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SYNTHESIS OF FUTURE TRENDS IN SOCIAL MEDIA FOR 2019 AND BEYOND

Deliverable D1.2.

Part 2



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Future Research on Convergence and Social Media

SYNTHESIS OF FUTURE TRENDS IN SOCIAL MEDIA FOR 2019 AND BEYOND

DELIVERABLE 2.2

PART 2

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Key Terms

AI - Artificial Intelligence

API - a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.

AR - Augmented Reality

CEO - Central Executive Officer

FB - Facebook

GDPR - General Data Protection Regulation

GIF - a lossless format for image files that supports both animated and static images

IoT - Internet of Things

MR - Mixed Reality

RoI - Return on Investments

SERP - Search Engine Result Page

SM - Social Media

SME - Small and Media Enterprise

VR - Virtual Reality

UGC - User Generated Content

Executive Summary

This study presents and interprets future trends in policy research and technological innovation in social media and convergence. Understandably, the majority of predictions is focused at marketing communication. There are very few suggestions for specific or general social media regulation. This in itself suggests that there is a missing gap in this area of prognostics. Be that as it may, a few authors who tackle regulatory aspects expect an increase in regulation in 2019 and 2020. There are some expectations that major platforms will be regulated by 2020 and there is forecast that strict regulation in marketing communication will emerge.

In general, regulation should focus on areas of virtual reality, augmented reality, mixed reality, chatbots and digital assistants, and social media influencers.

The results are based on the mixed content analyses of 15 online articles related to this field of study. Qualitative analyses reflected credibility of the provided information according to the quality and number of referred sources served as sources for each analysed article. The basic criterion for the inclusion of the article in the research material was the timeliness of the predictions - that is, the forecasts had to be related to the current period and the near future.

We have identified a number of different topics representing basic background for predicting a future evolution and trends in this area. Based on the qualitative analysis of identified topics, we have been able to present a summary of eight key general categories involving other subcategories.

These general categories of predictions reflect upon **(1) technological innovation, (2) social media transformation, (3) evolution of social media users, (4) business impact of social media evolution, (5) regulations related to above mentioned development, (6) social media as source of information, (7) social media marketing evolution and (8) other trends of social media.**

These categories, and in particular their sub-components, exist in relative interaction with each other and their mutual overlapping is natural.

It is very important to note that we have also identified the technological aspects of online communication, which can be a determinant of transformation or change in communication and activity on social media.

Policy Suggestions

- Regulation should focus on **areas of virtual reality, augmented reality, mixed reality and online/ social media influencers**. This is primarily, but not exclusively, related to the collection and usage of biometric data as well as influencers' disclosure rules applicable to VR social experiences.
- In addition, **social media influencers** may be regulated from the point of view of labour law (it remains open question whether kids-influencers enjoy their activity as a hobby or more like a work), right to transparent and unbiased commercial reviews, and tax-related issues.
- Moreover, there may be explored legal-regulatory issues emerging from **voice search** (and its possible abuses) as well as from „**digital identity**“ (and its possible abuses) in the future.
- There is emerging an issue of possible legal responsibility for advices given by **chatbots** and **digital assistants**, and related aspects, discussed in detail in the core text.
- The regulators/policy makers may again consider to address more efficiently **digital taxes**. This area is emerging a regulatory priority at some national levels, e.g. recently discussed in the Czech Republic, Austria, France and Spain.
- In spite of negative values attributed to use and abuse of social data for commercial purpose, policy makers may consider to use transparently **big data for making rational, evidence-based policy choices and monitoring popular sentiment to avoid populist backlash**.
- Policy makers may wish to consider **cooperation with SM influencers in communicating some specific topics related to e.g. health and data protection**, with citizens.
- **A fast track scientific research on future social media developments** from legal/regulatory perspectives, partly based on above mentioned directions, may be supported.

Introduction

This is an ambitious study, fully aware of its methodological limitations, exploring very short term developments of social media with a specific focus at possible regulatory challenges that policy makers may face now or in near future.

Dowerah-Baruah (2012) links social media with „web-based and mobile technologies“ which support an interactive character of dialogic communication. At the same time, the author points out at quite diverse characteristics of category of social media, since it includes wide variety of online magazines, forums, social blogs, weblogs, microblogging, wikis, podcasts, social bookmarking or social networks supporting social interaction and community building.

Foreman (2017) claims that the time when social media could be categorized according to their pragmatic or functional capabilities is over. Foreman offers a list of 10 general social media categories: social networks (connect people/ Facebook, Twitter, LinkedIn), media sharing networks (share of different types of media – photos, videos.../ Instagram, Snapchat, YouTube), discussion forums (space to spread news and ideas/ Quora, Reddit), bookmarking and content curation networks (discover, share or save different types of new content/ Pinterest, Flipboard), consumer review networks (customers can find and share valuable information about businesses and their reviews/ Zomato, TripAdvisor), blogging and publishing networks (space for publishing different content online/ WordPress, Tumblr, Medium), Interest-based networks (support communities created in connection to shared interests and hobbies/ Goodreads), social shopping networks (communities of online shoppers/ Fancy), sharing economy networks (backgrounds for trade of goods and services/ Airbnb, Uber, DogVacay) and anonymous social networks (anonymous *communities* of people/ Whisper).

It is clear that in the age of digitisation social media fulfill many important functions of social interaction, they even often substitute face-to-face meetings. Computer mediated communication is enriched of digital alternatives of nonverbal communication – for example in a form of emojis and GIFs. For example, web page makeawebsitehub.com offers approximately 60 unique social networking sites and instant messaging platforms (WhatsApp, WeChat, Baidu Tieba, Skype, Wiber, Snapchat, Reddit, Foursquare etc.) (Spencer, 2018). The countless number of social networks is a predisposition for their fragmentation or specification on one hand, and their significant role in interpersonal interaction is the basis for commercial communication and interaction on the other hand.

Sprout Social is a firm which developed a marketing analytics software which helps organization to listen to, and analyze their customer desires and behaviour. It also offers features for social management and customer care (Sproutsocial, 2019). This company conducts regularly a research called The Sprout Social Index focused on reflection of the most important specifics of the social media marketing strategy. Index from 2018 underlines that Facebook is still a dominant force in marketing strategies and consumer behaviour and determine that there are three basic goals mainly connected with social marketing - increase brand awareness (80 %), increase community engagement (65 %) and increase web traffic (54 %). Other goals are to generate sales or leads, distribute content, increase brand advocacy from customers or support customers (Sproutsocial, 2018). There is no need discuss in detail importance of social networks (and especially Facebook) in forming attitudes towards various social topics, ie not only in case of brand – customer interaction.

The number and extent of social media issues we as individuals, families, communities and nations face have increasing stunningly in the last decade. The SM environment is changing all the time, and SM induce both accumulative innovation and disruptive revolution at personal, social (especially marketing) and political (especially regulatory) levels. This dimension of SM communication was reflected by many authors (e.g. Mikuláš, 2017, Bačíková *et al.*, 2018, Poláková *et al.*, 2012) reflecting position of social media and their users in everyday-interpersonal-communication, communal communication, social responsibly communication, political communication, etc.

It is evident that SM can be analysed according to various perspectives with a specific determinants of interaction and information exchange process. It is beneficial for our study to identify main categories of current SM trends or predictions of their evolution and transformation. As Hickey (2018) remarks: „reading trends on social media before wide adoption can inform thought leadership and determine business decisions“, and also determine our social interaction and its effectiveness.

Methodology

The main aim of our study is to *identify the key categories of current (2019 and beyond) social media trends or predictions of their evolution and transformation*. To achieve our research goal we have determined our research question as follows: **What are current/ultimate trends (2019 – 2020) in technological innovation in social media and convergence/communication through social media as such?**

We have formulated three research sub-questions to answer the main research question:

RQ1: What is current SM related general framework of topics and their interactions?

RQ2: What are the emerging trends in SM evolution for 2019 and beyond?

RQ3: What is the amount of resources analyzed utilising more than five relevant sources?

In answering these research questions, we faced some well-known methodological challenges. Both Walonick (1993) and Gelpi (2017) underline some basic limitations of forecasting or prediction-making:

1. There is no way to state what the future will be with complete certainty. Regardless of the methods that we use there will always be an element of uncertainty until the forecast horizon has come to pass.
2. There will always be blind spots in forecasts. We cannot, for example, forecast completely new technologies for which there are no existing paradigms.
3. Providing forecasts to policy-makers will help them formulate policy. The new policy, in turn, will affect the future, thus changing the accuracy of the forecast.
4. There is challenge is “overfitting or making models excessively complex.”
5. Both quantitative and qualitative researchers will often overgeneralize models.

In making the first decision on using proper methodology of forecasting we have bounced off the recommendations of Chambers, Mullick and Smith (1971), who suggest to ask following questions:

1. What is the purpose of the forecast—how is it to be used?
2. What are the dynamics and components of the system for which the forecast will be made?
3. How important is the past in estimating the future?

Let us answer these questions one by one.

1) What is the purpose of the forecast—how is it to be used?

We aim here at providing some basic insight regarding possible recommendations of current (2019 and beyond) social media trends or predictions of their evolution and transformation.

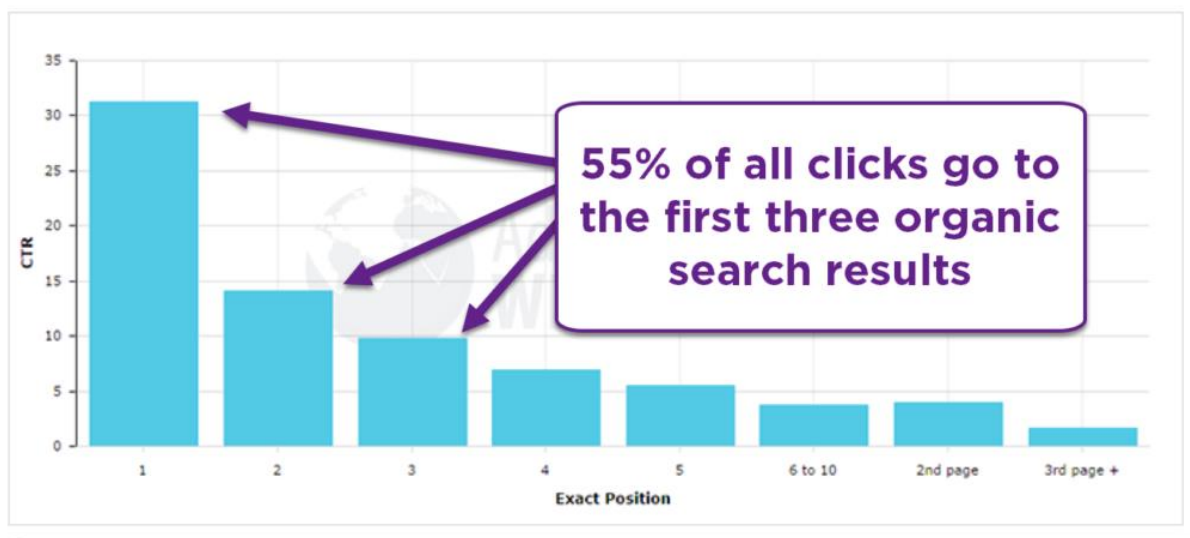
2. What are the dynamics and components of the system for which the forecast will be made?

This is, by definition, quite broad and rapidly evolving area. The components are defined, although there is no consensus about the scope of our targeted sample. We could argue that the basic set is a whole universe of predictions and recommendations for the future direction of technological and legislative/regulatory developments in the SM area. However, to get the exact and final number of these predictions (in the form of articles, blogs, professional and scientific outputs etc.) is practically impossible. Therefore, we have chosen a Google search engine as the basic determinant of our universe of baseline predictions. We have acquired a basic set of 30 online resources of different nature (blog posts, posts in online magazines, professional outputs etc.),² based on utilising the keyword „social media“ in combination with terms „forecast“, „prediction“ and „regulation“. For this keyword combination we have worked with the results from the first three pages of Google, assuming that each relevant source aspires to rank on position of the first three sources in first page SERP results based on organic search (Figure 1) (BlueCorona, 2019). The selection of sources was done in spring of 2019. However, we have also included the results from the 2nd and 3rd page of Google results in our core file. These results were analysed according to topics and content relevancy and according to our two criteria there were selected 15 articles which were analysed in-depth.

We use term communities according to an Oxford Dictionary interpretation of this term as mass noun with the meaning of „condition of sharing or having certain attitudes and interests in common“ (Dictionary, 2019)

When deciding on selection or compilation of research material we also considered the analysis of outputs within indexed scientific databases or specific journals. This choice would undoubtedly make a significant contribution to the scientific dimension, but in the case of primary analysis in the databases, the most research-oriented resources in social media research were not focused on identification of some predictions or further development and technology or convergence trends connected with social media. On the other hand, it is important for us to reflect not only scientific and professional outputs, but also outputs of a professional-popular nature, which are mostly based on the author's professional activity in the given area and at the same time they are more likely to be disseminated to a larger set of readers. This aspect can be consider as possible weakness or strength of our study methodology, depending of reviewer's perspective.

Figure 1: Importance of rank on Google



Source: Blue Corona, 2019 (<https://bit.ly/2qTCsQR>)

We then randomly selected a total of 15 sources meeting our two criteria:

1. **Relevancy** - source need to be focused on trends or regulations associated with SM activity.
 1. Analyses of headlines – it must consist at least one key word or key word phrase
 2. Analyses of content – content of the article must be relevant
2. **Recency** - trends must be linked to the current period.

Social media is moving at a tremendous pace, although we have mentioned that the relevant period goes as much as 10 years back, we have chosen articles

1. which have been released for a maximum of a year backwards (2018)
2. focused on predicting trends in the coming years (2019 and beyond).

This aspect answer also the third question suggested by Chambers, Mullick and Smith (1971):

3. How important is the past in estimating the future?

The past estimating the future in case of our study is about a decade old and in hindsight it documents unexpected changes and developments. There is probably no other sector in history that has evolved so rapidly in so short time and so globally, so we decided to consider mainly year 2018 and beyond. However, we do not exclude that it would be appropriate to carry out a retrospective analysis of identified trends in order to verify the validity of the predictions themselves in near future.

Subsequently, we have summarized the sources which analysis is provided in Table 1.

In general, Chambers, Mullick and Smith (1971) recommend that the forecaster should

prioritise a technique that makes the best use of available data. Moreover, the forecaster should be satisfied with "a technique of acceptable accuracy" that also considers cost of obtaining an information. Armstrong and Green (2016, 18) agree that forecasters should use methods that are no more complex than necessary to develop the simplest model that is consistent with knowledge about the situation. Classifications of future studies and its methodologies lead to two basic groups of methods: Quantitative (numerical or measured) and Qualitative (hypothesis or judgement) or Explorative (looking at ongoing trends and exploring where they may lead us in future) and Normative (Malhotra, Das and Chariar, 2015).

As mentioned, our aim was to identify *main categories of current (2019 and beyond) social media trends or predictions of their evolution and transformation*, so we focus on qualitative research strategy in the following part. Considering basic types of qualitative forecasting methods: Delphi method, Market Research, Panel consensus, Visionary forecast, Historical analogy (Chambers, Mullick and Smith, 1971), or alternatively Delphi Surveys, Futures Wheel, Simulation and Games and Agent Based Modeling¹ (Saleh, Agami, Omran and El-Shishiny, 2008) we opted for the visionary forecast method which uses *expert opinion, insight, judgments, and different scenarios of future*. Walonick (1993) includes this method among group of Consensus methods. Applying qualitative content analyses we have carried out meta-analyses of visionary forecast. Our main research categories were topics and specific predictions connected with social media technology evolution, trends, regulations and content convergence. We have also analysed quality or expertise of the author according to his/her online identifiable activity and presence in social media and online communication related areas. We have also analysed the presence of supporting sources and argumentation in analysed visionary forecasts. As mentioned, our forecast is based on experts opinions collected via Google search with key terms "social media" and "prognosis" or "forecasting" and/or "regulation". There have not been identified specific information sources that would provide an answer to our questions and we have not found study similar to our concept, so we consider our study as exploratory descriptive research design.

The possible weakness of our methodology is what some call "*unaided expert judgments*". Armstrong and Green (2016, 5) explicitly warn that "While *unaided expert judgments* should be avoided, topic experts can play a vital role in forecasting when their judgments are incorporated using evidence-based methods." Some of experts' forecasting social media developments did not use any evidence, these experts just stated their opinions. We have tried to eliminate this possible drawback by a more extensive sample. Armstrong and Green (2016, 7) suggest, referring to Hogarth (1978), that forecasters should obtain forecasts from at least five experts – we have actually obtained forecasts from three times higher number of experts and professionals in this area.

To improve our results further, we used multiplicative decomposition. This involves dividing a forecasting problem into parts, forecasting each part separately, and multiplying the forecasts of the parts to forecast the whole. Thus, by addressing and predicting changes in social media development and use, this deliverable uses an analytic method that (1) clusters associated terms and trends to constitute meaningful social media related framework of topics and their interactions, and (2) in doing so, identifies emerging trends in social media for 2019 and beyond.

¹ Neither Delphi method, nor Panel consensus method or Marker research could be used by us. We did not have either resources, or time for use of these three methods. Moreover, for the two of these three methods, as well as for Historical analogy method, factor of past is important. Therefore, these methods are less suitable for our purpose.

Results

Answers to our research problem and related research questions are reflected in Table 1. As already mentioned, the results are ranked based on the relevance of the outputs or predictions based on the presence and total number of relevant sources used to generate that particular statement or *visionary forecast*.

We also supplemented the qualitative analysis with information about professional activity of the author of the visionary forecast. However, this analysis has only complementary nature, since it was not the primary purpose of our research.

Furthermore, we highlighted in green direct mentions of a need of regulation.

The results are supported with Hogarth (1978) who recommends the establishment of an analysis on at least five professional opinions/resources. We identified that seven out of seventeen analysed sources were on the basis of highly relevant background resources, four sources were considered to use semi-professional background information (they utilised three – four sources) and further six analytical sources were considered to be relevant, but not at a professional or expert level. However, the absence of a relevant or reliable resources may not directly reflect the low level of prediction expertise, but it is certainly necessary to confront these predictions with other visionary predictions.

Table 1: Summary of identified SM trends and predictions

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
01	<ol style="list-style-type: none"> 1. There will be increase of SM users. 2. SM is going mobile. 3. Social messaging overtook social media. 4. Social messaging will greatly benefit businesses. 5. Chatbots are becoming the norm. 6. Businesses will have to improve social customer service. 7. Organic reach and referral traffic are plummeting. 8. Video will be (still) the most popular content type. 9. UGC will help drive reach and engagement. 10. Businesses are pouring more money into social ads. 	<ol style="list-style-type: none"> 1. Techcrunch - techcrunch.com; 2. State of Social 2018 Report - report done by Buffer in cooperation with Social Media Week - inspired by Internet Trends Report by Mary Meeker; 3. Statista, 4. Facebook IQ; 5. comScore's 2017 US, 6. VentureBeats; 7. Business Insider; 8. Juniper Research, 9. SproutSocial 10. Social@Ogilvy; 11. Buzzsumo; 12. Simply Measured; 13. Instagram; 14. eMarketer 	Contributor for Medium Corporation, Bufferapp.com and entrepreneur.com

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
02	<ol style="list-style-type: none"> 1. Chatbots automization – AI will impact communication. 2. Content will need to be interactive (good interactive video related to products). 3. Need for originally completed profiles, which will support transactions. 4. AR will improve communication – in will get a real Look into communication. 5. The impact of Influencer marketing will grow. 	<ol style="list-style-type: none"> 1. Softscripts.net 2. Adage.com 3. Snapapp.com 4. Learn.g2crowd.com 	The author is member of Soft Script online marketing agency and writes blogs for their page. There have not been identified other sources referring to him.
03	<ol style="list-style-type: none"> 1. SM growth will continue. 2. Product discovery goes social. 3. Social selling will become a new norm. 4. Generation Z will set social trends. 5. Social video will dominate. 	<ol style="list-style-type: none"> 1. Hootsuite , 2. We Are Social, 3. Ryan Homes (CEO of Hootsuite); 4. Global WebIndex Study, 5. comScor 6. Mark Zuckerberg; 7. Statistics; 8. Tubular Insights 	The author is member of DubaiMonsters design studio and writes blogs for them, there have not been identified other sources referring to him
04	<ol style="list-style-type: none"> 1. Product discovery becomes more visual (and social) (use of voice control, visual searches, chatbots, messagig apps...). 2. SM usage will grow 3. There will be huge social video saturation—and evolution. 4. Social commerce will make a new push. 5. Gen Z will be driver of VR and AR adoption. 6. Social CEOs will become the new norm (by 2020, we'll see the greatest impact on two areas: employer branding and the rise of executives who understand—and know how to use—social to listen to customers, communicate their vision, and rally employees). 7. By 2020, we'll see digital dominance of Google and Facebook slightly shrink, while Amazon's and Snapchat's influence grows. 8. AR will be everywhere. 9. Messaging apps will play a key role in this mobile-centric world. 10. There will be neccessity to rise of regulation due to increase of Fake News. 	<ol style="list-style-type: none"> 1. Ryan Holmes - Hootsuite CEO, 2. Global Web Index reports; 3. Andrew Ng - Baidu; 4. Ben Silbermann - Pinterest's founder and CEO; 5. Mark Zuckerberg; 6. Tim Merel- Techcrunch.com; 7. Edelman Trust Barometer; 8. eMarketer - Rani Molla; 9. Mary Meeker - recode; 10. Suzie Shaw & Simon Kemp - Vivid Ideas; 11. Facebook IQ; 	The author is a senior copywriter and content strategist on Hootsuite's brand team ; he worked at a few ad agencies creating B2B campaigns for Google, Intuit, Thomson Reuters, AppLovin

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
05	<ol style="list-style-type: none"> 1. The Internet will catch up to television in 2019 in terms of hours watched. 2. There will be a deep integration of SM into all services. 3. The Live video and Story option is on the increase. 4. Chatbots continue growing (and it will impact the communication). 	The author is referred only to disenoideas.com.	The author works for Disenoideas Website & App Designers and before worked for Marbella Wordpress Designer. There have not been identified other sources referring to him.
06	<ol style="list-style-type: none"> 1. AI will grow and be implemented more in communication. 2. Smart Speakers will be more implemented in communication and browsing activity. 3. Virtual Spaces will be „formed“. 4. The number of people using private messaging services such as Messenger, WhatsApp, and Snapchat will exceed the number of people using public SM platforms (the use of SM is still growing, but the use of these private networks is growing faster). 5. Impact and necessity of Conversation marketing will grow. 6. The talent gap growth - We have an entire generation of marketers who are faking it and this needs to be changed. 7. There will be Government regulations of online and SM communication. 8. Personal branding becomes the company brand – consumers trust people and their stories. 9. Influencer marketing will still grow. 10. In marketing communication is needed to create content that moves (Content that Shocks). 	<ol style="list-style-type: none"> 1. Mark Benioff - salesforce.com, 2. Chairman & Co-CEO; 3. Keith Weed - Unilever, 4. Kevin Kelly 	Chieftain of the blog {grow}, strategy consultant, educator, podcaster. The author of books <i>Return On Influence, The Content Code, and The Tao of Twitter</i> .

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
07	<ol style="list-style-type: none"> 1. Video will be the content with the best ROI. 2. Ephemeral Content Storytelling will „rule“. 3. Influencer Marketing will have still greater impact. 	<p>The author uses internal links to articles of other authors at digitalmarketinginstitute.com and her own articles at Forbes.</p>	<p>Kate Talbot is a marketer consultant for early-stage startups, <i>author, and entrepreneur who helps brands engage millennials</i>. She's been featured on NBC News, CNBC, Huffington Post, VentureBeat, CIO Magazine, American Express Open Forum and named an Instagram Marketing Expert from Foundr Magazine and Social Media Examiner. Kate wrote a best-selling book, "Oh Snap! You Can Use Snapchat for Business"</p>
08	<ol style="list-style-type: none"> 1. New technologies (AR, VR, Voice Assistants) will be opportunity for brands. 2. AI will change communication at all. 3. Altered Reality (AR, VR, MR) will change communication. 4. Social networks create a new TV model somewhere between traditional TV model, streaming media and video-on-demand. 5. SM marketing and advertising is focused on experience. 6. Influencer marketing will stay as power for brands. 7. Video is a HYPE. 8. Gen Z expresses the strongest desire to protect its personal data profiles (it will impact their activity and behaviour on SM). 9. SM need to protect from Fake News. 10. Integration of SM into the union of social and mobile commerce (this model has become reality in China). 	<ol style="list-style-type: none"> 1. Bloomberg, 2. Tijman Shep, 3. Kantar TNS's research 	<p>The author is a head of Global Brand & Comms Kantar Media. Ex Capgemini and LinkedIn.</p>

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
09	<ol style="list-style-type: none"> 1. SnapChat and Twitter will be cut in half. 2. Every digital media firm other than FB, Google and Amazon Media Group loses shares. 3. Amazon becomes one of the five largest media firms. 4. Decrease of VR and increase of AI. 5. Amazon is going to be the most valuable healthcare company in the world (it has the best data set on the two-thirds of US households). 6. The consumer world begins to distill to a small number of mega brands or networks that are recurring revenue bundles ("rundle"). 7. Digital Identity - the way we define and validate our personal selves is going to be a key topic in the year ahead. 	<ol style="list-style-type: none"> 1. Pewresearch, 2. Businessinsider, 3. CNBC, 4. The Verge 	<p>Founder of L2 Inc, Prophet, professor of marketing at the New York University Stern School of Business, public speaker, author (<i>The Algebra of Happiness: Notes on the Pursuit of Success, Love, and Meaning; The Four: The Hidden DNA of Amazon, Apple, Facebook, and Google...</i>) and entrepreneur.</p>
10	<ol style="list-style-type: none"> 1. There will be a rise of private groups and accounts. 2. Time of conversational commerce (chatbots) is coming. 3. Transparency of brands on social media need to be increased. 4. Facebook will lose in market value. 5. Stories receive major updates. 6. Employees will pose as trusted influencers. 7. Importance of analytics dashboard will increase. 	<p>The author use as referred sources links to other <i>sproutsocial.com</i> sections and links to <i>examples of products or agencies</i> connected with mentioned information.</p>	<p>Jenn Chen is an SF-based digital strategist, photographer, and writer who works with specialty coffee companies to make them look awesome online.</p>
11	<ol style="list-style-type: none"> 1. Media consumption won't increase. 2. In 2021 roughly 2 billion people will be using a digital assistants (50% of all search queries will be conducted through voice search). 3. Smartphone cameras will place a big role in media consumption- search for product by taking a photo. 4. By 2019 audiences will be almost the same amount of time watching television as they will be browsing the internet. 	<ol style="list-style-type: none"> 1. Mary Meekers - Quartz 2. Rani Molla - recode.net 3. Jan Dawson - recode.net 4. Smart Audio Report - National Public Media 5. Christopher Heine - AdWeek, 6. Taylor Martin - Cnet.com 7. David Pierce - Wired.com 8. Ilyse Liffreing - digiday.com 9. pwc.com 	<p>The author is the Insights Editor @AMStrategy, Medium Corporation (medium.com).</p>

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
12	<ol style="list-style-type: none"> 1. Full adoption of new technologies - by the year 2020 about 2.5 billion smartphones will be in use. 2. Continued adoption of new technologies will make the world more transparent and consumers will demand better services. 3. Selectivity- new media will enable consumers to be very selective about which companies he or she is linked with. 	<ol style="list-style-type: none"> 1. Jeanne Lewis - CEO of Capsure; 2. Jay Singh - CEO of PHL Venture Company 	<p>The author is considered as expert in customer focus in a digital marketing, keynote speaker and inspirator. He was a member of a A-list speakers at Retail Summit 2019 (Prague).</p>
13	<ol style="list-style-type: none"> 1. By 2020 we'll be seeing more prominent SM users who don't remember a time before SM (Transformation of demographics- grow of the number of social media users and their diversification). 2. SM as extraordinary sense of data - by 2020, you'll have a world where SM can analyze billions of users to create a conclusions about user behavior. 3. Content will need to be individualized - customizing content for each individual. 4. Today's SM will be seen archaic - social platforms, social customs, and communication standards are all in a constant process of evolution. 5. SM will integrate seamlessly with life. 6. Actions will be more important than messages - in 2020, it's more likely that actions will be integrated into SM streams, what means that social messages and produced content will need to have more of an "experiential" factor. 	<p>Author uses only references on site <i>audiencebloom.com</i>. There are <i>no other sources</i> linked with offered predictions.</p>	<p>Author works/writes for <i>audiencebloom.com</i>. We have not identified (found) other relevant sources connected with this author.</p>

	Predictions and headlines of identified trends	Used sources and references	Expertise of the author
14	<ol style="list-style-type: none"> 1. By the end of 2020 majority of online purchases might be done through a social channel. 2. By 2020 will be social search expanding. 3. Social platforms will blend into one seamless experience with multiple facets. 4. Social feeds will be filled with news and automatically assembled pieces of content. 5. Next-generation of SM platforms will systematically learn our preferences and offer content and results based on reflection of our preferences. 	<p>Author referenced only in two sources - Christina Warren – <i>mashable.com</i> and page on <i>business.pinterest.com</i></p>	<p>The author is a contributor for Entrepreneur and Forbes, has own professional blog and writes for <i>socialmediaexplorer.com</i>.</p>
15	<ol style="list-style-type: none"> 1. There will be a rise of AR 2. Instagram Stories will increase in popularity. 3. Influencer marketing investments will increase. 4. Brands will invest in platforms used by Gen Z - increased buying power. 5. Brands will invest more in communication with customers on messaging platforms. 6. Live streaming will be used to capture the attention of followers. 7. Twitter leadership will have to rethink how the platform operates - decrease of followers/ users of this platform. 8. Digital hangouts will become a mainstream. 9. Facebook Spaces will be the first successful VR social media product. 10. Social platforms embrace a stronger governance policies. 	<ol style="list-style-type: none"> 1. Statista, 2. Apple, 3. Snapchat, 4. Instagram, 5. Linqia - <i>go.pardot.com</i>, 6. Sarah Shannon - Business of Fashion, 7. Goldman Sachs Group, Inc. 8. Study, 9. Laurie Fullerton - <i>thedrum.com</i>, 10. Matthew Lynley, Josh Constine - <i>Techcrunch.com</i>, 11. Casey Newton - The Verge, 12. Scott Shane & Mike Isaac - <i>nytimec.com</i>, 13. Colin Dwyer - National Public Radio, 	<p>Deep Pate is the author of <i>A Paperboy's Fable: The 11 Principles of Success</i>. The book was the #1 best business book in 2016 by Success Magazine and named the best book for entrepreneurs in 2016 by Entrepreneur Magazine.</p>

Sources²

² Source: Table reflects results from qualitative analyses of following sources:

01= Lua, A. 2018 *Social Media Trends Report: 10 Key Insights Into the Present and Future of Social Media*. Buffer.co, : <https://bit.ly/2wtqGix>

02 = Saikumar, S. 2018. *Top 5 Trends for Future Social Media Marketing*. Softscripts.net, <https://bit.ly/2OW4LcD>

03 = Hasan, S. (2018), *Envisaging the Future of Social Media: The Face of Social Media Landscape in 2020*. Dubaimonsters.com, <https://bit.ly/2wulwT0>

04 = Mulvey, J.(2018).*Social Media in 2020: 11 Data-Backed Predictions*,blog.hootsuite.com, <https://bit.ly/2KcE43u>

05 = Hopkins, D. (2018), *The future Social Media / Digital Marketing Trends in 2019*. LinkedIn.com, <https://bit.ly/2T9qiAl>

06 = Schaefer, M. (2018), *10 Ideas driving the future of social media marketing*, businessesgrow.com,

In the Table 1 we have identified a wide variety of predictions, trends and recommendations for policy regulation. Based on these data, we can furthermore identify these eight framework categories and topics which are usually in interaction with each other³ The green colour suggests areas of possible regulatory intervention.

1. Technological innovation (9)

- a. Full adoption of new technologies (5)
 - i. Adoption of new technologies in general (1)
 - ii. AI in general (4)
 - 1. Chatbots (2)
 - 2. Smart speakers (2)
 - iii. New reality (4)
 - 1. Integration of altered reality (1)
 - 2. Decrease of VR (1)
 - 3. Increase of AR (2)

2. Social media transformation (20)

- a. Change of platforms (12)
 - i. Social messaging (3)
 - ii. Social media goes mobile (1)
 - iii. Virtual spaces (2)
 - iv. Creation of new TV model on social media (1)
 - v. Social media *technological evolution* (5)
 - 1. Today's SM will become archaic (1)
 - 2. SM will integrate seamlessly with life (1)
 - 3. Social platforms will blend into one seamless experience with multiple facets (2)
 - 4. Digital Hangouts will become a mainstream (1)
- b. Social media usage (6)
 - i. SM usage growth in general (2)
 - ii. Snapchat and Twitter will cut in half (1)
 - iii. Facebook will loss in market values (1)

<https://bit.ly/2ETPVAC>

07 = Talbot, K. 3 *Trends Defining The Future of Social Media for Business*. [online] digitalmarketinginstitute.com [2018]. Available at: <https://bit.ly/30WsmQn>

08 = Patel, R. *Social Media Trends 2018*. [online] kantarmedia.com [2018]. Available at: <https://bit.ly/2WyDzXY>

09 = Galloway, S. *2019 Predictions*. [online] l2inc.com [2019]. Available at: <https://bit.ly/2VL1WYD>

10 = Chen, J. *7 social media trends to watch in 2019*. [online] Sproutsocial.com [2018]. Available at: <https://bit.ly/2q2tTRj>

11 = Harkins, S. *In the Year 2020: Preparing for Future Trends in Media Consumption*. [online] medium.com [2018]. Available at: <https://bit.ly/30ZFowo>

12 = van Belleghem, S. M. *Are you ready for Marketing 2020?* [online] oursocialtimes.com [2013]. Available at: <https://bit.ly/2pZunKk>

13 = Wilson, N. *6 Social Media Shakeups We Predict to Occur By 2020*. [online] Audiencebloom.com [2014]. Available at: <https://bit.ly/2KgV3Bl>

14 = Alton, L. , M. *How Social Media Will Change By 2020: An Informed Hypothesis on the Future of Social*. [online] socialmediaexplorer.com [2017]. Available at: <https://bit.ly/2l0CJwy>

15 = Patel, D. *10 Social-Media Trends to Prepare for in 2018*. [online] Entrepreneur.com [2017]. Available at: <https://bit.ly/2wUCv4D>

³ Numbers in brackets reflect the frequency of occurrence of a given topic in the analyzed file.

- iv. Increase of number of private groups and accounts (1)
- v. Social search will be expanding (1)
- c. Social media algorithm (2)
 - i. Next generation of SM feeds will be filled with news automatically and will offer content based on preferences of the SM profile owner (2)

3. Evolution of Social Media Users (6)

- a. Specifics of social media users (4)
 - i. No. of SM users (3)
 - 1. No. of SM users increase (2)
 - 2. Diversification of SM users (1)
 - ii. Twitters' number of users decrease (1)
- b. Dominant users (2)
 - i. Generation Z (also a driver of VR and AR adoption) (2)

4. Social media evolution impact on business (19)

- a. Integration of customer services and social media (5)
 - i. Integration of customer services and social media (in general 2)
 - ii. Business will benefit from social messaging (2)
 - iii. Conversational marketing/chatbots (1)
- b. Promotion on social media (5)
 - i. Businesses will invest more money into social media commerce (2)
 - ii. New technologies as opportunity for brands (VR, AR) (1)
 - iii. Integration of social media into union of social and mobile commerce (1)
 - iv. Consumer world will focus more on a small number of mega brands or networks (1)
- c. Social media as source of information about product (9)
 - i. Product discovery (3)
 - 1. Product discovery goes social (2)
 - 2. Smartphone cameras will place a big role in media consumption.- search for product by taking a photo (1)
 - ii. Social selling will become a norm (2)
 - iii. Transparency (3)
 - 1. Transparency of brands on social media needs to be increased (2)
 - 2. Selectivity- new media will enable consumers to be very selective about which companies he or she is linked with (1)
 - iv. Brands will invest in platforms used by Gen Z (1)

5. Regulations connected with identified transformations (6)

- a. Rise of regulations due to increased potential of fake news spread (2)
- b. Government regulations of SM with focus at transparency and better integrated services (2)
- c. Gen Z and Digital Identity– desire to protect their personal data profiles (2)

6. Social media as source of information (2)

- a. Creation of „social CEOs“ who will find important information about customers and employees on SM (1)
- b. SM as opportunity to analyse billions of users to predict or describe their behaviour (1)

7. Social media marketing evolution (according to identified trends) (23)

- a. Content (15)
 - i. Content characteristics (3)
 - 1. Unique content with experiential factor (2)
 - 2. Customized (1)
 - ii. Video (8)
 - 1. Video as the most popular content type (6)
 - 2. Live video/ streaming (2)
 - iii. Ephemeral content (3)
 - 1. Ephemeral content storytelling (2)
 - 2. Instagram stories (1)
 - iv. Profiles (1)
 - 1. Originally completed profiles (1)
- b. Traffic (2)
 - i. Organic reach and referral traffic are plummeting (1)
 - ii. UGC can drive reach and engagement (1)
- c. Communication (5)
 - i. Conversation marketing (1)
 - ii. Influencer marketing (4)
 - 1. Increase of influencer marketing (in general) (3)
 - 2. Transformation of influencer marketing (1)
- d. Skilled marketers (1)
 - i. Talent Gap – entire generation of marketers who are faking it (1)

8. Other trends of online communication which are supported or linked with mentioned aspects of social media transformation and evolution (9)

- a. Change of the Internet position (3)
 - i. The Internet will catch up the television (2)
 - ii. Media consumption won't increase (1)
- b. Change of specific platforms influence (4)
 - i. Amazons' and Snapchats' influence grows (1)
 - ii. Amazon Media Group, Facebook and Google share increase /other media will lose share (2)
 - iii. Amazon is going to be the most valuable healthcare company in the world (1)
- c. Transformation of Identity in the digital age (1)
 - i. Digital Identity (1)
- d. Online data analyses (1)
 - i. Importance of analytics dashboards will increase (1)

Before we will analyse these results further, it is necessary to specify that identified topics are included within specific categories, but these categories are overlapping/interacting with

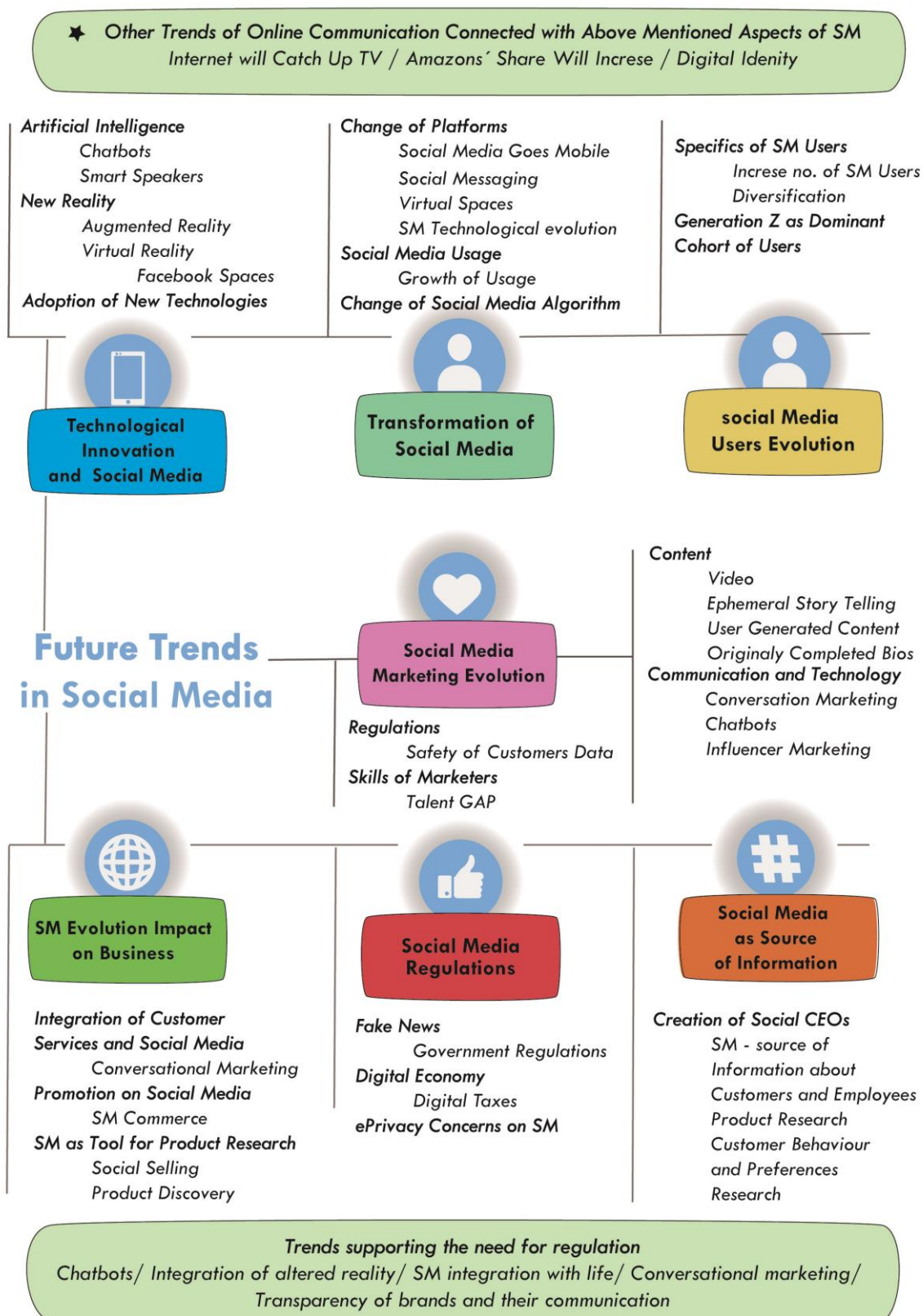
each other and can be further mutually influenced. We do not recommend to consider any of these categories solitary, but rather to interpret them in relation to other identified categories and elements.

There are especially three categories which are at the forefront with a relatively high representation within the visionary forecasts, against the background of various sub-categories falling within the given category (*thats why the number is higher than 15*): **Social media marketing evolution** (according to identified trends), **Social media transformation** and **Social media evolution impact on business**.

Analysis

To make the identified trends and related thematic areas more transparent, we have created specific infographics. In the next section, we will discuss in more detail the identified individual areas/categories and the specific examples to answer our overall research problem and identified research questions.

Figure 2: Reflection of Current SM Trends and Predictions



Presented graph does not reflect all unique identified predictions, only the most relevant ones. There is also important to note, that identified categories may overlap each other and support further modifications

Source: own research

1. Technological innovation

The first category includes predictions related to progress in the field of technologies used - adoption of AI into communication process⁴ (chatbots, smart speakers etc.) and new realities (AR, mixed reality, VR). These technological changes can have a direct impact on the behavior of SM users, functionality and the algorithms of SM, although their relevance to SM may not be so self-evident. Interestingly, most of the identified trends, predictions or recommendations have been linked to commercial communication on SM and the marketing communication.

Thus, first important technological innovation changing SM communication are chatbots. As Lua (2018) argued „...chatbots are becoming the norm.” This trend appears to be clear from the fact that 80 % of senior marketing executives worldwide are already using, or plan to implement chatbots as part of their business communication by 2020 (Nguyen, 2017). That is corroborated by Fennell (2018) who recalls the claim by IBM “that by 2020 85% of all customer interactions will be handled by chatbots”. Chatbots can be integrated into messenger platforms and can be also linked with web page. In this context, the question of the competitiveness of chatbots and email marketing comes to the fore. Is it possible to perceive chatbots as a modern alternative to email marketing? Chatbots can serve also as “platform” for news distribution, so it can be considered as alternative to newsletters, which are delivered at social media messenger platforms.

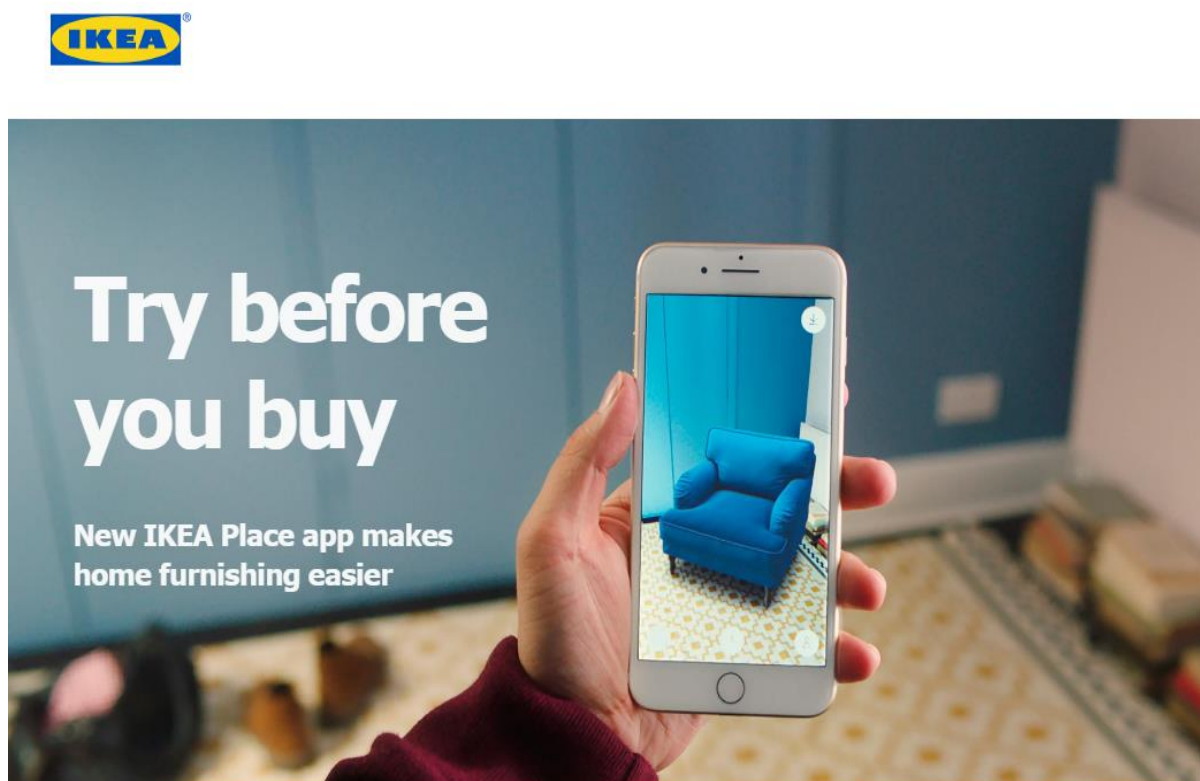
The second important category of technology innovation is connected with smart speakers and digital assistants - Siri, Amazon Echo, Alexa. According to Harkins (2017) *„It’s estimated that by 2021, roughly 2 billion people will be using a digital assistant and 50% of all search queries will be conducted through voice search.”* Further progress is related to the new possibilities of smartphone use - for example, wider range of applications for smartphone cameras. Our digital assistants can be voice controlled, so the search is also done by the voice command. This command is then used as “plant” for receiving appropriate ads on social media. We have to note that there is still a little number of people using voice commands for SM postings. Customers mostly make a phone call, make an online search, write a text etc. (De Vivo Bustillo, 2017).

The third important technological change is connected with new realities – (VR, AR or MR). Fennell (2018) points out that AR and VR were growing in 2018 and are expected to keep growing in 2019 especially in commerce by allowing consumers to “virtually try products” before buying. However, Galloway (2019) expects decrease of VR and forecast increase of AR use and commerce implementation. Concurrently, and even more notably, AR has been in the limelight.

In this context, AR has already been used extensively by IKEA in brand mobile applications allowing potential buyers to preview how furniture may be arranged or fit into the spaces in their homes or workplace even before they purchase them. AR makes it possible to digitally place showcased furniture in the household (Saikumar, 2018). Mostly designed to be playful and engaging, other prominent branded applications using AR include those of LaCoste, Tesco, MTV, New York Times, and Cadbury etc. (Harkins, 2017) (Figure 2 below).

⁴ The Commission has established a new High-Level Expert Group on AI in 2018.

Figure 2: The Application of Augmented Reality by IKEA



Source: <https://highlights.ikea.com/2017/ikea-place/>

As Fennel (2018) points out, AR has been also part of so called “visual search” for e-commerce which was initially manifested by Google Lens and now followed up by popular platforms like Snapchat. Users can use Snapchat to identify and buy products via provided AR interface. Many authors argue AR to be more preferred than VR - some authors view VR only as *hype* (Hlavenka, 2019; Galloway, 2019). However, the former trend is being reflected in some prognostics of SM transformations – Facebook Spaces, 360-degree videos and cover photos etc. (more information about VR and SM is offered in the next section).

2. Social media transformation (20)

Second identified framework of forecasts is slightly connected with already mentioned technological innovation which support SM platforms change of communication (i.e. social messaging and use of chatbots, formation of virtual spaces, use of mobile phones etc.) and also to other technological evolution of SM platforms mostly connected with their integration into one seamless experience. However, within this framework, we also come to the very way of use and the functionality of the transformed SM (increase in usage, the decline of some networks (Twitter), the increase in social search, etc.). The last category within this framework is linked to the SM and networking algorithm itself, which will continually support primary content relevant to the recipient's interests (profile owner) and support its solid relationships within the existing community of friends or family.

These changes are mostly the result of convergence. In the next part of this text we shall more specify some selected trends - use of mobile phones, social messaging and conversation marketing and virtual spaces.

As Kulkarni 2017) pointed out „*No clumsy borrowing between web and phone platforms - seamless integration. The future of the internet is mobile, so it stands to reason that mobile-native platforms will be built to last*“. The importance of smartphones and mobile-native platforms is expected to be reflected in growth of social messaging platform by users (Patel, 2017; Lua, 2018; Mulvey, 2018) which support conversational marketing and the need for the implementation of chatbots. According to Lua (2018) SM are going mobile, and Mulvey (2018) suggests “mobile centric world”, where messaging apps will play a key role. Mobile usage of SM creates a linkage with social messaging and conversational marketing. Conversational marketing or conversation marketing is a one-to-one approach to marketing. Unlike traditional marketing, conversational marketing uses targeted, real-time messaging and intelligent chatbots instead of lead capture forms — that way leads never have to wait for follow-ups, and can engage with your business when it’s convenient *for them* (like when they are live on your website)(Devaney, 2018). In Fennel’s perspective (2018), “*A recent Facebook survey showed that 69% of users had more confidence in brands that they could message directly*” and that messaging apps will be one of the primary channels for interacting with customers.

Mobile centric world (Mulvey, 2018) represents a great predisposition for full implementation VR and AR potential. In case of SM we can meet in “virtual spaces” (Schaefer, 2018). Nevertheless, there are some studies which pointed to Facebook Spaces as a platform created to allow friends to connect in VR (Patel, 2017). Facebook has been working on a project called Spaces, designed to allow friends to connect via VR. As Patel predicted in 2017, “*Facebook is poised to scale Spaces in 2018.*” This project has been launched and users are able to use a beta version of Facebook spaces.⁵ To corroborate that, Garcia (2019) points out there is a growing number of social VR platforms following the Facebook example. That includes in particular VRChat⁶ and AltspaceVR⁷ (acquired lately by Microsoft) which offer even more flexible platforms where many users can share very rich and interactive experiences. In particular those highly customisable platforms encourage the community to create new virtual worlds to socialize in and new VR content to interact with. Another new example of VR social media is BigscreenVR⁸ that offers social movie watching with other people. Garcia (2019) expects “*VR social networking platforms skyrocket in popularity much like Second Life, Myspace, and Facebook did in the early 2000s*” and that “*VR will likely transform social networking into something entirely new and truly unique*”. Some authors like Kabrovski (2017) expect that the unique combination of VR and SM may generate marketing opportunities: “*we will see the birth of new formats and types of experiences (...) this will ultimately create more advertising opportunities for brands*”.

A very specific type of content that bridges the current SM and the emerging VR-SM are 360-degree videos. Facebook and YouTube already offer full support to viewing 360-degree videos on their platform via mobile and desktop interfaces. However the true immersion can be only achieved by using Facebook Spaces or other dedicated 360-degree VR apps. In this context, Garcia (2017) recalls that “*29% more people would view a 360-degree video over the same video in a traditional format*”. The expectation of great uptake of 360-degree videos is corroborated by Enthoven (2018) who argues that 360-degree experience brings better

⁵ <https://www.facebook.com/spaces>

⁶ <https://www.vrchat.net/>

⁷ <https://altvr.com/>

⁸ <https://bigscreenvr.com/>

sense of trust which is particularly important in the era of ubiquitous fake news. In particular Enthoven believes that “VR and 360-degree videos will become a standard of trust in 2019”.

The 360-degree video advantage discussed, gives clear leverage to the further developing Facebook Spaces and other social-VR platforms.

3. Evolution of Social Media Users

We focused here on predictions related to the increase, decrease or leverage of SM users. On the one hand, Hasan (2018) argues: *„In addition to skyrocketing social growth, we will also see some shift in the popularity of different social media channels. The market leaders of today will slowly lose ground against some emerging players.“* On the other hand, demographics of social media are changing. Especially teenagers are leaving Facebook, and many of them do not want to join FB because their parents and grandparents are there present too (Kulkarni, 2017). In some countries, e.g. in the USA, it seems that audiences’ consumption habits level off (Harkins, 2017). Mulvey (2018) also highlighted the increase in the number of users belonging to older age groups: *„By 2020, we’ll see the increased dominance of Instagram, especially among older demographics“*. On the other hands, Patel (2018) underline that *“Twitter leadership will have to rethink how the platform operates”,* because there is predicted huge decrease of platform users.

As outlined earlier, the dominance of Generation Z over other users of social media is expected to be the major driving force behind further SM evolution, with the impact on VR and AR adoption (Mulvey, 2018). The author argue that *“ 22 percent of Gen Zers are using geofilters each month. Gen Zers who are watching social videos each month are 40 percent above average for using online sources to research products. They also are influenced by social reviews, admitting that lots of “likes” and positive comments on social media motivates them to make a purchase,”* and predicts that *“ Social platforms will obviously continue to push mobile AR features, as novelty always boosts user engagement”*.

4. Social media evolution impact on business

Identified technological innovation, convergence and accompanying change at the level of the users themselves are reflected at business area too. In this case, we have classified predictions related to the integration of customer services and SM, promotion on SM and SM seen as background for product research and development. Specifics of this framework is that it not only builds on the already identified innovations, but at the same time it forms the baseline for the transformation and prediction associated with SM marketing. It could be considered as logical conjunction or intermediate level of forecasts.

The importance of social messaging and the aforementioned conversation marketing within customer service is reflected in accordance to business communication as well. In this case we use Lua’s idea that people found messaging as helpful tool for businesses to connect with their customers more effectively than ever before, while customers use business messaging platforms to ask businesses questions, make appointments and purchases, and to provide direct feedback” (Lua, 2018). The potential of SM as a tool of social sales is directly

connected with already mentioned conversational marketing. Hasan (2018) hinted that: *"Social sales will become a new norm"*. The author also established a direct link between social sales facilitated by product search on social networks (sometimes provided by voice command or voice search)⁹ and its use as a source of information on products which customers (followers) are interested in. We align our insights with the perspective of SM as a source of information about the activities, preferences and qualities of potential and already available customers.

In this context, Fennell (2018) pointed out that SM platforms such as Snapchat already made partnerships with the e-commerce giants like Amazon to enable product purchasing without leaving Snapchat via so called "visual search". In particular Snapchat, AR capabilities enable instant product search and seamless purchase options. That trend is expected to continue and become mainstream to other providers. Another form of visual search that has strong e-commerce application has been applied before by Pinterest and is also expected to be on increase.

Social sale is directly linked to product discovery, which Mulvey (2018) predicts to *become more visual (and social)*, because SM users (and internet users as such) have actually the ability to follow their favourite or prospective brands (Buckle and Mander, 2018). Mulvey (2018) also predicts that by 2020 we will see dramatic increase and changes in product discovery. These changes will be linked to five main areas, some of which are directly related to the above-mentioned categories: social networks for product search, visual searches, messaging apps, chatbots and voice control (voice technology makes search much easier activity). It is predicted that by 2020, 50% of all searches will be voice-based (Harkins, 2017, Hasan, 2018). Fennell (2018) corroborates that by idea of significant progress made in the area of AI and voice recognition technologies by 2019. *"Voice marketing will be key to working with how people are living and expect to be able to find the information, products or services they need"* (Fennell, 2018). This development is also expected to be driven by the Generation Z dominance among SM users – Generation Z is *"40% above average for using online sources to research products"* (Mulvey, 2018). Again, Fennell (2018) confirms that by statement, that most of Generation Z'ers already uses SM to find out information about searched products and followed brands.

The need for transparent brand communication also comes to the fore. Chen from Sprout Social supports importance of brand transparency on SM as evidenced by result of Sprouts' study (2019). This study argues that *"55% of customers found brands to be only somewhat transparent on social media"*. Typically, millennials expect more transparency in case of brand communication than in case of communication with/by politicians, friends and family. Chen notes *"The top three desires are product/service changes, company values and business practices,"* and gives the recommendation to publicize product iterations or app updates, to demonstrate company values and give more behind-the-scenes looks at company business.

5. Emerging regulations

The above mentioned innovations and developments in general, support call for specific regulations of SM communication and digital communication in general. Daugherty and

⁹ Harkins (2018) assume that in 2021 roughly 2 billion people will be using a digital assistants and 50% of all search queries will be conducted through voice search.

Carrel-Billiard (2019) believe that SM can be considered as the curators of reality and represent a new level of companies' obligation to society. The regulations should then address the emerging regulatory issues linked to the evolution of digital economy: digital taxes (recently discussed e.g. in Austria, France and Spain – for more information see Sanger and Thomas, 2018), copyright protection (discussed in the European Parliament in March 2019), spread of fake news, cybersecurity and fighting hate speech (these last two issues are among priorities of the Romanian Presidency of European Council for the first half of 2019)¹⁰ and ePrivacy (Yar, 2019, Mulvey, 2018).

We are exposed to a variety of diverse incentives from various resources. We can easily encounter misinformation, hoaxes or rumors. We perceive this as an argument underlining the need for regulation of dissemination false/fake information, as highlighted by Mulvey (2018) and Patel (2018). Mulvey (2018) expects that major SM platforms will be regulated by 2020 and forecasts strict regulation in marketing communication, because the market will be filled with tech vendors in order to protect and store first-party data forecasts. These regulations will have to be driven by government. However, since not only consumers, brands, or marketers work with personal data, better privacy regulations will have to be set up by government institutions as well as by other commercial and non-commercial entities.

If we accept the claim that *"More than 50 per cent of individuals find out about breaking news by means of online networking rather than customary news sources"* (Saikumar, 2018) then it is perhaps useful, if not necessary to monitor online SM for emergency communication by national governments or the EU bodies. The role of EMM (European Media Monitor) seems to be not fully utilised here. Obviously, national intelligence services, both civil and military, may be involved in monitoring of this type of communication, as Edward Snowden case revealed in USA. However, open and transparent utilisation of SM for getting overview of emerging trends may help policy makers to be ready to answer emerging controversies quickly and confidently.

In terms of convergence of SM and VR in emerging social-VR platforms, authors such as Sommer (2018) expect that *"More laws will emerge affecting the collection and usage of biometric data"* and that *"Government regulations will obligate social media platforms to monitor cyberbullying"* and finally that relevant *"influencer disclosure rules will apply to VR social experiences"*.

Although we have found a lot of references to chatbots among futurologists, we had to look for further inspiration among specialists for emerging specific regulatory issues. Thus, Mukkadam (2017) identified following legal issues related to chatbots:

¹⁰ see <https://www.romania2019.eu/priorities/>

Table 2: A summary of the key legal issues to be considered with regard to chatbots

Regulatory Issue	Suggested Content
Policies on chatbots	Internal policies must be in place which govern the extent of the chatbot's permitted activities, information that it will be fed and how, information it will collect and where that is stored/sent, oversight/update of the chatbots, and all ancillary policies must be reviewed to make provision for chatbots if appropriate.
Website T&Cs and disclaimers	Depending on the type of activity that is being carried out by the chatbot, consideration should be given to whether reference to the chatbot is made in the website/platform T+Cs and if appropriate disclaimers are required.
Regulated industries/activities	Where chatbots are used in regulated industries, the activities of the chatbot must be programmed to comply with industry regulations and standards. Where a chatbot is giving advice for instance, information fed to the chatbot must be kept up to date. Appropriate escalation measures need to be in place and disclaimers should be considered. Similarly, where chatbots are used for regulated activities, for example advertising, chatbots will need to be programmed to comply with the relevant regulations. Again, appropriate oversight must be in place.
Data collection	Data controller registrations and privacy policies must be up to date, it must be clear where the data is collected and where it will be processed, the relevant controller-processor agreements (if required) must be in place to govern the transfer of any data outside of the EEA, technological protection measures must be in place to safeguard data, and data privacy policies must be up to date
Defamation/abuse/harassment	Where chatbots are used to stimulate conversation, appropriate measures must be in place to prevent the chatbot's comments going too far and straying into the territory of libellous comment, abuse or harassment.
Infringement of third party rights	Appropriate safeguards must be in place to prevent infringing copyright protected content, using third party trade marks and brands, linking to information/content behind paywalls, or otherwise 'screen scraping' where information from third party sources is extracted and re-utilised by the chatbot.
Policy on monitoring/human intervention trigger	As well as having policies in place, consideration should be given to the extent of monitoring of a chatbot's activities and a human intervention trigger must be in place to prevent things going too far.

6. Social media as source of information

Hutchinson (2016) uses the specific term *DATAclysm*, to refer to the ability of social media to collect and provide huge amounts and variety of data. „A huge amount of the data and insights we have available to us now simply were not available ten, even five years ago. The growth of social media has led to an influx of data, huge amounts of it flowing through every tweet, 'gram and update being submitted online every day. There's so much data that no one knows exactly what we'll be able to do with it — it's beyond our capacity to even comprehend how all this information can be correlated and calculated and used for benefit.“ (Hutchinson, 2016). The data that social networks offer to us could be used in different ways, for example Asur and Huberman (2010) demonstrated how Twitter can be used to predict box-office revenue for movies. Of course, numerous possibilities with the use of SM as a source of data, abound. During the 2018 year probably the most controversial case concerned Cambridge Analytica - Facebook scandal.

Mulvey (2018) forecasts that by 2020 *“we'll see the greatest impact on two areas: employer branding and the rise of executives who understand—and know how to use—social to listen to customers, communicate their vision, and rally employees”*. Social media can serve as a gold mine of valuable information useful for CEO, marketers, shopper, but also for policy makers, among others.

Indeed, one can find efficient utilisation of big data. For example, the Europe Media Monitor (EMM), a fully automatic system analyses online versions of traditional media but among SM it includes only Twitter. Moreover, while it is using their public API, to monitor tweets related to particular policy areas, although this function is not available on the main public EMM system.¹¹ Therefore, it might be useful to consider utilisation of EMM for full-scale social media monitoring of selected discussion groups (e.g. sentiment analysis) in policy areas that are of concern of the European Commission. These issues could include, for example, regular monitoring of some long-term issues like rule of law and media freedom. In specific cases, it may be useful to monitor online lobbying activities that aim against policies suggested by European institutions. This is not to say that "voice of the people" should be ignored or taken with suspicion, but there are clearly hidden or at least no so transparent lobbying activities, either by transnational or foreign actors, as it was documented for example in case of the copyright directive in early 2019. The German newspaper FAZ documented heavily sponsored non-transparent campaign in SM by Google against copyright directive (Van Linjnden, 2019). The Google never responded to our call for clarification.

In terms of convergence of SM and VR in emerging social-VR platforms, authors such as Sommer (2018, 1) expect that *“More laws will emerge affecting the collection and usage of biometric data”* and that *“Government regulations will obligate social media platforms to monitor cyberbullying”* and finally that relevant *“influencer disclosure rules will apply to VR social experiences”*. The need for regulation to increase security comes to the fore with the

¹¹ E-mail from Charles Macmillan, Charles.MACMILLAN@ec.europa.eu, 3/26/2019

concept of smart homes and the modern paradigm of the IoT. Sicari *et al.* (2015) define IoT as use of heterogeneous technologies which provides an innovative services in various application domains. The security and privacy requirements represent a fundamental role, while “such requirements include data confidentiality and authentication, access control within the IoT network, privacy and trust among users and things, and the enforcement of security and privacy policies”.

7. Social media marketing evolution

In general, SM ad marketing as well as advertising costs have been on the rise and this trend is expected to continue (Lua, 2018). Social media marketing evolution, undoubtedly, overlaps with each of the aforementioned categories. Apart from the indicated trends and related predictions, we highlight the regulations related to consumer data protection (mostly currently tackled by GDPR), the use of SM as a source of information, and the role of technological innovations in improving brand-to-customer interaction (for example applications based on AR). The results of the qualitative analysis reflect that the framework of SM marketing evolution is composed of four basic subcategories: content, traffic, unique features of communication with the customer and professional aspects of marketers.

First of all, there are trends related to the social media content itself. It is predicted that there will be more unique, original content that will come from the UGC category. Daugherty and Carrel-Billiard (2019, 6) suggest that: *“In the post-digital world, every moment will represent a potential new market of one.”* This may include increase in production of ephemeral storytelling and communication through short interactive videos, including meme. A meme is an image, video, piece of text, etc., typically humorous in nature, that is copied and spread rapidly by Internet users, often with slight variations.¹²

The expected increase of stories and video is also corroborated by Fennell (2018) that points out that 69% of all the traffic on the internet in 2017 was video traffic and that by 2019 that figure will hit 80%. Fennell also mentions the growing popularity of live-streaming on social media that has been harnessed by many brands for marketing purposes. Schaefer (2018) believes that there is a need in marketing communication to create content that moves or “shocks”, unique, original and exciting content. Garcia (2017) goes one step further and expects that with the growing popularity of *“360-degree video, marketers can reap the benefits of practicing and refining campaign strategies that include interactive content”*. Hutchinson (2016) pointed out that sharing of non-video content on Facebook is declining and argues as following: *“...watching something happen, for yourself, is truly powerful, and as such, the explosion of video is expected to continue to expand as mobile technology and network capacity also evolves in-step”*.

Talbot (2018) mentions the promotional function of video. Video content is considered to have the best return on investments. It actually does not matter what kind of video format is used – explainer video, product testimonials, behind-the-scenes content, thought leadership interviews). Talbot (2018) points out that: *“...users are glued to video to connect with brands*

¹² <https://en.oxforddictionaries.com/definition/meme>

and companies they have affinity toward,“. Talbot also recommended the creation of longer content which will then be distributed across the appropriate social media platforms - it is up to the marketing team to figure out which channel is the best for specific video content.

Saikumar (2018) suggests that *“the biggest social media trend overall is interactive media”* and Talbot (2018) argues that *“the ephemeral content storytelling has been embraced by users, influencers, and brand alike”*. The ephemeral content lasts only 24 hours. This offers brands space to test and discover what works best. Talbot (2018) also highlights the importance of influencer marketing and predicts that *“by 2020 influencer marketing is on target to become a 10 billion dollar industry.”* Chen (2019) likewise anticipates an increase in money spent on influencer marketing and outlined the specific categories of influencer marketing, such as employee advocacy, which she considers as next level of influence. Influencer marketing is intelligence lead identification of these channels and influencers. Fennel (2018) corroborates the forecasts by Mulvey (2018) that the growing popularity of video, stories and shoppable posts will bring significant increase to Instagram utilisation, while some significant challenges are expected to be faced by popular Twitter platform. The most serious problem with Twitter appears to be fake news and fake accounts (bots) disseminating disinformation.

Clearly, video and storytelling are a key aspects of popularity and effectiveness of disseminated content which can be easily generated by users of SM. The importance of UGC underlines Lua (2018) in reference to reach and engagement of the audience - it is the aspect that is impacting engaged traffic.

Another important part of future transformation of SM marketing is the integration of conversation marketing, mostly represented by chatbots and digital assistants. Chatbots are quite common parts of business communication today. Lua (2018) argues that *“...80% of senior marketing and sales executives around the world are already using chatbots for their business or plan to use them by 2020”*. As the author notes, there is a wide variety of uses for chatbots – marketing, payments, customer services and much more. Motley (2017) states that chatbots are appreciated by many users including companies. The results from a survey indicated that 38% surveyed had positive feelings, and only 11% had negative feelings about their experience with chatbots. The rest of the participants did not have enough interactions with chatbots to make a choice.

Chatbots can be considered as a form of AI, which refers to *“...a set of computer science techniques that enable systems to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making and language translation”* (Berlucchi et al, 2016, 3). AI adoption had been surveyed by the Economist (Berlucchi et al, 2016) and 75% of surveyed companies supported the prediction that AI would be actively implemented in companies within three years (study was done in 2016 so the evolution in year 2019 would be a fulfilment).

AI is also linked to digital assistants and smart speakers which are projected, as mentioned, to be used by two billion people by 2021. This is expected to result in another trend: approximately 50% of all search queries will be conducted through voice search by 2020 (Harkins, 2017; Olson, 2016). Olson further notes that: *“Today’s digital assistants are going beyond voice input, and are evolving to understand user intent and behaviours through available data and information to help consumers take actions”*. This forecast has a high probability of being fulfilled in some countries and among younger users.

The *Voice Search For Local Business Study 2018* (BrightLocal, 2018) offered some interesting results: 56% of (US) respondents had used voice search to find information for a local business within the last 12 months through smartphone, 28% used desktop/laptop, 26% used tablet and 18% used smart speakers. It is also important to note that voice searches (done by smartphone, desktop/laptop, tablet or Smart Speaker) were mainly made by the cohort aged 18-34 and then 35-54 years. 30% of people aged 55+, however, indicated that they would not use voice search to find information.

Carter (2018) and other authors predict differentiation of social media demographics. Although nowadays, social media are used by different age groups it is important to highlight that *“today’s older generation grew up in a time when social media—and the Internet in general—didn’t exist. By 2020, we’ll be seeing more prominent social media users who don’t remember a time before social media. And the oldest generation of users will have been used to the technology for several years.”* There is increasing trend of the formation of different groups ("echo chambers" or "bubbles") of social media users (Kulkarni, 2017). However, the most important change to be expected refers to the supremacy of Generation Z on social media. Patel (2017) argues that Generation Z users are entering the labor market, and they will increase purchasing power; brands will soon recognize this trend and adjust their SM strategies accordingly.

Social media demographics is directly linked with already mentioned concept of influencer marketing (Saikumar, 2018; Schaefer, 2018; Talbot, 2018; Patel, 2017) and endorsement of products. Patel (2017) notes that in 2017 there was a radical shift from traditional advertising strategies to use of influencers. He predicts that, *“...It is likely that more brands will embrace influencer marketing as a way to connect with audiences who tend to ignore traditional strategies.”* This assumption has become true, there is a growing number of influencers, and their recruitment is also on the rise. We notice the use of social media influencers mainly in communication with Generation Z and Generation Y – they constitute the basic audience of influencers. For example, in Slovakia, we can identify vloggers such as Gogo, Selassie or Soňa Skoncová as influencers for campaigns of several banking / financial institutions (VUB, Poštová banka, Slovenská sporiteľňa, etc). There is a new group of Instagram-influencers (Biel, 2019).

Current developments in SM and SM marketing are typical with their volatility and the need to continually update information and trends tracking. Schaefer (2018) points out at the so-called *talent gap*. This means that there is an entire generation of marketers who grew up in another environment.

8. Other trends of online communication

The last category provides some analytical framing of already analyzed categories of frameworks used for forecasting. As mentioned, although we divided identified predictions into eight categories, this analytical step was made to create a simpler and more transparent partial summaries of key trends.

In this last part, we have included predictions that are seemingly very marginally linked to SM, but in fact their real impact may be much more significant. This category is divided into four subcategories: change of the roles of other media (especially TV) due to the internet’s popularity; change of impact of specific platforms; transformation of Identity in the digital

age and new ways of online data analysis.

Hopkins (2018) as well as Harkins (2018) believe that the audiences of TV and the Internet will be almost the same if we compare the time spent by watching television and browsing the Internet. However, Harkins predicts that the overall media consumption will not change. Yet, there will be important changes in popularity of platforms. Mulvey (2018) forecasts that by 2020 „ we'll see digital dominance of Google and Facebook slightly shrink, while Amazon's and Snapchat's influence will grow". This perspective is supported also by Galloway (2018), who specifies that every digital company, including Facebook, Google and Amazon Media Group, will lose its digital market share. Galloway also forecasts that Amazon will become one of the five largest media firms and he suggest that it is going to be „the most valuable healthcare company in the world“, because of its data set about households in the US. Galloway (2018) also suggests to pay attention to changes reflected in transformation of user or personal identity into concept of „digital identity“ defined by the way we validate our personal selves. To see possible use or abuse of the concept of Digital Identity in practice we recommend to become more familiar with China social credit system (see Kobie, 2018).

CONCLUSION

This overview has identified eight basic analytical frameworks (including more specific current/ ultimate trend) in technological and partly legal/regulatory innovations and challenges in SM, content convergence and SM communication. We explained that identified categories do not exist independently just analytically. Thus, they should be seen as interconnected within specific subcategories of trends or predictions.

As the most clearly emerging frameworks or basic (umbrella) categories of social media trends are considered trends connected with the rapidly evolving and constantly changing nature of SM transformation, and impact of this evolution on business in general and SM marketing in particular. Against the background of these basic analytical categories we have to underline namely these trends and formulate suggested recommendations:

- First, we have noticed changing/evolving use of SM platforms and their increasing impact on business and politics. Therefore, brand managers and marketers, as well as policy makers and other stakeholders, should reflect upon these evolving changes and choose the most appropriate platform for communication, interaction or monitoring.
- Second, SM transformation continues to be reflected in their integration among customer services, in the use of SM as source of information about products, customers and also employees.
- Third, there is evolution of origin and type of content created and shared on SM: viral and ephemeral storytelling, mainly it is UGC.
- Fourth, there is continuous growth of the use of conversation marketing with emphasis on the respect of AI (digital assistants) and integration of chatbots.
- Fifth, there is a specific category of predictions related to the importance of influencer marketing with some specifications (i.e. the use of employees as influencers).

Following identified trends we recommend to reconsider/adjust SM regulations in the areas

indicated above. Further, we also suggest to support enhancing a capacity of European SMEs to more effectively use emerging SM marketing techniques as well as channels for services delivery for greater competitiveness.

In addition to these more general recommendations we would like to offer some specific policy recommendations:

- Sixth, the EU (the Commission, the European Parliament, etc) but also national governments, may consider open and transparent use of SM monitoring for getting quick and cheap overview of emerging trends (e.g. sentiment analysis) and challenges. This can be done via already existing EMM service of the Commission. This decision should be clearly and widely communicated to the public to avoid any worries about unethical secret supervision.
- Seventh, the EU (the Commission, the European Parliament, etc), but also national governments, may consider in their communication strategies to use ephemeral storytelling and viral communication through short interactive videos (including *meme*) via social media such as Instagram, LinkedIn, WhatsApp or Snapchat. Such innovative approach may attract especially younger generation that in some countries seems to be losing interest in using legacy media for news and current affairs as well as in Facebook. This would also imply that the EU is a modern and creative union. Some of these innovations have been noted during campaign before elections to the European Parliament in spring of 2019.
- Eight, the Commission and other EU or national institutions may wish to consider cooperation with SM influencers in communicating some specific topics related to e.g. health and data protection, with citizens. This should be done in transparent way and only for a specific, clearly defined set of policy issues.

References

- Armstrong, J. Scott and Kesten C. Green** (2016). Forecasting Methods and Principles: Evidence-Based Checklists .
- Asur, Sitaram and Bernardo A. Huberman** (2010). Predicting the Future With Social Media, arXiv:1003.5699v1 [cs.CY] <https://arxiv.org/pdf/1003.5699.pdf>
- Bačíková, Z. et al.** (2018). Marketing in the Digital Era. Berlin : Peter Lang. ISBN 978-3-631-74545-8.
- Berlucchi, Matteo et al.** (2016). Artificial Intelligence in the Real World. eiuperspectives.economist.com, https://eiuperspectives.economist.com/sites/default/files/Artificial_intelligence_in_the_real_world_1.pdf?_ga=2.237050816.1555687524.1548576128-2099304336.1548576128.
- Biel, Marián** (2019, May 16). Slovenskí instagrameri (Slovak Instagramers), Trend, (19), 10-15
- BlueCorona** (2019). Google Ranking Factors in 2019. *Blue Corona*. [Online] Blue Corona, 2019. January 2019. [Dátum: 01. June 2019.] <https://www.bluecorona.com/blog/google-ranking-factors-2018>.
- Buckle, Chase and Jason Mander** (2018). Social Video. Trends Report <https://cdn2.hubspot.net/hubfs/304927/Downloads/Social-Video-Report.pdf?t=1522336485606>
- Carter, Timothy** (2018.). 6 Social Media Shakeups We Predict to Occur By 2020 <https://www.audiencebloom.com/6-social-media-shakeups-predict-occur-2020/>
- Chambers, John C., Satinder K. Mullick and Donald D. Smith** (1971, July). How to Choose the Right Forecasting Technique. Harvard Business Review, <https://hbr.org/1971/07/how-to-choose-the-right-forecasting-technique>
- Chen, Jenn** (2019, January 18). 7 social media trends to watch in 2019, <https://sproutsocial.com/insights/social-media-trends/>
- Daugherty, Paul and Marc Carrel-Billiard** (2019). Accenture Technology Vision 2019. The Post-Digital Era is Upon Us ARE YOU READY FOR WHAT'S NEXT?, https://www.accenture.com/_acnmedia/PDF-94/Accenture-TechVision-2019-Tech-Trends-Report.pdf#zoom=50
- Devaney, Erik** (2018, May 18) What Is Conversational Marketing? Definition, Examples and Best Practices behind a Conversational Marketing Strategy, <https://www.drift.com/blog/conversational-marketing/>
- De Vivo Bustillo, Marcela** (2017, July 28). How Will Voice Search Change the Social Media Landscape? *sendible.com*. [Online] Sensible, <https://www.sendible.com/insights/voice-search-and-social-media>.
- Dictionary, Oxford** (2019). community. *e.oxforddictionaries.com*. [Online] Oxford University Press, <https://en.oxforddictionaries.com/definition/community>.

Dowerah Baruah, Trisha (2012). Effectiveness of Social Media as a tool of communication. *International Journal of Scientific and Research Publication*,. 2, (5)

Enthoven, Julia (2018, November 28) <https://www.kapwing.com/resources/5-important-video-trends-you-should-follow-in-2019/>

Fennell, Kylie (2018, December 26) Social Media Predictions for 2019 <https://mavsocial.com/social-media-predictions-for-2019/>

Foreman, Curtis (2017, June). 10 Types of Social Media and How Each Can Benefit Your Business. *blog.hootsuite.com*. [Online] hootsuite.com, <https://blog.hootsuite.com/types-of-social-media/>.

Galloway, Scott (2019, January 11). 2019 Predictions, <https://www.l2inc.com/daily-insights/no-mercy-no-malice/2019-predictions>

Garcia, Albizu (2017, August 22) How AR & VR Technologies are Changing the Game for Marketers <https://www.socialmediatoday.com/marketing/how-ar-vr-technologies-are-changing-game-marketers>

Garcia, Albizu (2019, March 28). Is virtual reality the future of social networking? <https://sociable.co/social-media/is-virtual-reality-future-social-networking/>

Gelpi, Christopher (2017). Connecting Theory to Policy with Forecasting. https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_184651.pdf

González-Sancho, Miguel and team (2018, September 19). Proposal for a European Cybersecurity Competence Network and Centre. European Commission. Team responsible: Cybersecurity Technology & Capacity Building (Unit H.1) <https://ec.europa.eu/digital-single-market/en/proposal-european-cybersecurity-competence-network-and-centre>

Harkins, Sarah (2017, July 31). In the Year 2020: Preparing for Future Trends in Media Consumption, <https://medium.com/digital-trends-index/in-the-year-2020-preparing-for-future-trends-in-media-consumption-a38b6aaa6710>

Hasan, Sarmad (2018, January 3). What Will The Future of Technology Look Like? 8 Technology Trends to Keep an Eye On in 2018 <https://blog.taskque.com/8-technology-trends-2018/>

Hasan, Sarmad (2018, May 4). Envisaging the Future of Social Media: The Face of Social Media Landscape In 2020 <https://dubaimonsters.com/blog/future-of-social-media-in-2020/>

Hickey, David (2018, January). Staying on Trend: The Importance of Monitoring Trending Topics Online. *meltwater.com*. [Online] Meltwater, <https://www.meltwater.com/blog/monitoring-trending-topics/>.

Hutchinson, Andrew (2016, June 5). 5 Key Trends That Point to the Future of Social Media. *firebrandtalent.com*. Firebrand Talent 2019, <https://firebrandtalent.com/blog/2016/06/5-trends-point-future-social-media/>

Hlavenka, Jiří (2019, January 24). Prognózy pro rok 2019 v technologiích (Forecasting 2019 in Technologies), <https://blisty.cz/art/94250-prognozy-pro-rok-2019-v-technologiich.html>

- Kabrovski, Rob** (2017, December 13). Virtual Reality and the Future of Social Media
<http://digitalmarketingmagazine.co.uk/social-media-marketing/virtual-reality-and-the-future-of-social-media/4745>
- Kobie, Nicole** (2019, January 21). The complicated truth about China's social credit system
<https://www.wired.co.uk/article/china-social-credit-system-explained>
- Kulkarni, Chirag** (2017, August 3). 11 Ways Social Media Will Evolve in the Future,
<https://www.entrepreneur.com/article/293454>
- Lua, Afred** (2018, Jun 21). 2018 Social Media Trends Report: 10 Key Insights Into the Present and Future of Social Media, <https://blog.bufferapp.com/social-media-trends-2018>
- Malhotra, Sugandh, Lalit K. Das and V. M. Chariar** (2015). Classification of Forecasting Methods with Respect to their Structure. The Third International Conference on Design Creativity (3rd ICDC), Bangalore, India.
- Mikuláš, Pavol** (2017). Formy digitálneho a mobilného marketingu . Nitra : UKF
- Motley, Josiah** (2017, October 9). Chatbots are here to stay, what the data is telling us about the people that use them. thenextweb.com,
<https://thenextweb.com/contributors/2017/10/09/chatbots-stay-data-telling-us-people-use/>
- Mukkadam, Farah** (2017, June 6). Chatbots: Some Legal Issues. Social Media Law Bulletin,
<https://www.socialmedialawbulletin.com/2017/06/chatbots-legal-issues/>
- Mulvey, James** (2018, April 10). Social Media in 2020: 11 Data-Backed predictions
<https://blog.hootsuite.com/social-media-2020/>
- Nguyen, Mai-Hanh** (2017, October 20). The latest market research, trends & landscape in the growing AI chatbot industry, <https://www.businessinsider.com/chatbot-market-stats-trends-size-ecosystem-research-2017-10/?IR=T>
- Olson, Christi** (2016). Just say it: The future of search is voice and personal digital assistants. www.campaignlive.co.uk. Haymarket Media Group Ltd.,
<https://www.campaignlive.co.uk/article/just-say-it-future-search-voice-personal-digital-assistants/1392459>.
- Patel, Deep** (2017, September 27). 10 Social-Media Trends to Prepare for in 2018
<https://www.entrepreneur.com/article/300813>
- Phuc Duong, Phug** (2017, August 1). What Is Influencer Marketing? – The 2018 New Definition, <https://blog.influencerdb.com/influencer-marketing-definition-2018/>
- Poláková, E. - Spálová, L. - Szabo, P.** (2012). Facebook - nástroj diskriminácie Rómov (Facebook – a tool for Roma discrimination). In: Mládež a spoločnosť : slovenský časopis pre štátnu politiku a výskum mládeže. 18, (4), pp. 37-45.
- Saikumar, Siva** (2018, August 9). Top 5 Trends for Future Social Media Marketing,
<https://www.softscripts.net/blog/2018/08/top-5-trends-for-future-social-media-marketing/>
- Saleh, Mohamed, Nedaa Agami, Ahmed Omran and Hisham El-Shishiny** (2008). A Survey on Futures Studies Methods. *INFOS2008, March 27-29, 2008 Cairo-Egypt*
- Sanger, Chris and Rob Thomas** (2018). New digital tax policies What, when, where, how and

by whom? An excerpt from EY's Global Tax Policy and Controversy Briefing, Nr. 22, EY, <https://www.ey.com/Publication/vwLUAssets/EY-new-digital-tax-policies-what-when-where-how-and-by-whom/%24FILE/EY-new-digital-tax-policies-what-when-where-how-and-by-whom.pdf>

Sautoy, Marcus du (n.d.). Can social media predict the future? BBC, <http://www.bbc.co.uk/guides/zthd7hv>

Sicari, S. et al. (2015). Security, privacy and trust in Internet of Things: The road ahead. *Computer Networks*.

Sommer, Brian (2018, Feb 1) The Convergence of Virtual Reality and Social Media: What Legal Issues May Arise? <https://vrvoice.co/convergence-virtual-reality-social-media-legal-issues-may-arise/>

Spencer, Jamie (2018, December). 60+ Social Networking Sites You Need to Know About. *makeawebsitehub.com*. Make A Website Hub, <https://makeawebsitehub.com/social-media-sites/>.

Sproutsocial (2019). About. *sproutsocial.com*. Sprout Social, Inc., <https://sproutsocial.com/about/>.

Sproutsocial (2018). Sprout Social Index 2018. *media.sproutsocial.com*. <https://sproutsocial.com/insights/data/2018-index/>.

Talbot, Kate (2018). 3 Trends Defining the Future of Social Media for Business <https://digitalmarketinginstitute.com/en-ie/blog/3-trends-defining-the-future-of-social-media-for-business>

Van Linjden, Constantin (2019, March 16). Gekaufter Protest? <https://www.faz.net/aktuell/feuilleton/debatten/youtubern-wird-geld-fuer-urheberrechts-protest-geboten-16091413.html>

Walonick, David S. (1993). An Overview of Forecasting Methodology. <https://www.statpac.org/research-library/forecasting.htm>

Yar, Lucia (2019, January 16). EÚ v roku 2019: Digitálny trh v Únii porastie, potrápia otázky etiky nových technológií (EU in 2019 Year: Growth of Digital Market, Challenges of New Technologies), <https://euractiv.sk/section/buducnost-eu/news/eu-v-roku-2019-digitalny-trh-v-unii-porastie-potrapia-otazky-etiky-novych-technologii/>

E-mail from EMM Service, Charles Macmillan, Charles.MACMILLAN@ec.europa.eu, 3/26/2019