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NEW TRENDS IN SOCIAL MEDIA

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FOREWORD

In the current media landscape, social media has taken on a very prominent role. It has evolved into a mainstream information channel and developed into a new online platform through which people organise their lives. Social media influences almost every aspect of human interaction, and the online and offline worlds are increasingly merging.

Social media has become one of the main channels through which people connect and communicate, as well as getting news, however as the technology develops, social media consumption habits and communication models are also changing unpredictably, both in terms of speed and direction.

Social media has also emerged as a powerful weapon, used more and more frequently in information warfare. Since its development in the early 2000s, social media has become an important tool for influencing people's attitudes, beliefs and behaviour. Both states and terrorist groups are exploiting social media platforms effectively and experimenting with the engagement techniques and types of content that best achieve their political or military goals.

In order to be better prepared for this rapidly changing information environment, the Polish National Ministry of Defence requested that the NATO StratCom Centre of Excellence explore the current trends in social media, analyse its potential development in the future, including usage patterns, models of communication and engagement techniques.

This report is the outcome of that request and will seek to:

- Identify social media trends in types of platform and content.
- Analyse usage patterns.
- Analyse the expectations from the further opportunities social media offers NATO and its member states.
- Discuss the threats and opportunities presented by the use of social media, as well as analyse current gaps in NATO's communications via social media.
- Develop recommendations on how to further improve current communication techniques in order to support the strategic communication needs of governments, armed forces and NATO in the future.

The report summarises the conclusions of the expert seminar *New Trends in Social Media*, organised in Riga on 18-19 April 2016 by NATO StratCom COE. The seminar attracted more than 50 communication practitioners, industry representatives and academics.

The report includes social media usage statistics and a literature review, as well as lessons learned from the communication efforts during recent NATO exercises. Finally, it presents the main outcome from the survey carried out by NATO StratCom COE on the perception, understanding and use of social media by NATO communication personnel.

INTRODUCTION

Interest in social media development and efforts to predict 'the next big thing' have been hot topics for communicators, marketers, investors and governments since its advent. Questions – such as which platforms your audiences are using, how better to approach and reach them, where they could potentially migrate to in the future, and has any revolutionary new platform been developed that will replace the currently popular ones – have been on the agenda for anyone trying to promote brands. Hundreds of research companies and think tanks provide regular statistical updates on global and regional usage patterns based on gender, age, country, leisure and consumption habits, etc.[1] In a very broad perspective, these statistical data can delineate usage patterns and give a sense of how they have changed over time. However, for more elaborated results and a real understanding of which audiences are using which platforms and how, more targeted research is required, assessing the specific requirements of the audiences of interest. This report presents the most visible trends observed in social media during the last few years.

1 Examples of global statistical trends can be found at: globalwebindex.net, http://www.statista.com/,http://wearesocial.com/uk/special-reports/digital-in-2016, http://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/, as well as the websites of many other internet research companies focusing on specific countries.

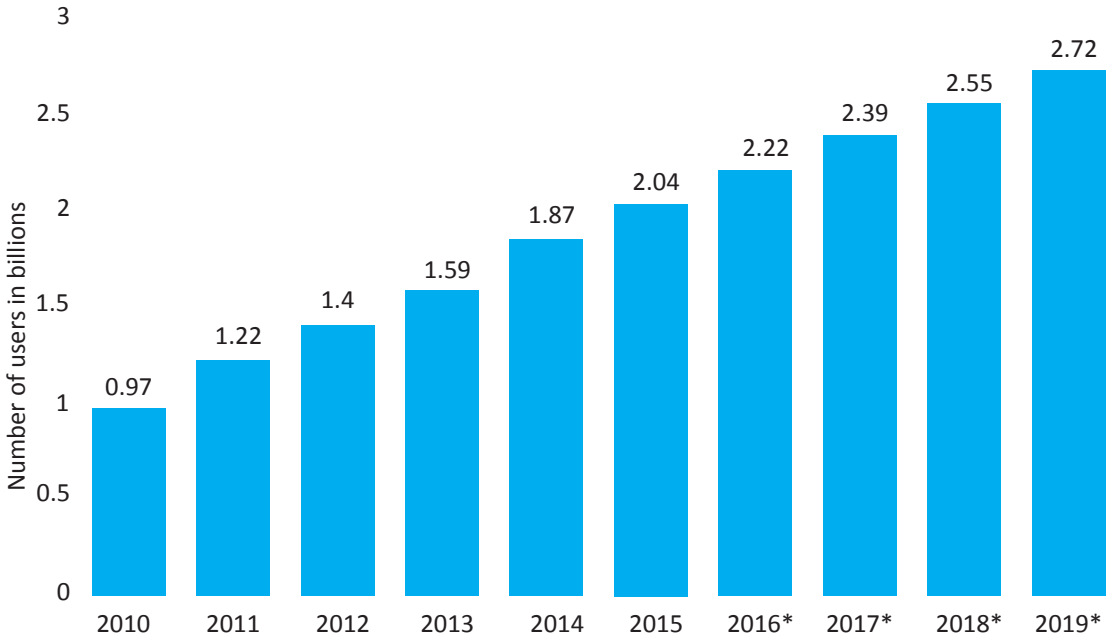
SOCIAL MEDIA TRENDS

SOCIAL MEDIA – FROM PARTICIPATION TO MONETIZING

The early history of social media goes back to the 1980s and amateur-driven discussion forums such as USENET groups or Bulletin Board Systems (BBS) where people gathered to share their views, interests and experiences. Over time, they grew into sites that connected friends and relatives, either people you already knew (like *Classmates.com*) or people you connect to through networks of your friends (like *SixDegrees.com*). *Friendster* (based on a similar idea to *SixDegrees.com*), created in 2002, was the first social media site to reach 1 million members. From there, social media gradually developed into large social media corporations that today can offer a variety of services such as instant photo/video sharing, live video streaming, direct messaging, match-making – all interconnected on one platform.

Several factors can be identified as having driven the development of social media and its evolution over time. Originally, the need for connectedness was what encouraged many people to start using social media sites. At the time Web 2.0 provided technical opportunities for the rise of social media in the early 2000s, 'participatory culture' was the buzzword phrase designating the web's potential to provide wide-range connections, build communities and advance democracy. This connectivity quickly evolved into a valuable resource, as software engineers

NUMBERS OF SOCIAL NETWORK USERS WORLDWIDE FROM 2010 TO 2019 (BILLIONS)



©Statista 2016

found ways to code information into algorithms that helped commercial brands identify their particular form of online sociality and so make them profitable in online markets. Large and influential platforms such as *Facebook*, *Twitter*, *YouTube* and *LinkedIn* exploded in numbers of users and monetizing potential, along with numerous smaller profit-based and non-profit sites[2]. If we look at usage numbers globally, social media today is clearly a massive data pool for marketing purposes, but also a useful instrument for analysing audiences.

In 2016, there are over 2 billion social media users (64% of all internet users) with clear market leader *Facebook* having 1.59 billion active users alone[3]. It is predicted that this number will continue to grow in line with the rapid increase in mobile device and smartphone usage[4].

The push for monetizing started to be visible even in those platforms which had been previously reluctant to share their users' data, as for example WhatsApp. In August 2016, the platform announced that it would share users' phone numbers with the social network (Facebook) to

2 Jose van Dijck, The Culture of Connectivity: A Critical History of Social Media. Oxford University Press, 2013, p.4

3 http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

4 Number of social network users worldwide from 2010 to 2019 (billions) http://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

offer its users "more relevant" friend suggestions and advertisements. In fact, it will enable companies to send marketing messages to WhatsApp users[5]. It is important to note that by this move, WhatsApp made a critical change in its privacy policy – for the first time since the company was purchased by Facebook in 2014.

To illustrate the marketing potential of social media, it is worth noting that in 2016 the revenue from social media advertising will be more than 27 billion US dollars and this is expected to show annual growth of 12.57%, resulting in a market volume of nearly 49 billion dollars by 2021[6]. According to *Socialbakers*, a social media analytics company, the number of brands placing paid promotion on *Facebook* has increased by 120% within the last three years[7].

Over the same period, users have learned very quickly how to evade intrusive ads. Ad-blockers are one possible response. Numbers vary among countries, but around 30% of internet users currently use ad-blocking services[8]. To address these issues, the major social media players help brands design non-intrusive advertisement formats adapted to the customs, codes and specificities of each social network.

> In 2016, there are over 2 billion social media users (64% of all internet users) with clear market leader Facebook having 1.59 billion active users alone.

Social platforms have also invested in the development of e-commerce offering their users the option to shop directly from within the social network. The "buy now" button is a feature of all the major platforms. The social aspect of this online shopping can be an important driving factor: four out of five social media users declare that the opinions of their social media friends influence their shopping decisions[9].

5 http://www.bbc.com/news/technology-37184651

6 https://www.statista.com/outlook/220/100/social-media-advertising/worldwide#

7 https://contently.com/strategist/2016/08/17/publishers-brands-creating-dozens-facebook-pages/

8 Presentation by Krzysztof Majkowski (Gemius Consulting) at the NATO StratCom COE workshop New Trends in Social Media, Riga, 19 April 2016.

9 http://www.journaldunet.com/management/expert/63697/2016--quelles-grandes-tendances-sur-les-medias-sociaux.shtml

Considering the monetization of social media, it is also worth noting a new phenomenon on the part of users. It seems very likely that the hashtag will soon become a legally protected trademark. For example, in South Africa more and more individuals and companies are submitting trademark applications related to their hashtags. It may be too early to consider this a trend, but the question of whether hashtags will be copyrighted has already arisen[10].

GLOBALISATION AND CONSOLIDATION OF SOCIAL MEDIA

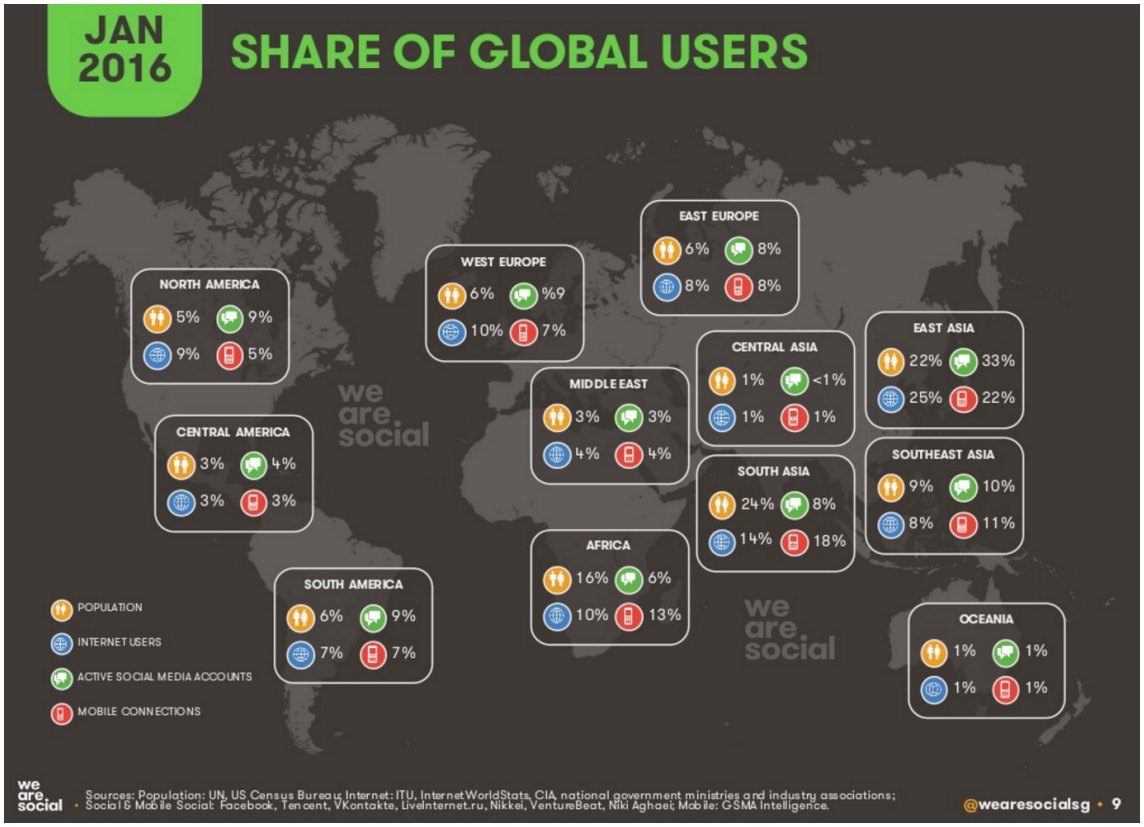
The social media environment has developed from a number of small, dispersed social media sites into the consolidation of communication in the hands of a few global 'big players'. Thanks to the acquisition of other communication platforms, they have gradually increased their influence in this market. For example, *Facebook*, despite the rapid growth of other smaller platforms, has been able to keep its place as the most popular network globally for the last several years. Furthermore, with the acquisition of popular platforms like *Instagram* (in 2012) and *WhatsApp* (in 2014) with more than 900 million active users[11], it has been able to offer services beyond those provided by *Facebook* itself. It is very possible that, in the future, all social networks will be owned by a few large companies and any successful local networks or start–ups will gradually be acquired by them. "This monopolisation of communication could become more commonplace in the future, to the point where the only conversations that aren't logged and owned by companies are those you have face to face, away from other people"[12].

Another trend that can be identified is that local or national networks (like different forms of national or regional 'classmates', 'schoolmates', 'friends' networks) are gradually disappearing, and the huge global players are taking their place. The *Odnoklasniki* (Classmates) service, still popular in Russia and post-Soviet Russian-speaking countries, including Ukraine, Kyrgyzstan, Uzbekistan and Georgia, is a notable exception. One of the factors driving this trend is the growing need to connect globally. People want to

10 http://www.bizcommunity.com/Article/196/740/149249.html

11 Marie Dolle, Social Media: The consolidation era, 22 May 2015. http://www.kantarmedia.com/uk/thinking-resources/blog/social-media-the-consolidation-era

12 George Archer, What's next after Facebook? Another 'social network'?, 20 December 2014. https://www.linkedin.com/pulse/whats-next-after-facebook-another-social-network-george-archer



Source: We are Social http://wearesocial.com/uk/special-reports/digital-in-2016

connect with their friends abroad, more and more get their news and current affairs information via on-the-spot links (and not only via national or regional news agencies). The purpose of using social media is no longer limited to networking with one's closest friends or interest groups. The chart above shows the global presence of social media and shares of its users, demonstrating that there are no longer any blank spots on the world social media map[13]. It is interesting to note that for some regions (Europe, North America, and above all, east Asia) their share of social media users is clearly higher than their respective share of population (e.g. the population of east Asia constitutes 22% of the global population, but its share of social media users – 33%). This clearly demonstrates that social media literacy has developed more rapidly in these parts of the world than elsewhere.

13 http://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/

MOBILE REVOLUTION AS A GAME CHANGER

Although social media has changed the way people communicate, giving them wider opportunities to participate and connect, the dramatic expansion of mobile communications has had an enormous impact on people's behaviour.

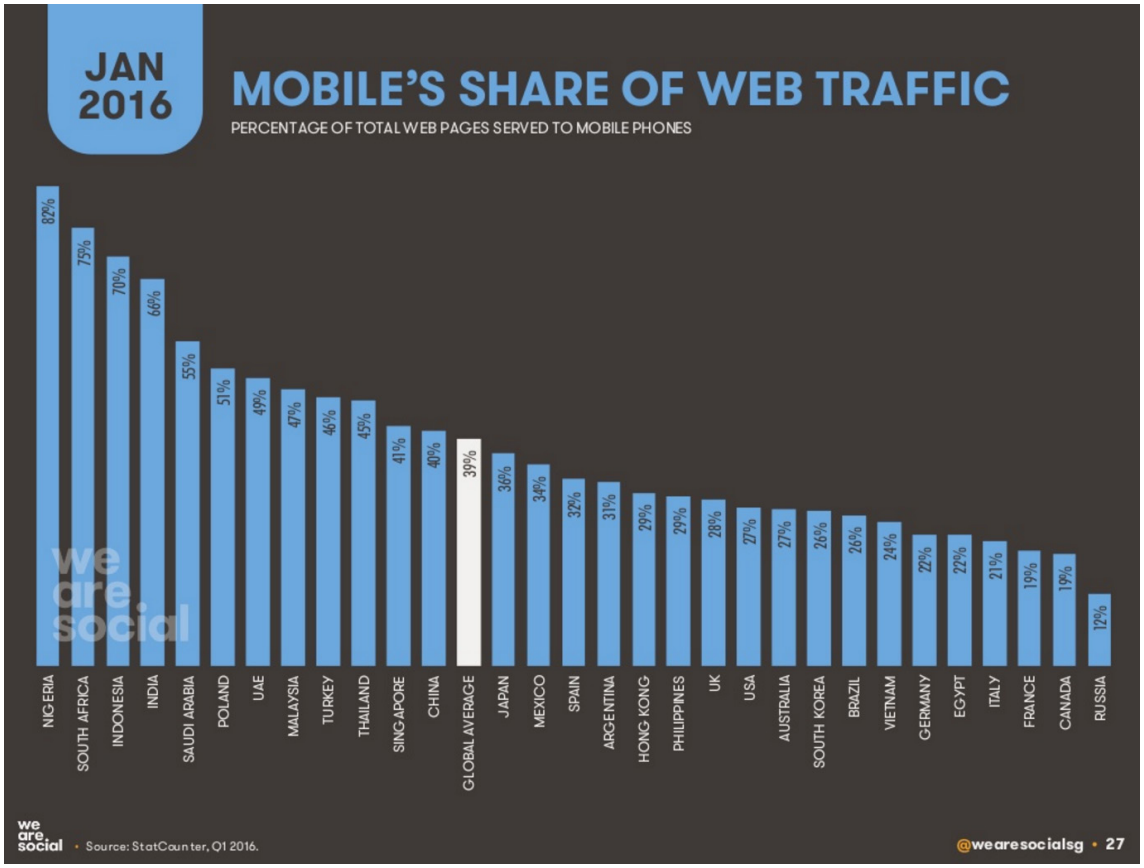
During 2015, mobile devices became the main way people accessed connected services, including the internet[14]. Mobile devices are now so powerful that they can provide the functions that previously required several devices. They can show weather forecasts, find one's location and give directions, help with planning (calendars), as well as connect to other electrical devices (TV, fridge, car, etc.). This has radically decreased the costs of the technology needed and made it more and more accessible, including to people in low income regions, providing them with opportunities to use daily services (for example, banking) that would not have been possible before. This trend can particularly be seen in developing regions (Africa, south and east Asia), where the highest growth in mobile subscribers is being seen and where internet use is dominated by mobile devices. In China, about half of all sales over the internet take place via mobile phones[15].

It is also predicted that we can expect further growth in the use of mobile devices in the developing world. For example, today more than 90% of younger people (aged 18-25) in Syria already have access to mobile phones and are accessing the internet with these devices[16]. According to the GSMA Global Mobile Economy Report of 2015, by 2020, around three-fifths of the global population will have a

14 Digital in 2016, special report by We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016

15 http://www.economist.com/news/business/21703428-chinas-WeChat-shows-way-social-medias-future-WeChats-world?fsrc=scn/fb/te/pe/ed/WeChatsworld

16 Presentation by Paul Smyth (MC Saatchi) at the NATO StratCom COE New Trends in Social Media workshop, Riga, 18 April 2016.



Source: We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016

mobile subscription, with close to one billion new subscribers added over the intervening period[17]. The chart on the next page shows the growth in mobile subscriptions by world region.

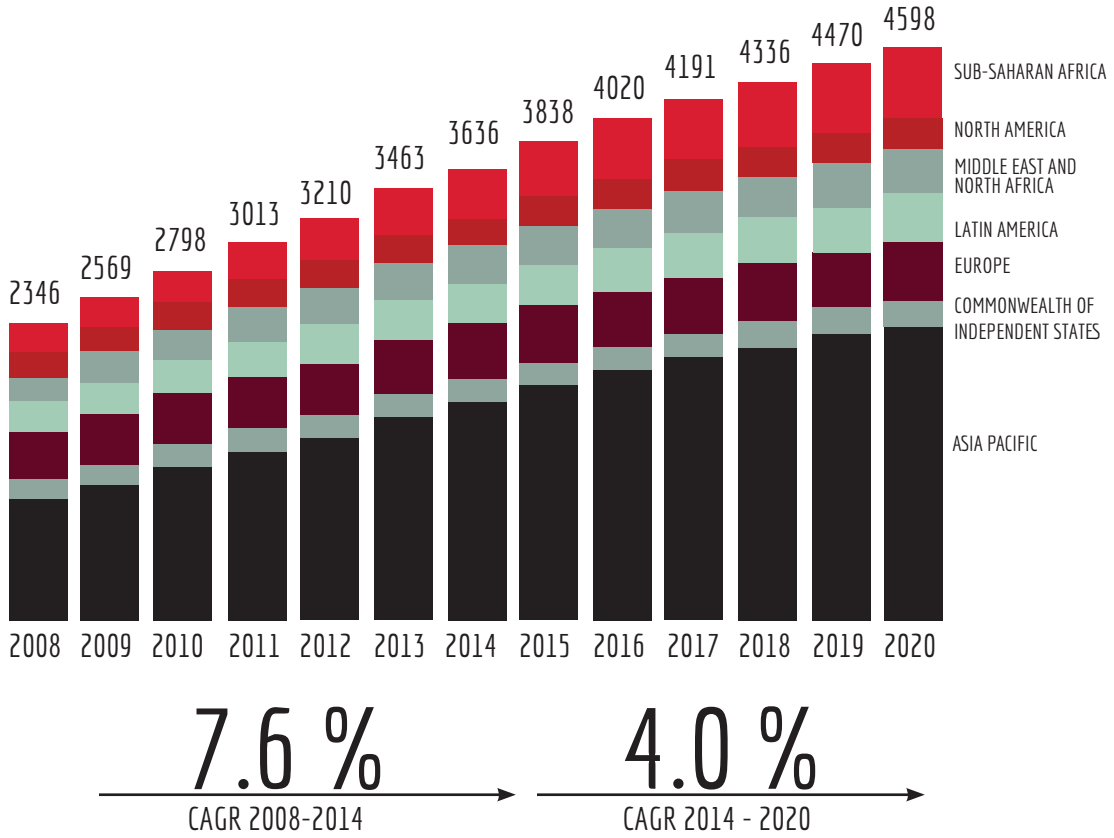
At the beginning of 2016, more than 2.3 billion people were using social media, and of this number, 1.9 billion were accessing social media via their mobile phone[18]. It is no surprise that, in recent years, the most popular social media platforms have been following the development of smartphone capabilities very closely, and developing services native to these devices. For example, photo- and video-sharing applications such as *Snapchat* and *Instagram* exist almost entirely on mobile. The same applies to platforms such as *Foursquare*, whose users use their smartphones to find entertainment options in locations around the globe, and various matchmaking services (like *Tinder*)[19].

17 http://www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf

18 Digital in 2016, special report by We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016

19 The History of Social Networking, 14 May 2016. http://www.digitaltrends.com/features/the-history-of-social-networking/

UNIQUE SUBSCRIBERS BY REGION
(MILLIONS)



Source: GSMA Intelligence, on www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf

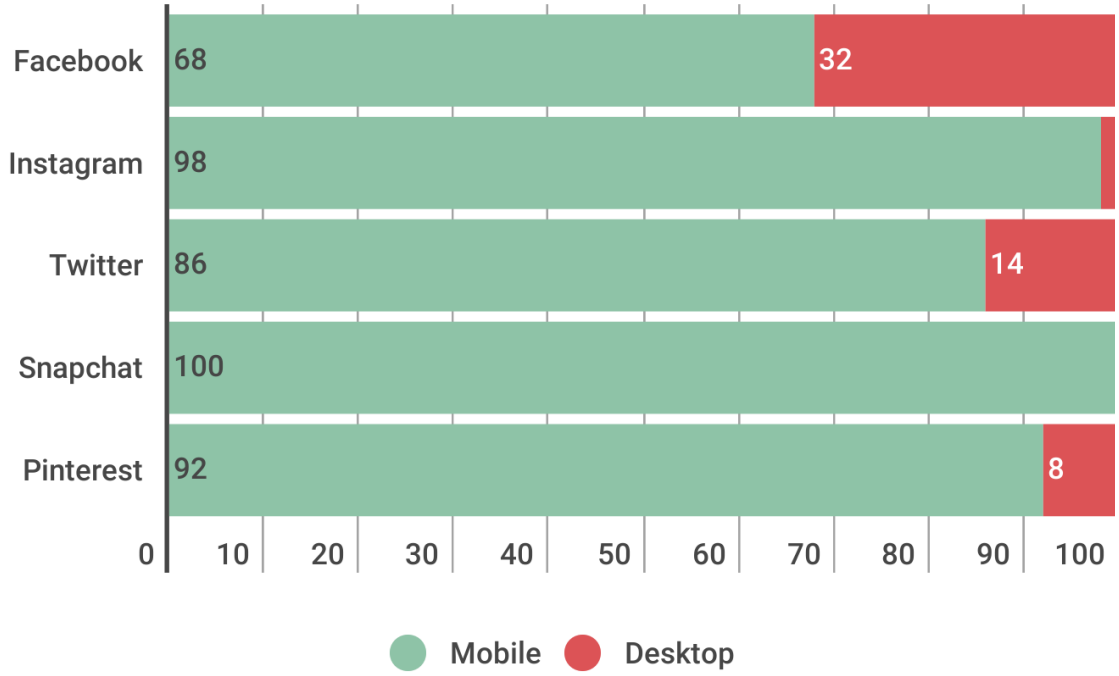
The growth in mobile usage could also be a facilitator that will increase the use of ad-blocking services in the future (currently, the share of ad blocking services is comparatively low). For example, the release of iOS 9 in the autumn of 2015 may considerably increase this number, as it allows users to easily install ad blocking from the *App Store*[20].

And last, but not least, it is interesting to note that "mobile" doesn't actually mean mobile. According to UK research in the first quarter of 2014, only 10% of users reported using their mobile device only (1%) or mainly (9%) away from home, whereas 66% declared using them both at and outside their home[21].

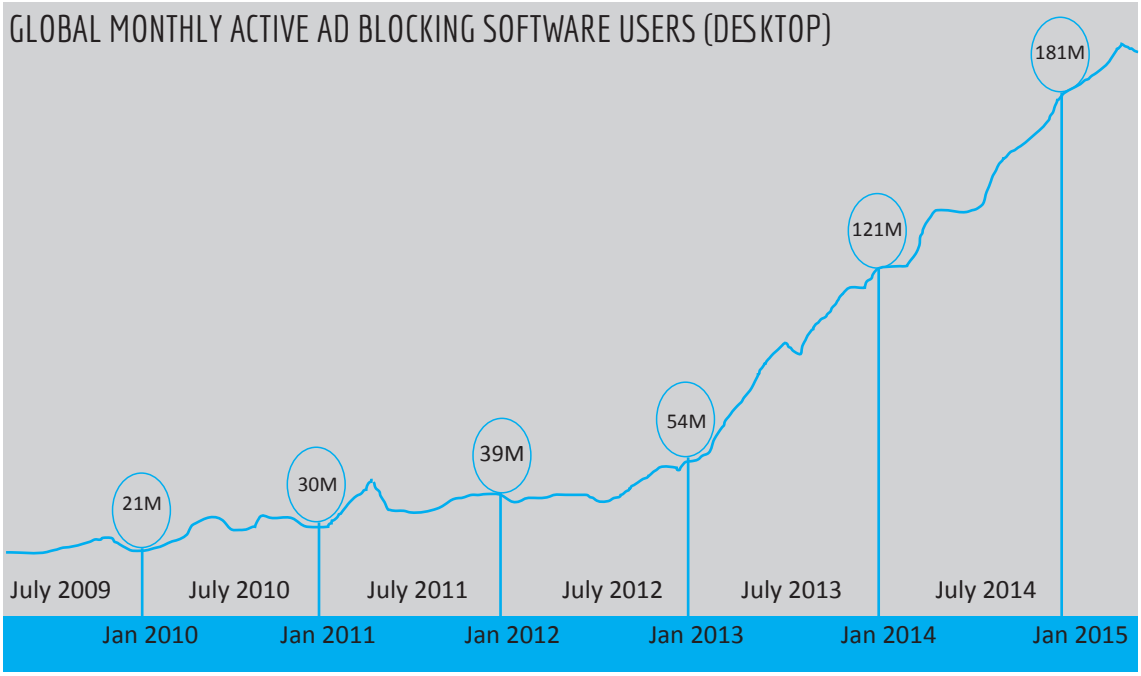
20 The cost of ad blocking PageFair and Adobe, 2015 Ad Blocking Report, https://downloads.pagefair.com/wp-content/uploads/2016/05/2015_report-the_cost_of_ad_blocking.pdf

21 Presentation by Paul Smyth (MC Saatchi) at the NATO StratCom COE New Trends in Social Media workshop, Riga, 18 April 2016.

USE OF SOCIAL MEDIA ON DESKTOP VS MOBILE IN 2015



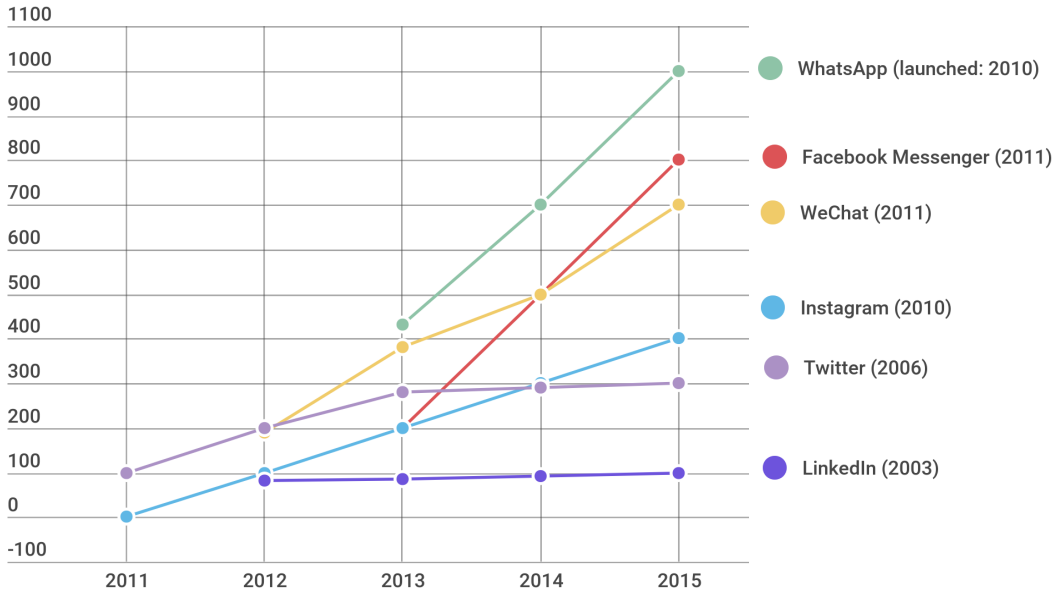
Source: Presentation by Paul Smyth (MC Saatchi) at the NATO StratCom COE workshop New Trends in Social Media in Riga, on 18 April 2016.



Source: The cost of ad blocking, PageFair and Adobe 2015 Ad Blocking Report

TOWARDS CLOSED NETWORKS

MONHLY ACTIVE USERS ON SELECT SOCIAL NETWORKS AND MESSENGERS



Source: We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016

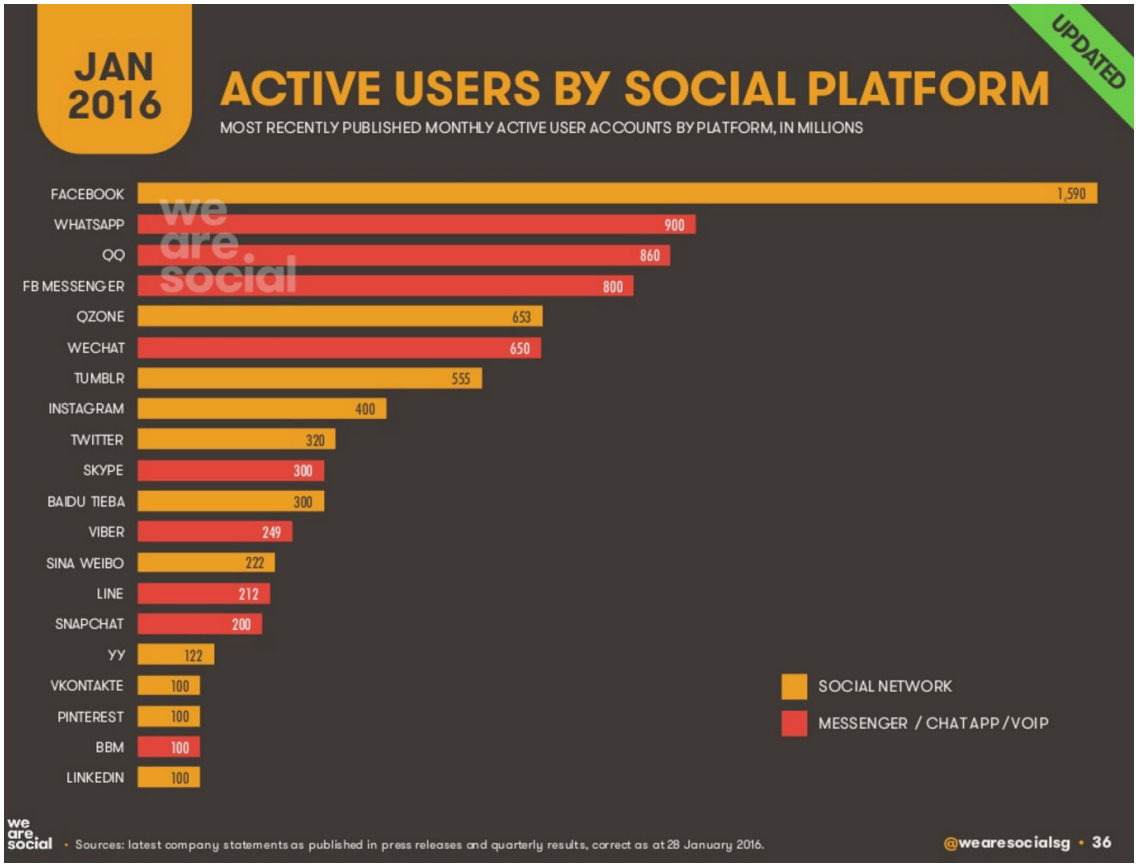
The increased popularity of direct mobile messaging platforms shows that the use of social media seems to be trending towards a greater number of private conversations, as offered by platforms such as WhatsApp, LINE, KakaoTalk, Facebook Messenger (the last reported one billion active users in June 2016, and a stable growth of 100 million users per quarter[22]). As can be seen from the chart above, the five most popular social media platforms are dominated by direct messaging apps.

According to *WeAreSocial*, this change is already having an effect on other platforms and can be seen in the increased number of 'private' accounts on *Instagram* and people sharing fewer 'personal' stories on public channels like *Facebook* or *Twitter*, instead using more messenger platforms[23].

To sum up, while maintaining the social motivation to use social media, users are becoming more selective about whom they share their content with.

22 http://www.digitaltrends.com/mobile/facebook-messenger-billion-users/

23 Digital in 2016, special report by We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016



Source: We are Social, http://wearesocial.com/uk/special-reports/digital-in-2016

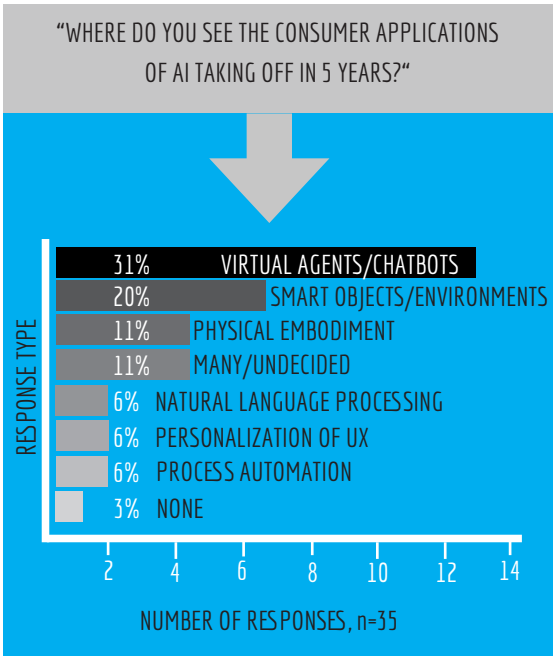
Marketing companies have already picked up on this trend, and are looking for the most effective ways to personalize communication with audiences and approach them directly. In this respect, the utilization of chatbots[24] has grown dramatically since their launch in this environment in 2016. The idea of chatbots is to help people with their daily tasks more than any app can do currently. It could be like a personal advisor to users that will help them find out the right information, shop, find directions, book accommodation, flights and journeys, and many others.

Chatbots have already been acknowledged as the 'next big thing' and the new revolution in digital media, which will completely change the way companies approach their customers. Messaging apps like *Facebook Messenger*, *WeChat*, *Skype*, *Kik*, *Telegram* and LINE have their own chatbot application

24 Chatbot – a computer program designed to simulate an intelligent conversation with one or more human users via auditory or textual methods. https://en.wikipedia.org/wiki/Chatbot

programming interfaces (API), so it is possible to send/receive messages via a program[25]. *Facebook* has already opened its *Messenger* app for people to build bots[26]. Some experts even talk about a 'bot revolution' and a bot-based web 3.0. In the coming 2–5 years, the majority of our daily tasks could be chatbot-assisted[27].

According to the results of a poll released in June 2016 by *TechEmergence*, a marketing research firm into artificial intelligence and machine learning, the next five years will definitely belong to chatbots (see next chart)[28].



Source: http://techemergence.com/artificial-intelligence-industry-an-overview-by-segment/

The recent development of social media platforms for internal corporate communication, such as *Slack* and *Facebook at Work*, is also worthy of note. More and more companies are using social media for their internal communication, marketing campaigns, and internal marketing purposes. This development, although clearly visible, is not going as smoothly as might be expected. According to a survey by the *Harvard Business Review*, only 12% of 2 100 companies professed to using internal social media networks in an efficient way[29].

Extremists or terrorists are a particular group of social media users, often shifting from public, open platforms to closed ones. This phenomenon is explored further in Chapter 9: From social exchange to powerful weapon.

25 Jan Rezab, Why Social Media Chat Bots Are the Future of Communication, 9 June 2016 https://www.linkedin.com/pulse/why-social-media-chat-bots-future-communication-jan-rezab

26 Facebook releases Bot Engine to create much smarter bots, 12 April, 2016, https://techcrunch.com/2016/04/12/facebook-releases-bot-engine-to-create-much-smarter-bots/

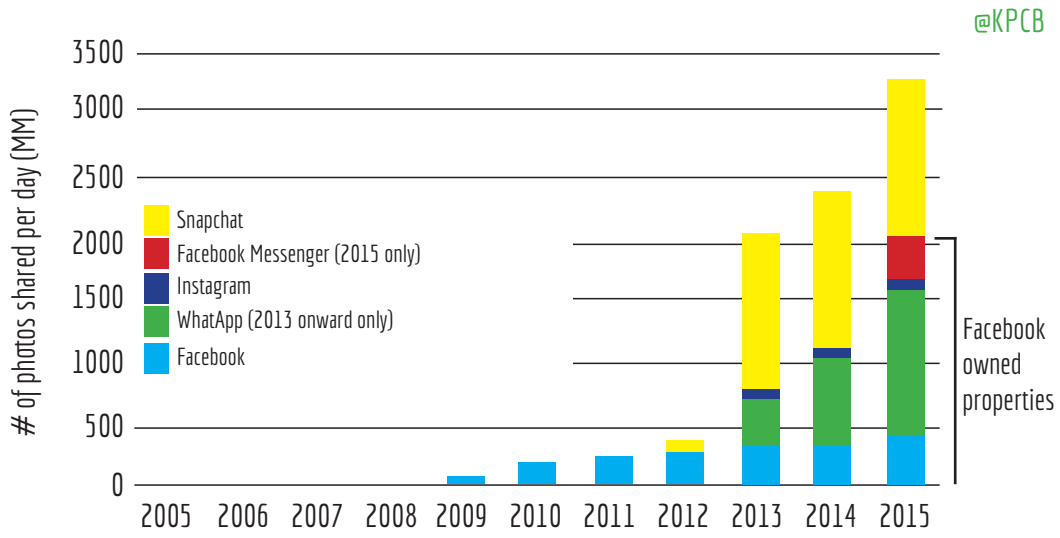
27 Jan Rezab, Why Social Media Chat Bots Are the Future of Communication, 9 June 2016 https://www.linkedin.com/pulse/why-social-media-chat-bots-future-communication-jan-rezab

28 http://venturebeat.com/2016/06/22/smart-assistants-and-chatbots-will-be-top-consumer-applications-for-ai-over-next-5-years-poll-says/

29 http://www.journaldunet.com/management/expert/63697/2016--quelles-grandes-tendances-sur-les-medias-sociaux.shtml

SOCIAL MEDIA CONTENT: LESS TEXT, MORE IMAGE

DAILY NUMBER OF PHOTOS SHARED ON SELECT PLATFORMS, GLOBAL, 2005-2015



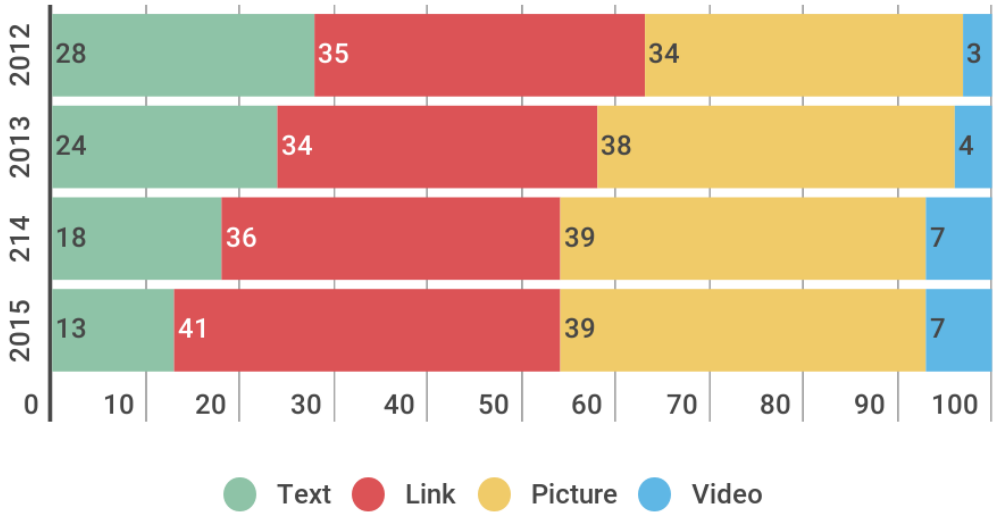
As Evan Spiegel, the founder of Snapchat, has said, "Photos are no longer just a means of capturing a moment, they are a means of communicating"[30]. That is probably one of the reasons why social conversations, both in private messaging apps and in public platforms, are moving from text messages (which are also becoming shorter) to simple and expressive forms of communication such as pictures, memes, emoji (created in the late 1990s by NTT DoCoMo, the Japanese communications firm; the name is a contraction of the words e and moji, which roughly translates as pictograph) or very short videos (as on Vine). As can be seen in the chart above, the numbers of images shared via different social media platforms have grown dramatically, starting in 2013.

Over the same period, the Emoji Report, issued in 2015 by Emogi Research, states that 92% of the online population uses emoji, and 70% of internet users find emoji useful for effectively expressing their emotions[31]. Emoji are also being used more and more in marketing. According to a survey conducted by the *Appboy* company in June 2016, the

30 http://www.bizcommunity.com/Article/196/669/149626a.html

31 http://www.signal.co/resources/emoji-marketing-trends/

TYPE OF POSTS ON POLISH FUNPAGES



Source: blog.sotrender.com

number of active campaigns featuring emoji has increased by 557% in the last 12 months, and by 114% in the year to date[32].

And forecasts are not suggesting any slowing down. According to some predictions (e.g., CISCO), by 2019, 80% of global internet traffic will be dominated by video[33].

Considering the growing domination of images, further evidence of this trend comes from the study by Polish research company *SoTrender*. Analysing the most popular social media platforms in Poland (*Facebook*, *Twitter* and *YouTube*) in the period 2012-2015, the researchers observed a strong trend in internet posts: a clear reduction in the number of words in favour of different forms of image. In 2012, posts including only text constituted nearly 30% of all posts. Three years later, their share was only 13%[34].

Another conclusion of this study was the increasing popularity of memes[35] and their growing ability to engage internet users. One can also observe a strong professionalization of the

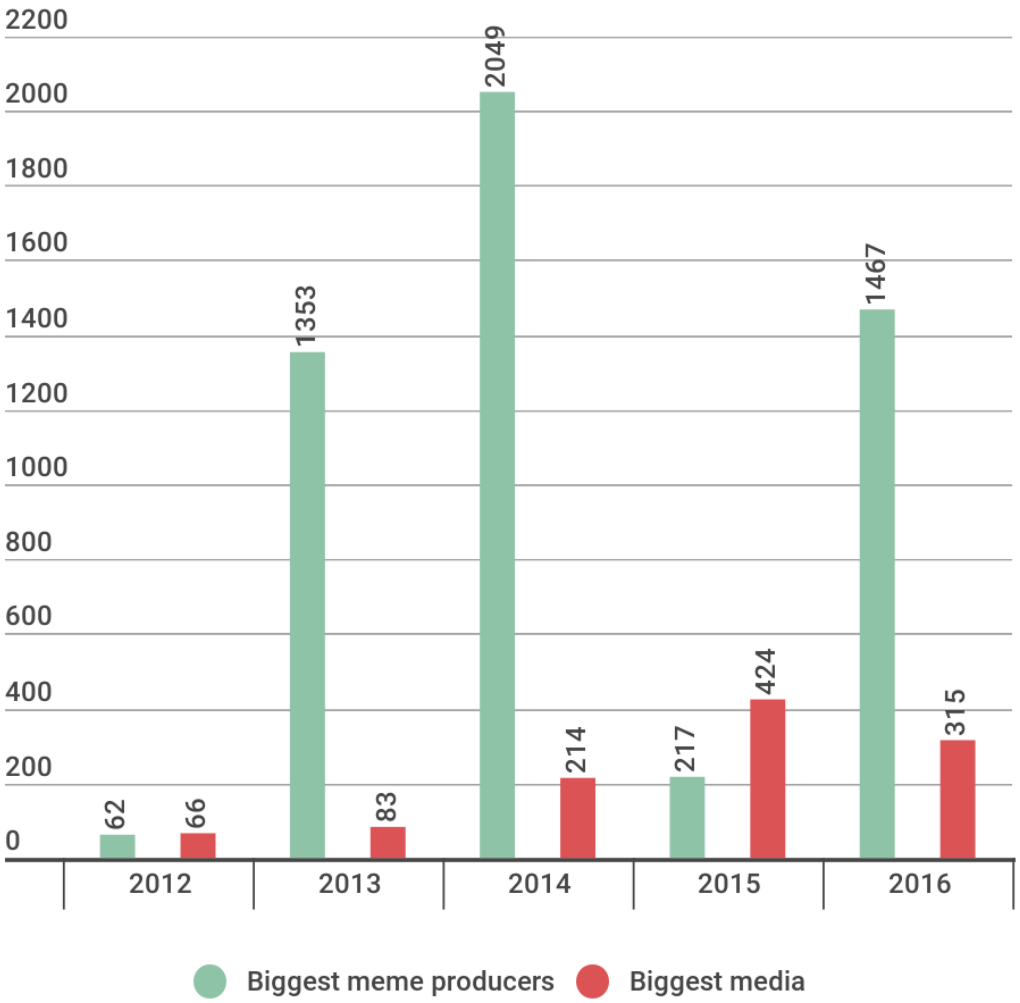
32 http://www.digitaltrends.com/web/brands-use-emojis/#ixzz4Eq1EW4i4

33 http://www.socialmediatoday.com/social-business/social-media-trends-you-need-know-2016-infographi; http://www.digitalinformationworld.com/2015/12/infographic-social-media-marketing-trends-2016-insights-predictions.html

34 http://socialpress.pl/2016/03/jak-zmienily-sie-media-spolecznosciowe-na-przestrzeni-5-lat/

35 According to Webopedia (http://www.webopedia.com/TERM/I/internet_meme.html): An Internet meme is a concept or idea that spreads "virally" from one person to another via the Internet. An Internet meme could be anything from an image to an email or video file; however, the most common meme is an image of a person or animal with a funny or witty caption.

NUMBER OF USERS ENGAGED IN DISCUSSIONS ABOUT A POST



Source: blog.sotrender.com

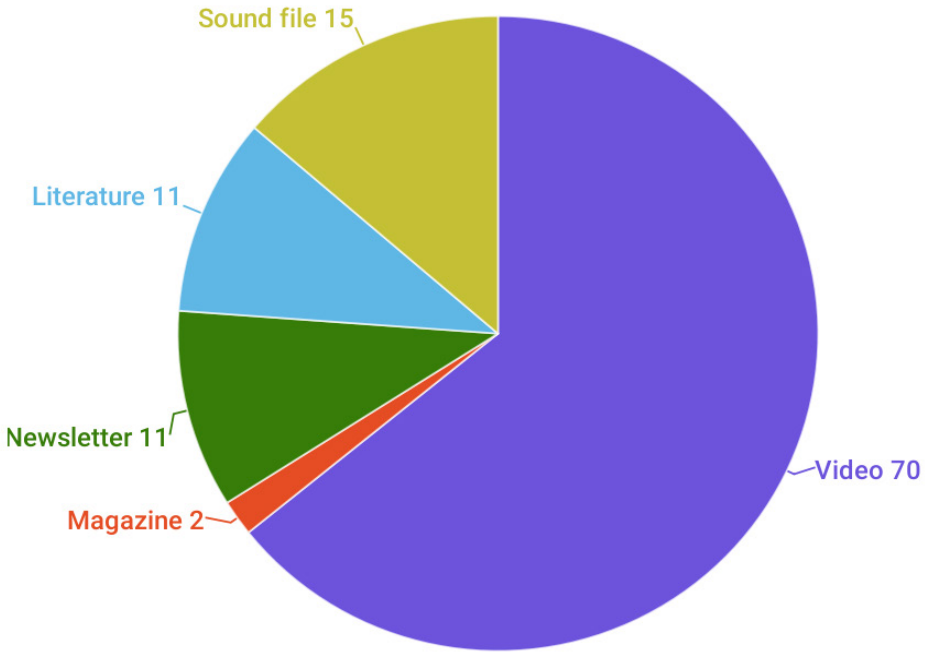
meme market – in Poland, it has almost been cornered by the three biggest players, *Kwejk, Demotywatory* and *Bezużyteczna*. The chart above shows how these websites engage internet users, comparing the biggest Polish internet media platforms.

One area very often utilising memes is politics. Political memes have a strong tendency to go viral and quickly engage users in discussion. According to the authors of the study, "if political initiatives were brands, in the fourth quarter of 2015 they would have been paying an average of 500 000 zlotys [ca. 114 000 euros] to achieve the same reach[36].

Images are becoming more and more important even on social media platforms traditionally

36 http://socialpress.pl/2016/03/jak-zmienily-sie-media-spolecznosciowe-na-przestrzeni-5-lat/

PERCENTAGE OF PRODUCTS USED IN DAESH COMMUNICATION STRATEGY



Source: NATO StratCom COE report The DAESH Strategic Narrative, June 2016

considered as being reserved for text communication, e.g., *Twitter*. The growing number of emojis used in posts have inspired the platform to introduce a functionality that allows advertisers to target their ads in line with the emojis displayed by users[37].

The important role of images in internet content has long been recognised by marketers who have found them crucial for engaging their companies with their target audiences. And they are now also applying this rule to their campaigns on social media[38].

And last, but not least, the power of images has also been recognized by terrorists whose internet and social media output is clearly dominated by video. The chart above, from the *NATO StratCom COE report The DAESH Strategic Narrative* (June 2016), shows the share of different types of media used by terrorists, with the domination of video content clearly visible.

It is still important to emphasize that the secret to success in social media is not simply entering a conversation, but entering people's narratives. Just providing information is not nearly enough. It is relatively easy to receive 'likes', but it is much more difficult to create attachment and engagement.

37 http://socialpress.pl/2016/06/twitter-mozliwe-bedzie-targetowanie-reklam-w-oparciu-o-emotikony/

38 http://www.socialmediatoday.com/marketing/visual-marketing-tools-you-need-shine-social-media-infographic

Going from conversation to narrative means replacing interest with identification. If the audience identifies with the story you tell, engagement is much more likely[39]. And according to experts, it is easier to achieve this goal using images – of the most engaging posts on *Facebook*, photos are clearly number one (93%)[40].

If the post includes a relevant image, the user spends more time on it and the chance that he/she will engage increases considerably. Furthermore, an item of information is easier to remember if accompanied with an image (65% of information with images is remembered three days later, while if it consists of pure text – only 10%)[41].

REAL TIME FORMS OF COMMUNICATION

Another visible trend is the move towards *hic et nunc* (here and now) content. Catching the moment and providing real-time content and live video streaming is becoming

> It is most likely that the utilisation of live videos to engage audiences will continue to increase.

more popular than saving data and using it afterwards. The growing popularity of *Snapchat*, especially among young people, provides a significant example of this trend (*Snapchat* with its 150 million users has overtaken *Twitter,* which has less than 140 million daily users)[42].

At the same time, it is important to note that *Snapchat* is no longer just for teenagers. It is also gaining popularity among older demographic segments, those aged between 25 and 34, and even those aged 35 and older. According to *comScore Mobile Metrix*, three years ago *Snapchat*'s app was only used by 5% of smartphone users between 25 and 34 years old, and 2% of age 35+. Today, its penetration among these two age groups has reached 38% and 14% respectively.

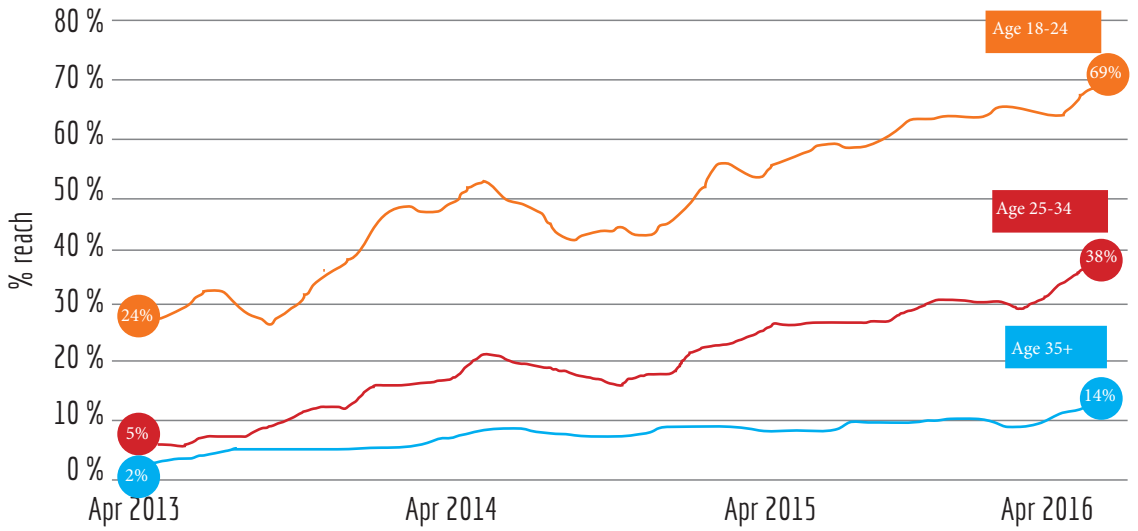
39 http://www.fastcocreate.com/3039565/for-success-in-social-media-conversation-is-not-enough-you-need-narrative

40 http://www.socialmediaexaminer.com/visual-storytelling-on-facebook/

41 http://www.lifelearn.com/2015/05/12/why-infographics-work/

42 Snapchat passes Twitter in daily usage. Bloomberg, 2 June 2016, http://www.bloomberg.com/news/articles/2016-06-02/snapchat-passes-twitter-in-daily-usage

SNAPCHAT SMARTPHONE APP PENETRATION BY AGE



Source:https://www.comscore.com/Insights/Blog/Snapchat-Breaking-into-the-Mainstream-as-it-Posts-New-Highs-Across-Age-Segments

This may be the reason why *Snapchat* has decided to test a new functionality called *Memories*, which will allow users to download their pictures, store them in the Memories tab, and share them with friends. The ephemeral character of the app might be becoming a thing of the past[43].

On the other hand, in August 2016, *Snapchat*'s major competitor *Instagram* introduced a new function, *Stories*, enabling users to post pictures for just 24 hours, which seems to be a faithful copy of *Snapchat*'s flag functionality. It looks like both platforms are testing different options, and the aim is to attract different audience segments.

2016 can also be seen as the year of live streaming. Most of the large social media platforms introduced live streaming services. The success of live-streaming platform *Periscope*, as well as other live-streaming platforms, has also encouraged others to put more effort into live videos (such as *Facebook Live*). *Tumblr* announced itself as the live-streaming hub for other live-streaming videos[44], *Google* is

43 http://socialpress.pl/2016/07/snapchat-sie-zmienia-koniec-z-ulotnoscia-snapow-dzieki-opcji-wspomnienia/

44 Kyle Wiggers, Tumblr launches a live video competitor for Periscope and Facebook Live, 21 June 2016, http://www.digitaltrends.com/social-media/tumblr-live-video-streaming/

> Another visible trend is the move towards *hic et nunc* content.

developing its live-streaming app *YouTube Connect*. After *Periscope*'s first anniversary, *Twitter* is also introducing new features for live broadcasting, such as the ability to broadcast from *GoPro* cameras and watch any broadcast live from a *tweet*[45].

It is most likely that the utilisation of live videos to engage audiences will continue to increase. According to a January 2016 research report by *eMarketer,* nearly 80% of US retail executives acknowledged that producing live-streaming video events helps them create more authentic interaction with audiences[46].

45 Can Periscope Become The Pillar of Twitter's Growth? Forbes, 29 March 2016, http://www.forbes.com/sites/greatspeculations/2016/03/29/can-periscope-become-the-pillar-of-twitters-growth/#13bb92f47eba

46 ibid.

FUTURE SOCIAL MEDIA INNOVATIONS

When considering the future of social networking, some experts mention the potential increase of virtual and augmented reality (respectively: VR and AR[47]) in social media. As they emphasize, this trend will be driven by the accessibility of VR and AR devices.

For example, in March 2014, *Facebook* acquired *Oculus VR*, the leading company in the production of virtual reality headsets[48]. At the F8 Conference in April 2016, *Facebook* presented a demo of "social virtual reality" that would connect people in virtual worlds by using avatars. The idea is that eventually, "users would be able to play cards with friends from college, visit parents in another

47 Augmented reality (AR) is a live direct or indirect view of a physical, real-world environment whose elements are augmented (or supplemented) by computer-generated sensory input such as sound, video, graphics or GPS data. It is related to a more general concept called mediated reality, in which a view of reality is modified (possibly even diminished rather than augmented) by a computer. As a result, the technology functions by enhancing one's current perception of reality. In contrast, virtual reality replaces the real world with a simulated one. https://en.wikipedia.org/wiki/Augmented_reality

48 The History of Social Networking, 14 May 2016. http://www.digitaltrends.com/features/the-history-of-social-networking/

state or enjoy a concert with their siblings, all while sitting snugly on their couch"[49].

The capabilities of social networking in virtual reality have already been proven by the *VTime* app, developed by *Starship*, which lets users meet up with friends. At the *Wearable Technology Show* in London in March 2016, *Starship*'s Chief Marketing Officer Julian Price talked about how VR had the potential to turn social networks into sociable networks. According to him, the key will be the transition from phone, tablet or computer-based interactions, which are largely asynchronous, into real-time, VR interactions, where participants are perfectly 'in synch'[50].

Augmented reality differs from virtual reality in that it applies digital interaction to the real world rather than creating an audio-visual experience from scratch. Some forms of augmented reality already exist in apps like *Yelp* and *Google Ingress*.

Currently the price of devices providing virtual reality (such as *Google CardBoard* or *Oculus Rift* headsets – devices which, strapped to the user's head, offer 360 degree vision and sound) and augmented reality (such as *Google Glass*) is quite high (between 400 and 800 euros as of June 2016)[51], and therefore not that accessible to a larger public. However, as soon as prices fall, the widespread adoption of augmented reality, including for social networking, could become a greater likelihood[52].

The rapidly growing popularity of augmented-reality games further confirms this trend. For example, in July 2016, just a few weeks after *Nintendo* introduced their new game

49 Kurt Wagner, Facebook Shows Us What It Means to Be 'Social' in Virtual Reality, Recode, 13 April 2016. http://www.recode.net/2016/4/13/11586098/watch-facebook-social-virtual-reality-demo

50 Bernard Marr, Facebook, Virtual Reality (VR) and the future of Social Networks, 17 March 2016. http://www.forbes.com/sites/bernardmarr/2016/03/17/facebook-virtual-reality-vr-and-the-future-of-social-networks/#5f821bff3a74

51 http://www.pocket-lint.com/news/132945-best-vr-headsets-to-buy-in-2016-whatever-your-budget

52 The History of Social Networking, 14 May 2016. http://www.digitaltrends.com/features/the-history-of-social-networking/

Pokemon Go, it became the most popular application in the US in terms of daily users and time spent on the app, overcoming such big players as *Twitter* and *Facebook*[53]. On the other hand, as some experts emphasize, it seems too early to announce augmented reality as a new platform.

The success of *Pokemon Go* might be not be due to the technology used. The technology may have simply enhanced the popularity of *Pokemons* themselves[54].

It is worth noting that VR has already been experimented with by NATO. One example is the training exercise organized by the Euro Atlantic Disaster Response Coordination Centre and Romania in July 2016. During the exercise, 16 allied and partner countries' personnel used VR techniques to respond to realistic crisis-situation scenarios[55].

53 Pokemon Go tops Twitter's daily users, sees more engagement than Facebook, 13 June 2016, Techcrunch, https://techcrunch.com/2016/07/13/pokemon-go-tops-twitters-daily-users-sees-more-engagement-than-facebook/

54 http://www.inma.org/blogs/mobile-tablets/post.cfm/pokemon-go-s-success-is-not-a-sign-publishers-need-ar-offerings

55 https://www.youtube.com/watch?v=dZ3S4OpKlFs&app=desktop

SOCIAL MEDIA AS A SOURCE OF NEWS

Social media is not only a tool for entertainment and engaging with other people with common interests and views. It is more and more becoming a platform on which to look for information, for the latest updates on local, regional and international events. This does not necessarily mean that social media has completely taken over the role of traditional media, however news generated by a social media user can achieve the same impact as that from mainstream media.

According to the *Global Web Index* report of 2015 about the reasons people use social media, the top reasons are related to passive forms of networking. People are coming to view social networks as sources of content rather than platforms which require an active contribution. 55% of people use social media to stay in touch with what their friends are doing, 41% use them to stay up-to-date with news and current events, and 41% to fill spare time.

At the same time, only 27% of internet users say that they use social media to share details about their daily life. By some margin, this motivation is less important to networkers than is sharing of opinions or photos/videos. Clearly then, many internet users have become more comfortable using social media to publish content rather than broadcast personal details[56].

Academic research carried out in 2016 by SWOCC (a research organization linked to the department of communication studies at the University of Amsterdam) shows that the way people experience social media has changed considerably. The research explored users' experience with eight social media platforms: *Facebook*, *YouTube*, *LinkedIn*, *Twitter*, *Google+*, *Instagram*, *Pinterest* and *Snapchat*, using a model – Media Experience – featuring 12 dimensions (e. g., stimulation, identification, pastime, etc.). The first important conclusion of the research is that not all platforms traditionally counted among social media are actually perceived as sociable (e. g. *YouTube* and *Pinterest*).

The second conclusion is that some platforms are perceived as having more in common with traditional media channels, and the winner in this category is *Twitter* considered to be "current" and "informative"[57].

Another recent study by the *Pew Research Centre* confirms this trend. It concludes that in 2016, the majority or 62% of US adults are getting their news from social media, compared to 49% in 2012. Most *Reddit*, *Facebook* and *Twitter* users would visit those platforms in order to get news. *Facebook* as the largest social networking site (67% of its users are from the US), would be able to reach around 44% of the US population, followed by *YouTube* and *Twitter*[58].

Given this usage trend, news organizations and social media platforms are themselves developing capabilities to increase the ease of accessing news on their sites. Even *Snapchat*, a direct messaging platform not designed to be a news

56 Social Networking Motivations, Global Web Index Insight Report, Q1, 2015. http://www.globalwebindex.net/blog/top-10-reasons-for-using-social-media

57 http://www.inma.org/blogs/research/post.cfm/research-compares-8-social-media-platforms-with-news-media-experiences-twitter-wins

58 News Use Across Social Media Platforms 2016, Pew Research Center, 28 May 2016., http://www.journalism.org/2016/05/26/news-use-across-social-media-platforms-2016/

TOP20 INTERNET PUBLISHERS (WEBSITES AND PORTAL OWNERS) WITH THE BIGGEST NUMBER OF USERS.

	Media group	No of internauts	Page views	Penetration
1	Google group	24 647 667	7 638 332 718	96.6%
2	Facebook.com	21 606 676	5 618 514 868	84.7%
3	Onet-RASP group	19 532 715	2 770 933 357	76.6%
4	Wirtualna Polska group	19 442 869	3 095 717 567	76.2%
5	YouTube.com	18 885 932	1 092 786 952	73.9%
6	Interia.pl group	15 822762	1 052 448 369	62.0%
7	Gazeta.pl group	15 765 924	690 317 704	61.8%
8	Allegro group	13 969 126	1 167 785 427	54.8%
9	Polska Press group	13 778 396	341 089 649	54.0%
10	Wikipedia.org	13 698 388	306 771 023	53.7%
11	Naspers Classifields group	13 156 255	1 682 521 883	51.6%
12	ZPR Media group	11 963 719	97 053 206	46.9%
13	Cyfrowy Polsat group	8 965 258	95 044 747	35.2%
14	TVN group	8 420 310	174 777 642	33.0%
15	Microsoft-MSN	8 318 088	352 673 677	32.6%
16	Edipresse.pl group	8 313 532	67 470 316	32.6%
17	Ceneo.pl group	8 156 624	61 482 686	32.0%
18	Orange.pl	7 160 711	316 304 041	28.1%
19	CDA.PL	6 438 353	106 732 427	25.2%
20	PKO Bank Polski group group	6 257 268	387 790 787	24.5%

Source: twitter.com/PressRedakcja?lang=pl

source (only 2% of US adults would visit this site for news according to a study by the *Pew Research Center*), is trying to adjust its services to enable it to provide news services in an attractive form, such as live videos, to its audiences[59]. Because of the popularity of this platform among young people, news outlets are also trying to present news on the platform, both as live stories and in *Discover*, where nearly 20 outlets — from *The Wall Street Journal* and CNN to *Tastemade* and *People* — publish unique content exclusive to *Snapchat*. *Snapchat* is set to launch a redesign of its *Discover* section to try and boost the number of users who use it[60].

Social media stopped being perceived as just an entertainment or social exchange tool long ago. Today, it is considered an equal player in the information market. The chart on page 29 shows a relatively recent study published by *Press*, the Polish monthly covering the media market.

59 Snapchat wants to slip a little news into teens' social smartphone time, Joseph Lichterman, 25 September 2015. http://www.niemanlab.org/2015/09/snapchat-wants-to-slip-a-little-news-into-teens-social-smartphone-time/

60 Snapchat reportedly has more daily users than Twitter. What does that mean for news? Joseph Lichterman, 2 June, 2016. http://www.niemanlab.org/2016/06/Snapchat-reportedly-has-more-daily-users-than-twitter-what-does-that-mean-for-news/

> Not all platforms traditionally counted among social media are actually perceived as sociable.

What is interesting to note is that among the top 20 biggest internet media, two social media platforms – *Facebook* and *YouTube* – are both ranked very highly, among the top 5.

FROM SOCIAL EXCHANGE TO POWERFUL WEAPON

Because of the above mentioned trends, and especially the change in usage numbers and patterns, social media can be perceived as an important tool of influence that can be used to shape public attitudes and behaviours. Both states and non-state groups are increasingly using social media to achieve their political or military objectives.

As part of the ongoing conflicts in the Middle East and Ukraine, we are

witnessing how states and terrorist groups are using social media to reach out to their audiences, to mobilise support, deceive the adversary or even coordinate their actions.

The case studies of Russia's and *Daesh*'s use of social media for their information activities, that were analysed earlier by NATO StratCom COE, demonstrated that those actors have skilfully adapted to the new information environment

and are effectively using the tools and technologies developed for commercial and marketing needs in order to affect the attitudes and behaviours of their target audiences[61]. By following the activities of the actors in these conflicts, it is possible to grasp how they are exploiting the new capabilities and techniques provided by the market for their information activities.

The continuing trends used for this purpose can be characterized as follows[62]:

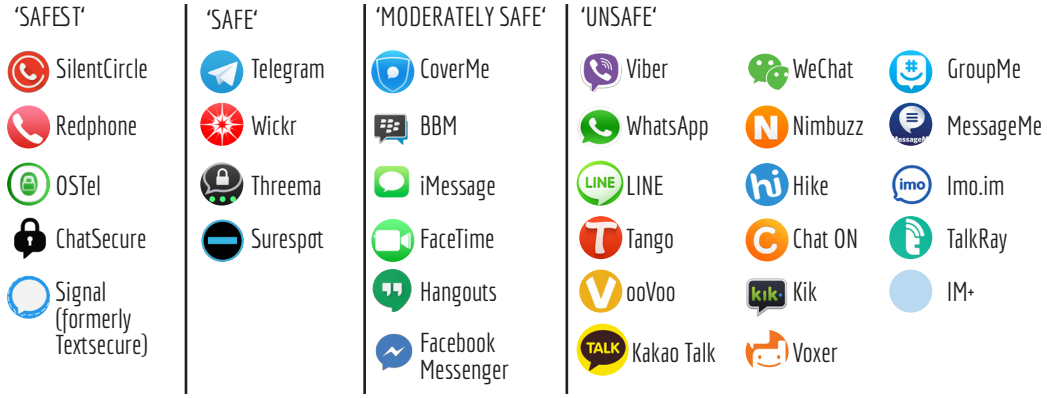
Creating attractive content (images, video games, music videos, etc.). Analysis show that 15% of *Daesh* content in 2014/2015 appropriates modern subcultures. This gives opportunities to attract Western audiences by transforming terrorism into a popular Western cultural product.

Using new methods to distribute traditional (old–school) content. This technological development creates a number of opportunities to spread content quickly and cost effectively, and reach larger audiences. However, the most important method is the ability to find the right medium and right device, used by the intended audience. This is why terrorist groups use different sharable platforms to distribute their content, sometimes, even very traditional ones. For example, sharing religious texts by using *Google Docs*, or creating information kiosks in Afghanistan at locations with no internet access, where the content (audio podcasts) is shared to devices in MP3 format, or using cheap mobile cards and mobile phones for the distribution of information (information is shared as ringtones).

61 For more information on how different actors in conflicts are using social media for their information activities please see the NATO StratCom COE study Social media as a tool of hybrid warfare, May 2016. http://www.stratcomcoe.org/social-media-tool-hybrid-warfare

62 The trends were identified by experts during the NATO StratCom COE workshop New Trends in Social Media, Riga, 18-19 April 2016.

Daesh issues regular tech tutorials intended to keep follower's communications out of reach of government surveillance. This guide, circulated in January 2016, ranks the encryption of chat apps.



Source: The Wall Street Journal (SITE Intelligence Group)

Coordinated use of multiple channels – public and closed. The coordinated use of different information channels from public ones (such as *Twitter*, blogs, websites), to more closed networks (like direct messaging apps – *WhatsApp*, *Messenger*, online games, etc.) which analysts cannot access even by trying to purchase data, has been seen in the communication efforts of both *Daesh* and the conflicting parties in Ukraine. At one extreme is another layer of communication (like *Wickr* or *Silent Circle*), where communication happens within ultra-closed systems, which even the best analysis tools cannot fully access. In this respect, some analysts note a distinction between the so-called surface web and dark web, claiming that a huge part of communication (especially in respect to recruitment, mobilisation of support, or coordination of activities) is carried out in the latter[63].

Terrorist groups are very well aware of the abilities of security institutions to track their communication efforts on public social networks. This is why

63 Computer specialists separate the so-called surface web (whose contents can be indexed by standard search engines), the deep web (whose contents cannot be indexed by standard search engines, they include web mail, online banking, but also paid services with a paywall such as video on demand, and many more) and the dark web (content that exists on darknets, overlay networks which use the public internet but which require specific software, configurations or authorization to access. The dark web forms a small part of the deep web, the part of the Web not indexed by search engines, although sometimes the term "deep web" is confusingly used to refer specifically to the dark web. Darknets which constitute the dark web include small, friend-to-friend peer-to-peer networks, as well as large, popular networks like Freenet, I2P, and Tor, operated by public organizations and individuals. https://en.wikipedia.org/wiki/Deep_web, https://en.wikipedia.org/wiki/Dark_web

> According to different studies, at least 8% of accounts on Twitter and 5-11% of Facebook accounts are bots.

combinations of both public and closed social networks are used for different purposes. Public networks that have widespread reach are mainly used for spreading propaganda materials while closed social networks may be more effective for further recruitment and the mobilization of support or coordination of activities. Sometimes, the communication process moving from very open to very closed platforms can happen in 5 minutes, while it can take the same number of hours for security institutions to track it.

The list developed by the SITE Intelligence Group describes social media platforms as ranging from safest to unsafe (see graph on page 32) was later also acknowledged by *Daesh* 'tech' experts in their efforts to educate their supporters on how to communicate safely and overcome tracking by security institutions[64]. Another reason for the success of the group has been the flexibility to overcome limitations imposed by social media platforms and move to other platforms that have fewer restrictions. For example, *Daesh* has been quite effective in using *Twitter*'s vulnerabilities to avoid their accounts being shut down[65]. Furthermore, as soon as they have faced restrictions by social media platforms in the US (as most of the biggest social media companies are located in the US), their content is adjusted and published in the social networks of other countries.

Creation of mobile apps to convey messages directly to users. The mobile app *Dawn of Glad Tidings*, that was distributed to *Daesh* supporters in 2014 and enabled them to use their *Twitter* handles to automatically tweet *Daesh*-related content, was the first attempt by the group to use a mobile app for the automatic distribution of their information. Although it was closed down by *Twitter* soon after, it turned out to be extremely successful and was able to mobilise 40 000 people

64 How Islamic State Teaches Tech Savvy to Evade Detection, The Wall Street Journal, 16 November 2015, http://www.wsj.com/articles/islamic-state-teaches-tech-savvy-1447720824

65 For more information see: Joseph Shaheen, Network of Terror: How DAESH Uses Adaptive Social Networks to Spread its Message, NATO StratCom COE, 2015.

to sign up for the app. Consequently, as ISIS advanced to new territories in Iraq, they were able to dominate *Twitter* trends with their version of the story[66]. Currently, a new *Android* app is in place enabling *Daesh* radio *Al-Bayana* to also be broadcast outside the boundaries of their operating territory. In May 2016, a new app was developed in order to teach the alphabet to the children with a large number of references to weapons and the *jihad*[67].

Extensive use of social bots[68] – from simple bots to sophisticated information strategies. The amount of computer generated content we currently see in social media has already been present for a number of years. According to different studies, at least 8% of accounts on *Twitter* are bots[69] and 5-11% of *Facebook* accounts are bots[70]. In 2014, half of all the accounts created on *Twitter* were suspended[71]. In the first half of 2016, *Twitter* suspended more than 350 000 accounts based on its regulations on the promotion of terrorism[72]. While some bots are innocuous and are created with the aim of providing more efficient customer service (as described above, the use of bots, and especially chatbots, is a growing trend in customer service), others are malicious bots designed specifically to harm. These bots "mislead, exploit, and manipulate social media discourse with rumors, spam, malware, misinformation, slander, or even just noise"[73]. They can **manipulate discussions** (for example, after the murder of Russian

66 How ISIS Games Twitter. J.M.Berger. The Atlantic, 16 June 2014. http://www.theatlantic.com/international/archive/2014/06/isis-iraq-twitter-social-media-strategy/372856/

67 ISIS has released new Android app aimed at children. Pamela Engel, Business Insider. 12 May 2016. http://www.businessinsider.com/isis-android-app-kids-2016-5

68 A social bot is a computer algorithm that automatically produces content and interacts with humans on social media, trying to emulate and possibly alter their behavior. Definition by Emilio Ferrara, Onur Varol, Clayton Davis, Filippo Menczer, Alessandro Flammini, Communications of the ACM, Vol. 59 No. 7, pp 96-104, http://cacm.acm.org/magazines/2016/7/204021-the-rise-of-social-bots/fulltext

69 Twitter Has Stopped Updating Its Public Tally Of Bots, William Alden, BuzzFeed, 10 November 2015. https://www.buzzfeed.com/williamalden/twitter-has-stopped-updating-its-public-tally-of-bots?utm_term=.qy111VP6D#.pbYRR3mJZ

70 Facebook estimates that between 5.5% and 11.2% of accounts are fake, Emil Protalinski, The Next Web, http://thenextweb.com/facebook/2014/02/03/facebook-estimates-5-5-11-2-accounts-fake/

71 Only 11% of New Twitter Users in 2012 Are Still Tweeting, Yoree Koh, The Wall Street Journal, 21 March 2014, http://blogs.wsj.com/digits/2014/03/21/new-report-spotlights-twitters-retention-problem/

72 https://www.theguardian.com/technology/2016/aug/18/twitter-suspends-accounts-terrorism-links-isis?CMP=twt_gu

73 Emilio Ferrara, Onur Varol, Clayton Davis, Filippo Menczer, Alessandro Flammini, Communications of the ACM, Vol. 59 No. 7, Pages 96-104, http://cacm.acm.org/magazines/2016/7/204021-the-rise-of-social-bots/fulltext

politician Boris Nemtsov, bots were offering different explanations of his death, among the most popular – Nemtsov's involvement in a love triangle); **fake connection numbers** – anybody can buy connections in order to look more popular than they actually are – this has been especially important for some politicians during election campaigns; **fake ratings and reviews** in order to promote products or services. However, bots have also been extensively used during conflicts in order to influence people's attitudes and behaviour. For example, according to ISIS's *Twitter Census*, around 20% of their supporters' accounts were created by bots or apps[74]. The ways bots can be used by different actors in conflicts are as follows:

Misdirection – tweet unrelated news that is happening somewhere else, using a hashtag related to the conflict or crisis.

Hashtag latching (or hashtag hijacking) – add popular or trending hashtags to the content in order to reach broader or in some cases rather specific audiences. For example, *Daesh* has been using this method to spread their propaganda materials or even threaten Western audiences following the terrorist attacks in Paris in 2015 and at Brussels Airport in 2016.

Smoke screening – mention something about the intended topic but not necessarily relevant information. For example, mention something about *Daesh*, but not necessarily about beheadings.

Thread–jacking – change the topic in a discussion thread in an open forum. For example, using the #ISIL hashtag, but the tweet has a link to a shopping website.

Social media platforms have gradually learnt how to identify and take down simple bots. However, in reaction to these efforts, bots have become more sophisticated – more social and human, appearing as credible followers, so not that easily recognizable.

The social media companies are not ignoring these attempts. There are some examples of their efficient cooperation with states to fight terrorism (one of them is the successful *Operation Hashtag* in Brazil before the Olympic Games). At the beginning of 2016, the CEOs of *Twitter*, *Facebook*, *Microsoft* and *Google* met with White House officials to discuss the measures to be taken to stop extremists using social media to their advantage[75].

74 J.M.Berger, Jonathan Morgan, ISIS Twitter Census: Defining and Describing the Population of ISIS Supporters on Twitter, The Brookings Center for Middle East Policy, March 2015, p.24

75 http://uk.businessinsider.com/facebook-twitter-brazil-olympics-terror-2016-7?utm_content=buffer864f4&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

ATTEMPTS TO CONTROL THE INTERNET

Some states, in particular those with strong authoritarian tendencies, have been trying to take control of the internet and particularly social media. In history, examples of exposing control over the information space are numerous (China, Cuba and others).

The advent of social media and its ability to increase transparency and bring to light governments' wrongdoings has been a driving factor for some governments to impose strict control measures over the internet, following the Arab Spring revolutions in the Middle East. For example, Turkey, one of the most famous examples in restricting social media, has radically increased censorship in the virtual environment since April 2015 by amending its Internet Law to authorize the government to ban internet content relating to "national security and public order". Turkey has blocked access to *Twitter*, *Facebook*, *YouTube* and other social media sites during terrorist attacks, public protests and other crisis situations. In the last five years, the Turkish government has issued more than 150 gag orders on subjects ranging from government corruption to natural disasters[76].

Restrictive rules to have more control over the virtual environment have also been seen in other regions, once more confirming the increasing role of this medium for achieving political aims. An internet rights' monitoring exercise conducted by the *Media Foundation for West Africa* from October-December 2015 shows that in the last three months of 2015, Ghana and Nigeria both passed and introduced bills that have the potential to curtail free expression online[77].

In 2014, Russia passed a draconian law imposing restrictions on social media users. Since then, bloggers with more than 3 000 daily readers have been obliged to register with the mass media regulator, *Roskomnadzor*, and conform to the regulations that govern the country's larger media outlets. More recently, in June 2016, the Russian Duma adopted so-called anti-terrorist legislation, strengthening control over citizens' internet activities. Telecom

76 Turkey Blocks News Sites, Twitter, Facebook after Deadly Attack. 28 June 2016. Vocativ. http://www.vocativ.com/334890/turkey-blocks-news-sites-twitter-facebook-after-deadly-attack/

77 http://www.mfwa.org/attempts-to-control-internet-use-in-west-africa-must-be-resisted-mfwa/

operators, blog platforms and social media have been obliged to store all communications and conversations for six months and make them available to the authorities, including the police and Federal Security Service (FSB), on request. Social networks have been subject to the same legal provisions as media outlets with respect to the crimes of inciting and condoning terrorism, which carry the prospect of seven-year jail terms[78]. Other attempts to control the internet relate to the replacement of the management of *VKontakte*, the largest Russian social media platform, and requests to social media sites to remove content that differs from the official position[79].

The growing use of social media platforms by terrorists has also caused a strong reaction in Israel, which has started to blame social media as being "partners in crime". On 20 July 2016, the Israeli Knesset passed a new preliminary law that would oblige social media to remove posts that promote terror. If they do not comply, the managers of social networks will be subject to fines. The new law specifically names *Facebook*, *YouTube*, *Twitter* and *Google*.

Also in summer 2016, the Defence Ministry of Thailand approved a plan to establish an Army Cyber Centre, one of whose tasks is "to keep track of information on media and social media and to sort the data out systematically"[80].

To ensure even more control over social media, some states, in addition to blocking access to discussion forums and sites, have taken a proactive stance and been trying to establish state-owned social media platforms that would allow better control and monitoring of people's conversations. For example, reacting to the radical growth in internet users (around 40% per year between 2010 and 2014), the government of Uzbekistan has created more than 38 state-owned social media sites. Despite these attempts, the sites have not gained much popularity and only eight of the state-owned sites are still operating and Uzbek social media users continue to prefer international social media platforms like *Facebook* or the *Odnoklassniki* (Classmates) Russian social network[81].

78 https://rsf.org/en/news/draconian-new-law-tightens-control-over-communication-russia

79 Social Media as a Tool of Hybrid Warfare, NATO Strategic Communications Centre of Excellence, May 2016, p.24, http://www.stratcomcoe.org/social-media-tool-hybrid-warfare

80 http://www.prachatai.com/english/node/6498

81 Uzbekistan launches its 38th own-brand social network, Inga Sikorskaya, IWPR, The Guardian, 17 June 2016, https://www.theguardian.com/world/2016/jun/17/uzbekistan-launches-state-social-networks-facebook

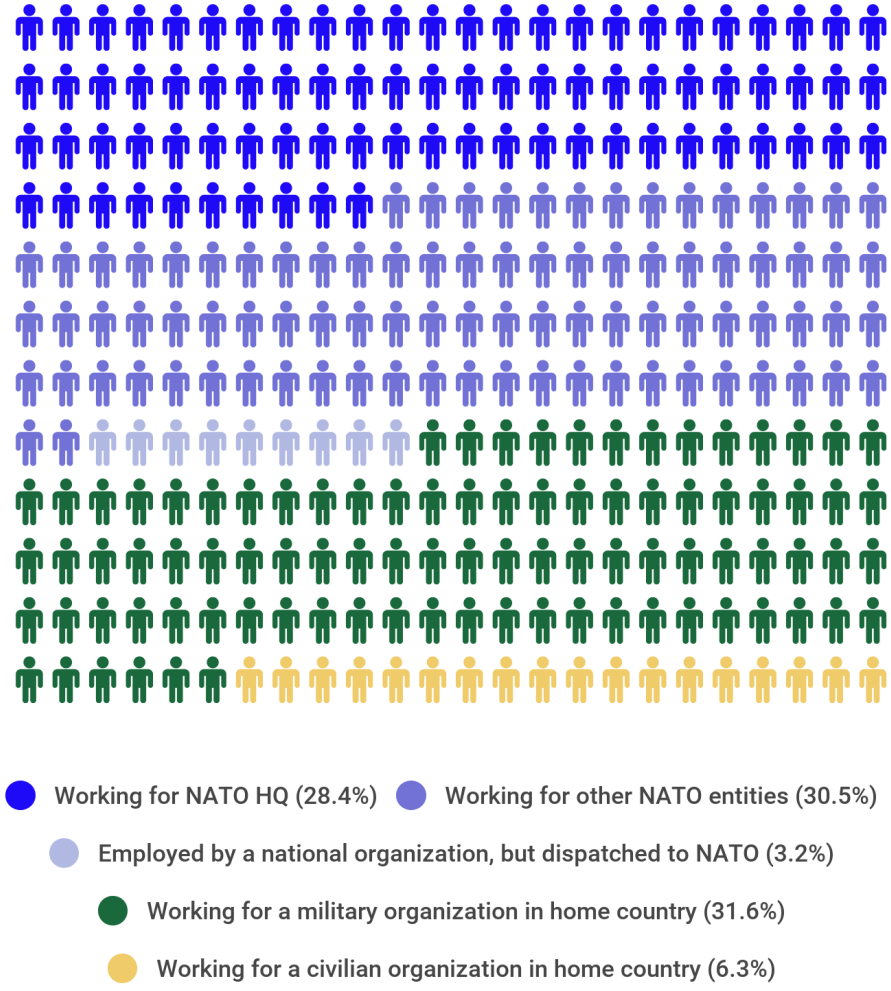
SURVEY ON NATO STRATCOM PERSONNEL'S UNDERSTANDING AND USE OF SOCIAL MEDIA

In order to investigate the understanding and perception of what social media is and how it is currently used by the NATO communication community, the COE carried out a standardized online survey, in cooperation with Prof. Natascha Zowislo-Grünewald and Dr. Franz Beitzinger, researchers from the Bundeswehr Univeresity in Munich.

The research was conducted in the form of a questionnaire (66 questions). The COE sent mails inviting people from NATO StratCom community to take part. Each mail contained a link to the online questionnaire. In order to avoid any duplication of responses and increase the accuracy of the survey, each link contained a unique code.

The objective was to obtain responses from the NATO and NATO member states' (ministries of defence and national armed forces) personnel involved in communication processes, representing all the traditional NATO Strategic Communications disciplines, namely Public Diplomacy (PD,) Public Affairs (PA), Military Public Affairs (MPA), Information Operations (Info Ops) and Psychological Operations (PSYOPS).

The survey's mailing list was based on a number of sources. The main source was the list of attendees at the NATO Information and Communicators Conference 2016, received from Supreme Headquarters Allied Powers Europe (SHAPE). This list was complemented by the StratCom COE mailing list (StratCom community of interest), as well as by email addresses obtained through an open-source investigation (i.e., the *Linkedin*



website). In total, 424 mails were sent. Of this number, a small part (about 30 addresses) proved to be inaccurate or invalid. To increase the response rate, two mails were sent 10 days apart.

In consequence, **153 respondents** took part in the survey (gross response rate: 38%). As 15 responses were not valid (the respondents did not complete the questionnaire), the **actual number of valid responses was 138** (net response rate: 33%).

More than 60% of respondents worked in the broadly understood 'NATO structure' (nearly 30% working directly for NATO Headquarters), and more than 30% in the national armed forces of member states (see diagram above).

More than 66% were military personnel, and **nearly 34% civilian**. In terms of nationality, the respondents represented 20 member states, the most represented being the US, UK,

Germany and Poland. A significant proportion of the respondents (**about one third) have never had a formal education in communications.**

The survey results have been divided into **six parts** addressing different questions:

1. General perception of social media
2. Social media in NATO communication
3. Social media in NATO and in home country communication (comparison)
4. Professional use of social media
5. Private use of social media
6. Monitoring and analysis of social media.

The general conclusion from the survey is that the NATO StratCom community is well aware of the importance of social media in communication activities. However, **better integration of this channel in the whole communication strategy is necessary,** as well as is **professional training** in social media assessment and communication.

The full report from the survey is available for internal use of NATO and NATO member states by request.

CONCLUSIONS

1. **Social media is one of the most dynamic and fast-changing information environments.** Innovations continue to arrive, one after the other. New applications, functionalities, technical solutions are an everyday reality. For this reason, one needs to be very careful about drawing conclusions on what might already be a trend, and what might just be an ephemeral phenomenon/fashion. One illustration of this difficulty is the number of publications appearing every day covering social media topics, describing all the innovations happening in the sector. As some studies prove, the perception of social media is changing in parallel with social media platforms themselves – some platforms are no longer perceived as sociable, others tend to be considered and used very much like traditional media. Analysing the trade press, it seems likely that the future development of social media lies with artificial intelligence and augmented reality techniques[83].
2. **An important driver of change in social media is its commercial aspect.** In considering social networks, one cannot forget that the platforms on which these networks operate, are above all commercial enterprises. Their objectives are commercial. Everything they do, all the new apps or functionalities they introduce, are intended to earn more money. It is important to remember this if you want to utilise them for a particular purpose. The platform you use can make considerable modifications, based

82 http://www.theverge.com/a/mark-zuckerberg-future-of-facebook

on new audience analysis carried out by the company running the platform. The new *Memories* functionality on *Snapchat* is a good example. Building a social media communication strategy, one should take this risk of shifting audiences into account, and try to be flexible.

3. **The dynamic development of mobile devices has been shaping people's behaviour.** It has made social media accessible in parts of the world which, only recently, had been blank spaces on the map of social media users. Obviously, the way people access social media – on mobile or on desktop, is a combination of many factors, e. g., age, education, objectives.
4. **People use social media for many different reasons.** The social aspect, although still dominant, appears to vary between different population sectors (e.g., age groups), and is being gradually complemented by other motivations. One of them increasingly is using social media for getting news. Given this fact, as well as the widespread use of mobile devices to access social media, they have become one of the most important tools for influencing opinion. Different states and non–state groups increasingly consider this communication channel to be a tool for distributing their narrative and mobilising support.
5. **As has been seen during recent conflicts, different actors have been able to adapt quickly to the new trends in social media** marketing and the capabilities provided by technological development, and even adjust them for military needs. Flexibility and adaptation to new trends in the digital communication market, including the use of social media for internal communication, is also the key to success for governments or NATO and its member states.
6. **It is an obvious statement that having a social media strategy also means having a social media risk strategy.** However, with the growing use of social media for information warfare purposes, this simple rule calls for much greater attention. It seems quite reasonable for your organisation to introduce social media use standards and principles which can be very useful, if, for example, you have to face troll attacks.
7. **Regardless of the communication channel one chooses, the narrative should still be at the very**

heart of it. The most important thing is the story you want to tell to your audience. Rather than just being in conversation with the audience, one has to enter people's narratives. Social media offers a wide range of platforms, including mobile ones, which enable you to target your message and choose the appropriate form of communication (text, picture, infographic, video, emojis, etc.). However, it is important to note that for governments or public sector organisations, the task of convincing audiences to accept their narrative is quite challenging because, as some experts say, "today, influence decidedly rests in the hands of the mass population […] 'a person like yourself' […] is almost twice as trusted as a government official"[84].

8. **There have been several attempts by states to impose restrictions on internet and social media usage, or even to create their own social media platforms.** However, one has to acknowledge that in the new information environment it is almost impossible to completely block access to information or the capacity to disseminate it. With the development of technology, there will always be somebody who will find an opportunity to inform the world about attempts to control the virtual space, reaching millions of people within a few seconds.
9. **Social media can provide a good sense of how states and non-state groups operate, and what their intentions and strategies are.** Publicly available information on social media also helps to understand what 'bad actors' want to say and how they target their audiences. However, analysing their activities on public networks is not enough, as most of their activities (such as coordination, recruitment etc.) take place in closed networks, or the so-called dark web. This is why the ability to access information in this space is becoming more important. New approaches to analysis should be developed that would lead to a better capability to detect disinformation strategies (bot, troll detection), as well as combine data from both publicly available information and closed networks.

Presentation by Simon Collister (London College of Communication, University of the Arts, London) at the NATO StratCom COE New Trends in Social Media workshop, Riga, 18 April 2016.

RECOMMENDATIONS

Be aware of the power of technology and use it. t is important to follow the changes that technological developments bring. A shift in mind-set is important – rather than blaming social media platforms for their inability to counter extremism and disinformation on their networks, we should target those who are using these media for manipulative purposes. As Nicole Matejic wrote, "to fight social media fires, you need to be familiar with the same tools, apps, channels and platforms as your audience"[85]. Even if that means using augmented reality platforms or social media platforms for internal communication. The latter can be a very efficient tool for building employer advocacy that is encouraging all employees to become ambassadors for your brand.

83

84 Nicole Matejic, Social Media Rules of Engagement, John Wiley & Sons Australia, Ltd, 2015, p. 128

Be present – frequent but relevant information gives more opportunities to be heard. Social media is no longer about survival of the quickest, it is about survival of the newest. That means creating more content and more quickly, but that remains relevant and targeted. Active engagement requires content to be as targeted and relevant as possible and to be pushed out frequently – volume really matters in the new information environment. The lessons learned from the recent NATO exercises (Response Force exercise Trident Juncture 2015 – TRJE15) demonstrate that it is important to ensure an extensive presence on social media, otherwise the actors interested in disseminating anti–NATO messages will dominate. For example, during the TRJE15 exercise, anti–NATO sentiments decreased gradually as the messaging from pro–NATO voices

increased. This also means finding influential voices in respective nations that will disseminate NATO's content on social media in their local languages.

Be prepared for social media risk and try to limit it. In such a massive organization as NATO, controlling the narrative is a major challenge. And social media has numerous examples of *faux pas* or serious mistakes putting users' or their organisation's security at risk. Obviously, any social media communication strategy should include a social media risk strategy. One of the answers to this challenge is education and increasing the social media literacy of communicators and employees, both in terms of their professional and personal presence in social networks. A clear social media usage policy and employee training are two prerequisites for restricting potential security breaches.

Create highly targeted content and disseminate it in an integrated way. Information relevant to people is what matters. Because of the information overload people face in the digital space, it is important to speak to targeted audiences and in a relevant manner rather than trying to reach out to broad audiences with abstract messages which are not relevant to them.

Think mobile. All communication efforts should be developed so that they meet the needs of the users of mobile devices, as they now constitute the majority of internet users. This is about providing short, attractive content, easy to use and share on mobile devices.

Adopt a comprehensive approach to counter adversarial information activities. That means finding credible voices within the audiences that could speak for you (government voices are not that powerful), identifying cultural touch points (such as inter-personal values, behaviours, norms, trends, etc.) and using them to your advantage, as well as identifying the platforms the adversary is using and denying them access to them. The frameworks on how to react to manipulation and disinformation are being extensively studied, however governments need to adapt and start using them. A more aggressive approach would involve mobilizing the public against extremism and blending in with pre-existing groups and efforts fighting extremism (hackers, opinion leaders, activists, 'elves'), and encourage them to be a part of this "warfare" in the information space. This approach has significant ethical and legal constraints however, such as the ability to identify

threats and declare 'war' status enabling democratic government to use more radical methods to counter disinformation in the information space.

Use crowd-source support on social media[86] with a similar approach to that terrorist groups (*Daesh* in particular) or humanitarian organisations are using. This also means the more creative use of modern technology that would encourage voluntary support and mobilise the public to action. For example, *Daesh* was able engage up to 40 000 sign-ups for their *Dawn of Glad Tidings* app that automatically disseminated *Daesh* propaganda from their accounts. Another example was given in the study *Examining ISIS Support and Opposition Networks on* Twitter published in 2016 by the RAND Corporation. Analysis of *Twitter* over ten months showed that, although the number of *Daesh* opponents of was six times bigger than that of its supporters, the former produced 50% more tweets per day[87]. Inviting the public to engage through the use of creative methods should be used more actively by governments and military staff.

Develop attractive branding. Governments are less proficient at selling their brands than are the private sector or extremists – not because they do not know how to communicate with the public, but because they need much more effort to make their brand more attractive. Development of a more attractive and engaging brand that includes certain lifestyle features, values, etc. and leveraging them for the government's cause would provide more public support. Private sector players and extremists are already achieving this, we need to learn from them.

Do not overestimate support from social media users – not all of it is relevant. There are several types of internet users from very active to very passive ones, and you cannot reach everybody out there. An often misplaced belief of communicators is that the active social media participants fully represent public opinion. In fact, they are only the most easily reached part, but by no means everybody. Fundamentally, a very small number of people can help get your message out. According

85 Wikipedia: Crowdsourcing is the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, especially an online community, rather than from employees or suppliers.

86 http://www.rand.stfi.re/pubs/research_reports/RR1328.html?sf=vkdvjlo&utm_content=buffer8e1e7&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer#aa

to an Estonian study, around 12% of all social media users are active and ready to create content, share it or become involved in discussions. It is these users you should try to get involved. Counting 'likes' and the overall number of followers of your account is irrelevant however, as most of them are passive users, and many of them don't even receive your message (as it is not sent out in the right time and perhaps is lost among many other messages). We should not expect all messages on the screen to be noticed by users, because of the wrong timing or format of the message. As Christina Archetti said, "availability of information doesn't mean reach, and reach doesn't mean impact"[88].

Follow closely what the younger generation is using – they will be the ones who will try out and play with new tools. For example, *Snapchat* was initially popular exclusively among teenagers but is now also attracting more older users[89] and is also being increasingly exploited by business and government organisations (for example, the White House, UK Foreign and Commonwealth Office and the European Parliament) in their communication efforts. Observing young users closely can be a good method of finding indicators of future social media developments.

Look for more flexible and lean approaches in analysing and engaging in social media. One of the solutions that is currently being developed by the NATO Science and Technology Organisation is the *Digital and Social Media Playbook* – a rolling and constantly updated information-environment assessment tool whose purpose is understanding the aims, tactics and methods used by adversaries in the information space, in order to make our own target audiences more resilient to manipulation. It is based on a lean mind-set, constant adaptability to the current situation and new trends, as well as on the analysis of adversaries' tactics, experience sharing and learning by many cooperation partners. It is also vital not to limit the analysis to collecting social metrics (e.g., numbers of 'likes' or followers), but to go deeper than simple statistics.

87 Strategic Communication in Counter Terrorism: Target Audience Analysis, Measures of Effect, and Counter Narrative, Baseline Report, NATO COE DAT, Ankara Turkey, 04-05 June 2014

88 Snapchat and the Generational Divide. 5 July 2016, https://www.linkedin.com/pulse/Snapchat-generational-divide-enrique-dans

For a better understanding of crises, combine digital data with information provided by actors on the ground

(organisations working on the ground, observations by locals, etc.). Digital data can bring a lot of information and feedback about situations in crisis and conflict zones. It also makes it much easier to analyse and measure the effectiveness of communication efforts. However, social media analysis tools, even the most sophisticated ones, cannot provide all the answers – it is important to look beyond social media to get results that could better reflect real facts. Good lessons can be learned from humanitarian disaster relief organisations and their efforts in preparing for potential crises in advance. A lot of data can be gathered by simply mapping and monitoring activities on the ground by involving local organisations and institutions, crowd source data or by hiring locals to provide regular updates for you by observing certain processes (for example, gathering information from locals on how many bakeries are open in conflict zones).

Remember that social media "is about sociology and psychology more than technology"[90]

Social media is one of possible communication channels. Everything you communicate should be the result of deliberate strategic intent. Your communication mustn't be accidental. Every social media post should be aimed at using your social media networks for a precisely defined objective. On social media, the weight of what you say is always influenced by the weight of how and where you say it. Target your efforts and measure their effects. And remember that your audience is looking for a story, but if you can't communicate in real life, "all the social media tools in the world won't help you". [91]

89 Brian Soli's quotation used in the article of Nicole Matejic 3 things Anthony Robbins reminded me about communication: http://www.infoopshq.com/2016/10/02/3-things-anthony-robbins-reminded-me-about-communication/

90 Nicole Matejic, Social Media Rules of Engagement, John Wiley & Sons Australia, Ltd, 2015, p. 105