaptation.

Summary

In this report, we set out to deliver a description of best practice that European police forces currently apply implement and integrate social media within their respective contexts. While the workshop-driven design of the research has limited us in determining the transferability of these practices, they nevertheless provide an overview of the current issues that police forces face and the strategies that they have developed to address them. Other forces or organizations then can make use of this description by individually evaluating the fit for their individual needs. Additionally, this report provides the foundation for a more informed discussion of these issues and might also help to explain why certain practices will not fit in other contexts.

Our approach of workshops brought together people who were very interested and often even passionate about the technological topics. We thus in this report could only provide an incomplete picture that focuses on those police forces or officers who are adopting social media. In order to

complete this picture we will have to enlarge our focus to include also those forces and countries that chose not to adopt a technology or could not do so for specific reasons. Especially for the topic of social media, bringing in such perspectives might help to better understand the largely positive and promising effects that we describe in this report.

Future Work

The forthcoming work in this COMPOSITE work package on technology adaptation has been planned to comprise interviews in the ten participating countries, thus providing a broader perspective than this report could. Additionally, also seeks to not only focus on police and technology adaptation but to also include more strongly the perspective of the general public and understand technology in its role as a channel between the police and citizens.

This upcoming work will help to understand the described best practice in a wider context that extends the perspective of the selected participants of the workshops.

Also, we will link our future research with the upcoming results from other COMPOSITE work packages to help us understand, for instance, how technological adaptation and best practice relates to the forces' identities.

Closing this report, we would like to thank all workshop participants, the police forces and training schools for their invaluable contributions to this work. They spent time and resources to participate in our workshops and provided us the opportunity to present and discuss our work in their forums; they further shared with us their experiences and challenges that they face.

Acknowledgments

We would like to thank all our interview partners and workshop participants, as well as the respective police forces and schools, for their invaluable support in this research. This work is partially funded by the European Commission in the context of the COMPOSITE project (contract no. 241918).

Feedback and Contact

If you have comments or feedback to this report, please contact us.



Dr. Sebastian Deneff
Fraunhofer Institute for Applied
Information Technology FIT
Address: Schloss Birlinghoven,
53754 Sankt Augustin, Germany
sebastian.deneff@fit.fraunhofer.de
Phone: +49 2241 14 2702
Fax: +49 2241 144 2702



You can find more information on the COMPOSITE project, general contact information and local project partners at:
www.composite-project.eu



www.composite-project.eu