Chapter 2
Delimitation of the Problem

Following the New Haven School of Jurisprudence’s five steps as described during this paper’s introduction, the problem to be discussed must first be delimited.\(^1\)

So, what is the specific problem concerning social networks? Is it overall privacy and data protection? And could other human rights issues also come into play?

In order to explore the subject of social networks and point out the problem that should be further discussed, a basic description of the world wide web as well as the most important facts regarding social networks have to be given and the so-called Facebook Generation as well as data gathered and processed through social networks have to be explained and, in the end, those concerns that arise from social networks have to be exposed. While doing so, questions will arise and should be answered.

For example, when speaking of the development as well as the current situation concerning social networks one might ask the following:

How did these networks get started? Which one was the first social network?
How did social networks develop? And what is today’s situation? How many persons are currently joining social networks? How much time do they spend on these platforms? And what are exactly their activities or purposes while using these services? Besides, are there psychological effects social networks might have

\(^1\)In order to give more detailed information on the New Haven School of Jurisprudence, see Reisman et al. (2007), pp. 575–582 as well as Wiessner (1999), p. 203 and Lasswell and McDougal (1992).

It has to be noted once again that the New Haven Approach especially pays attention to the eight values of a world order of human dignity that are reflected in different articles of the 1948 Universal Declaration of Human Rights meaning “affection, enlightenment, power, rectitude, respect, skill, wealth and well-being”, see McDougal et al. (1980). See also Wiessner and Willard (2004), p. 30, and Wiessner (2010), p. 46.

For further information on the New Haven Approach, its beginnings and vision, see Chap. 1.
concerning its users? And are there maybe financial benefits a person might have because of social media? After all, what are the pros and cons for social networks?

Furthermore, when speaking of the term “Facebook Generation”, who falls under this term? And what are the reasons for joining social networks for a member of the Facebook Generation? Which ones are the most frequented social networks amongst the Facebook Generation? And what happens to a person who is using social networks not just frequently, but literally all the time? Are the members of the Facebook Generation just doing what everyone else was doing in former times and before social networks became part of people’s everyday life? Especially when it comes to teenagers, do today’s teens still have the same needs as teenagers growing up without any social media? And if so, are today’s teens just channeling their needs through a new technology with new opportunities? Are there possible effects of social networks on its users? Are there psychological effects on the individual or even on the society as a whole due to the existence of social networks and the role social networks play today in the individual’s life? After all, might this new technology be changing our world more dramatically than we presently think?

Moreover, when it comes to data gathered and processed through social networks, where does this data come from? How did this data flow develop? Are different categories of data? And do we know the amount of data that is produced in the context of social networks? But more important, what kind of data do social networks gather and process? And most important, how can social networks make use of the data retrieved from their users? And how can a user have an impact on the usage of his or her own data? Besides, who might be interested in the data? And why is that? How is the data and its gathering and processing controlled? Over all, who might have the right to use, sell or work with the data gathered and produced in social networks?

In addition, while focusing on privacy concerns arising from social networks, the concept of privacy has to be developed which will lead to questions such as: When and how was the concept of privacy developed? Did it change over time? And what does it include nowadays? What are the differences from country to country or culture to culture? And what are the reasons why some countries might be treating privacy differently than other countries? And what about privacy in the context of globalization and new technologies, as well as terrorism? What about the concept of privacy when it comes to the world wide web? Overall, what about privacy particularly concerning social networks? Why are there any concerns, at all, if people share and give away their information voluntarily on social media? And does is make any difference if one spreads one’s information throughout social networks in contrast to any other situation when people expose their personal details voluntarily—for example, in a conversation one has with someone he or she meets while crossing a street? And if there is a difference, what exactly makes this difference? Could it be possible that there is a real threat to privacy nowadays? Could the concept of privacy even only exist on paper any longer, so that privacy has been banned from people’s real lives already a long time ago? How much privacy would be still left then?
In order to get started, it is essential to give a brief idea of the internet.

## 2.1 Understanding the Internet

First of all, it is important to explain what the term “internet” actually means. Is there a clear definition for that term? And why is internet not equal to the term “world wide web”? How is the internet’s architecture actually? What is its history? Who started the internet and where, when, how and why? And what about today’s situation?

What does “internet governance” mean? Are there policies, norms, principles, rules or regulations that regulate the use and further development of the internet? Over all, who are the ones in charge of shaping today’s internet? What about states or the EU? Do they have an impact on or do they actually rule today’s internet? Who exactly does what meaning who assigns and maintains the internet? And what can be assigned or has to be maintained in particular? Maybe so-called domains? And who repairs and maintains, for example, internet routers?

So, in order to give some explanations, it has to be noted that although the terms “internet” and “world wide web” are often used synonymously, they are not the same, as the world wide web only forms part of the actual internet and it is where one can find pictures, texts videos and audio files as well as a bunch of other information, but it is only one of many server collectives of the internet. Other services that are not part of the world wide web but are of the internet are, for instance, Emails or Chats.\(^2\)

The internet is also older than the world wide web, as its beginning goes back to the 1970s,\(^3\) but the fact that the internet became part of most people’s lives nowadays is due to the world wide web.\(^4\)

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\(^2\)For further information on the technical side of the world wide web and how it started, see Wilde (1999).

In order to get an overview of the current situations and latest trends of the internet development around the globe, one should take a look at the Fifth World Internet Conference, see Chinese Academy of Cyberspace Studies (2020).

See also Sunyaev (2020).

\(^3\)The world wide web was actually started 25 years ago—on April 30, 1993 to be exact—and one can say that it opened a gate to a whole new world.

In contrast, the internet’s beginning dates back to the 1970s. The Encyclopaedia Britannica describes the internet as:

a system architecture that has revolutionized communications and methods of commerce by allowing various computer networks around the world to interconnect. Sometimes referred to as a “network of networks, the Internet emerged in the United States in the 1970s but did not become visible to the general public until the early 1990s. By the beginning of the 21st century, approximately 360 million people, or roughly 6% of the world’s population, were estimated to have access to the Internet.

For further information on the internet, see Dennis (2020b).

\(^4\)For more details on the world wide web, see Augustyn et al. (2020c).
In what follows, it will be explained why that is.

The internet being a gigantic network consisting of a large number of computers in countries all around the world that are connected with each other, over all, via cables and satellites, leads to more than 3 billion people using it presently.\(^5\) This means that, at least, 10 out of 100 people have access to the internet as of today. But as mentioned above, the internet itself is mostly only this gigantic network, meaning computers and the connecting cable or other lines. So, in order to actually make use of the internet, one needs certain programs, and this is when the world wide web comes into play, being the most important program of the internet besides Email\(^6\) or Chat.\(^7\) Because the world wide web consists of many webpages written with hypertext markup language (HTML), a programming language, the webpages are automatically interconnected to each other via so-called links.\(^8\) Hence, this

\(^5\)The online statistics portal “statista”, founded in Hamburg/Germany in 2007, states:

With over 2.7 billion monthly active users as of the second quarter of 2020, Facebook is the biggest social network worldwide. In the third quarter of 2012, the number of active Facebook users surpassed one billion, making it the first social network ever to do so. Active users are those which have logged in to Facebook during the last 30 days. During the last reported quarter, the company stated that 3.14 billion people were using at least one of the company’s core products (Facebook, WhatsApp, Instagram, or Messenger) each month.

See “Facebook: number of monthly active users worldwide 2008–2020”, statista (August 10, 2020a).

For further information on how the total number of active Facebook monthly developed globally between 2008 and 2020, see “Number of monthly active Facebook users worldwide as of 2nd quarter 2020”, statista (July 2020).

Besides, according to statista, Facebook remains the world’s most popular social network, see “Global social networks ranked by number of users 2020”, statista (August 21, 2020b). See also “Most popular social networks worldwide as of July 2020, ranked by number of active users”, statista (July 2020).

At least for now, Facebook remains the most frequented social network and it has to be seen whether in the near future, other social networks might overtake Facebook—especially, as the younger generation seems to be no longer as interested in Facebook as people were in former times, but this generation rather turns to other social networks like, for example, Instagram, SnapChat or TikTok.

\(^6\)According to the Encyclopaedia Britannica, Email means “in full electronic mail, messages transmitted and received by digital computers through a network. An e-mail system allows computer users on a network to send text, graphics, and sometimes sounds and animated images to other users”, see Augustyn et al. (2020a).

\(^7\)It has to be noted that besides, so-called “chatting”, there is also “Instant messaging”. The Encyclopaedia Britannica describes it as follows:

Instant messaging (IM), form of text-based communication in which two persons participate in a single conversation over their computers or mobile devices within an Internet-based chatroom. IM differs from “Chat,” in which the user participates in a more public real-time conversation within a chatroom where everyone on the channel sees everything being said by all other users. See Larson (2020).

\(^8\)It has to be noted that the harmonization of technical standards was necessary during the process of the installation of the internet worldwide, or as Professor David Singh Grewal says:
formatting system that is designed in order to display any graphics, audio files and texts on a computer screen, leads the user of the world wide web to being able to “surf the web” so easily. Due to HTML a user only has to click on a link and is automatically brought from one webpage to another. As a result, the world wide web was used more and more and this way, at the same time, the internet that only became that famous because of the success of the world wide web.9

But how exactly did the internet itself get started? And who was the one initiating the world wide web?

When it comes to the history of the internet, one could say that it reflects the trajectory of the United States during the Cold War period.10 Until the Second World War, nothing was invented yet that could be compared to what a computer is as we know it today.11 However, there were devices that allowed multiple calculations at the same time. And in the late 1930s, Howard Hathaway Aiken started to design such a machine.12 His analog mechanical computer could be seen as marking the

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The harmonization of existing technical standards, and standardization in emerging fields, are essential for the spread of compatible technologies and products—in short, for ‘technical progress’. See Grewal (2008), p. 195.

Besides, in the process of standardization, history as always plays an important role in order to achieve an agreement. See McDougal et al. (1967). See also Lasswell et al. (1994), p. 3.

For further information on hypertext markup language (HTML), HTML, see Hemmendinger (2020).

9It has to be remembered that, especially in the 1990s, more and more Universities started to use the world wide web in order to publish their information and also companies began to do the same. Because of the fact that during that time, the world wide web consisted mostly of simple text and only a few links, the world wide web was pretty easy to handle, although it was not yet fast and nothing compared to what it is today. Nevertheless, little by little, also private individuals started to access the world wide web and this way, the world wide web actually brought the internet into private households.

10Balleste (2015), p. 11.

Roy Balleste states that:

Beginning around 2001, however this powerful tool began to benefit from the valuable input and collaboration of other nation. Today, the internet is a network formed by millions of servers and computers worldwide, all sharing data with one another.

11_Id. at 9.

12Howard Hathaway Aiken (1900–1973) was an American physicist who got his Master’s degree as well as his doctorate in physics from Harvard University and is best known for his invention of an automatic calculating machine, the so-called Mark I. For further information on Howard Hathaway Aiken, see “Howard Hathaway Aiken”, The Association for Information Science and Technology (2020).

Furthermore, it has to be noted that Aiken’s project was funded by the International Business Machines Corporation (IBM) and Harvard University. See Ifrah (2002), pp. 211–212.
beginning of the era of analog computers, espe-
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cially, as these became the latest in
technology back then.14

While the technology of computers was evolving in the following years, after the
Second World War, since the 1950s and during the time of the Cold War, the United
States founded an institution called Advanced Research Projects Agency (ARPA).15
ARPA was installed in order to fund universities and other institutions to do
research, especially as the Soviet Union had already been launching the first satellite
(called “sputnik”).16 The agency was founded in 1958 and linked to the Ministry of
Defense. ARPA was supposed to develop technologies and projects that could be
useful in the military field.17 While getting started with its work, very fast, it became
clear to the employees of ARPA that computers would play an important role in the
future,18 although computers were not only extremely big, heavy and expensive, but
also research on them was not really communicated amongst the different groups of
people that were performing studies on them.19 Therefore, ARPA created a com-
puter network called Advanced Research Projects Agency Network (ARPANET)20
that was supposed to connect all those researchers who were already involved in the

13 Rather than being electric, the Mark I was electromechanical and not only because of the fact that
this device was capable of solving nearly all mathematical problems, but also because the Mark I
was made available also to anybody outside of the US government, it can be considered being an
important step in the development of computers. Id.
14 Supra note 10, at 9–10.
15 The Advanced Research Projects Agency (ARPA), also later on called Defense Advanced
Research Projects Agency (DARPA), is different to other organizations linked to the Department
of Defense as this agency neither owns research facilities or laboratories nor has it lots of permanent
staff, but rather assigns eminent scientists as project managers to specific research projects short-
term. For more information on the Advanced Research Projects Agency (ARPA), see Dennis
(2020a).
16 Not only did the United States not have a satellite at that time yet, but also had nobody in the
United States been thinking that the Russians would achieve to place the very first satellite. Id.
Hence, it becomes clear that the Cold War did not only take place in politics, but also when it
came to innovative technologies, science and research.
17 Supra note 15.
18 Overall the psychologist Joseph Carl Robnett Licklider forecasted that the use of computers
would have to become an extension of the human being. See Hafner and Lyon (1998), p. 27.
For more information on Joseph Carl Robnett Licklider, see Augustyn et al. (2020b).
19 Supra note 15.
20 The Advanced Research Projects Agency Network (ARPANET) was an experimental computer
network and is being considered being the final product of an era of great developments in
computer-communications that were fueled by the constant threat of the Soviets attacking the
United States during the Cold War. ARPANET is also being considered the precursor of the
internet. For further information on ARPANET see Featherly (2020a).
There, it is said:
The end of ARPANET’s days arrived in mid-1982, when its communications protocol,
NCP, was turned off for a day, allowing only network sites that had switched to Cerf’s
TCP/IP language to communicate. On January 1, 1983, NCP was consigned to history, and
TCP/IP began its rise as the universal protocol.
field of computer technology.\textsuperscript{21} In its beginning in 1969, ARPANET consisted of only four computers that were located in four different cities within the United States,\textsuperscript{22} but little by little, more and more computers were added to the ARPANET. Furthermore, there were similar networks built in Europe, too, so that by the late 1970s England and France also achieved to have their own networks that were connecting computers within their countries’ territories.\textsuperscript{23} It was in the early 1980s that people working for ARPA decided that it would be a step into the right direction if they tried to connect all the existing computers including those oversees. That is why, all the necessary measurements were taken and in 1982, after a long way of research trying to develop and establish the best technology in order to be permanently used when transmitting information from one computer to the other, ARPANET was converted to Transmission Control Protocol/Internet Protocol (TCP/IP), a new standard that allowed any computer worldwide to join the ARPANET.\textsuperscript{24} In the end, this way, the so-called Interconnected Networks, commonly known as the “internet”, came to life.\textsuperscript{25}

How exactly did this happen? And who initiated the world wide web?

It all began with one of the experts in the field, Timothy John Berners-Lee.\textsuperscript{26} Berners-Lee was driven by the question of whether a computer could be programmed such that it could link different information together the same way as the human brain does. During college, when Berners-Lee was studying Physics, this question led to building his own very first computer.

\textsuperscript{21}When it comes to the idea of connecting the computers, it has to be noted that the successor of Joseph Carl Robnett Licklider who was Ivan Sutherland had been choosing Robert Taylor to be the director of the Information Processing Techniques Office (IPTO) at ARPA at that time. Robert Taylor was the one who made the suggestion to connect all the computers in his department to one another. This way, the idea of connecting different devices was born. \textit{See supra} note 10, at 12.

\textsuperscript{22}These first four computers were only able to exchange information amongst the four of them. For more information on Robert Taylor, \textit{see} Featherly (2020b).

\textsuperscript{23}Not only countries within Europe, but also other countries far away from Europe—for example, Canada—had been establishing their own networks during that time.

\textsuperscript{24}Transmission Control Protocol/Internet Protocol (TCP/IP) means “\textit{standard Internet communications protocols that allow digital computers to communicate over long distances}”, \textit{see} Featherly (2020c).

\textsuperscript{25}As it was pretty difficult to understand and not very easy to manage, mostly experts and scientists in this field were using the internet at that point, but soon after, the world wide web came to life and this way, as already pointed out, the internet became accessible for anyone.

For an overview of events and people who were involved in the process of initiating the internet’s present success, \textit{see} “How the Web was Born”, \textit{Vanity Fair} (January 7, 2009).

\textsuperscript{26}Timothy John Berners-Lee was born in one of London’s suburbs in 1955 as the son of two mathematicians. Both his parents were working on building a computer for a British firm. The question that Berners-Lee’s father was already addressing at that time was whether a computer would, like the human brain, be able to link certain information to each other. For more detailed information on Timothy John Berners-Lee, \textit{see} Dennis (2020c).
After graduating from university and working as a consultant for a British telecommunication firm, in 1981, Berners-Lee spend a couple of months at the European Centre of Nuclear Research (CERN).27 During that time, he wrote the computer program “Enquire,”28 and in 1989, Berners-Lee requested CERN to start a project called “world wide web”. It has to be noted that this way, in quite a short period of time, the world wide web’s first web browser and server were created, so that in 1990 the world wide web was officially born.29

Since then, Berners-Lee has been constantly working on improving the world wide web as his vision was to create a totally free world wide web and that is why, he never wanted to have his invention to be patent-registered.30

But how does the world wide web actually work?

In the following, a short explanation should help to, at least, give an idea of how a website comes to life:

First of all, it is clear that any computer is just part of a network. If the computer has access to the internet and must be connected to it, a modem is usually necessary that gets in touch with a provider and connects the computer to this provider. The provider gives every computer a so-called IP-address, so that it is able to recognize any computer as soon as data is retrieved from the internet. Thus, if the user of a computer searches for a specific website, the provider sends the data to a database, the so-called Domain Name System (DNS). This database is able to connect the computer’s IP-addresses to websites as the IP-address is sent back to the provider. This way, it can be seen if a webpage was already requested several times by a particular IP-address, and a copy of that page would be saved by the server, so that this webpage could always be shown easily and fast over and over again. No connection to the server where the particular webpage is located is necessary in this case. Otherwise, a connection with the server is mandatory and so-called routers are the ones in charge of connecting the computer to the server as fast as possible. As soon as the computer’s request reaches a server, this server sends the data back to a provider and the provider transmits it to a computer. And this is basically what happens every time a user requests a website or clicks on a link.31

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27The European Centre of Nuclear Research (CERN) is an international scientific organization with its headquarters in Geneva/Switzerland that was founded in 1954 in order to do collaborative research of a “pure scientific and fundamental character” in the field of physics. Article 2 of the CERN Convention states that it “shall have no concern with work for military requirements and the results of its experimental and theoretical work shall be published or otherwise made generally available.” See Sutton (2020).

28See supra note 26.

29Abbate (1999), p. 214.

30Supra note 10, at 19, 20.

In order to give a more detailed overview on innovations in technology that made the internet and worldwide web possible, see National Research Council (1999), pp. 169–183.

31For more detailed information, see “Hintergründe erklärt: Das passiert beim Öffnen einer Webseite”, Computerbild (August 2, 2015). See also Mandl (2019).
It has to be noted that, as of today, the world wide web has been shaping and changing the world dramatically. 25 years ago, firms like ExxonMobil\textsuperscript{32} were the most valuable companies in the world and ruled the stock market, whereas nowadays, firms like Apple, Google, Amazon, Microsoft or Facebook are the leading firms on the stock market and Wall Street.\textsuperscript{33} As a result of the spread of the world wide web around the globe and its constant improvement,\textsuperscript{34} things have been shifting\textsuperscript{35} and values exchanged. One could say that, nowadays, the new currency of most value is the collection of personal data of individuals who are making use of the internet.

\textsuperscript{32} ExxonMobil describes itself as the following:

Over the last 135 years ExxonMobil has evolved from a regional marketer of kerosene in the U.S. to the largest publicly traded petroleum and petrochemical enterprise in the world. Today we operate in most of the world’s countries and are best known by our familiar brand names: Exxon, Esso and Mobil. We make the products that drive modern transportation, power cities, lubricate industry and provide petrochemical building blocks that lead to thousands of consumer goods. \textit{See “Our history”, ExxonMobil (September 4, 2018).}

\textsuperscript{33} Not only due to the coronavirus pandemic, tech companies have been overtaking former leaders at the Wall Street, this shift happened already years ago. In order to get an overview of who was leading the U.S. stock market in 2017, \textit{see “The 30 Largest Companies on the Stock Market”, The Motley Fool (December 5, 2017).}

\textsuperscript{34} It has to be remembered that not only was the world wide web during its beginnings not accessible in as many parts of the world as today, but also was it pretty slow when it first started.

\textsuperscript{35} For instance, people started to do their shopping online and bought more and more things using what the world wide web had to offer. To give a more specific example, in the year 2000, people in the Federal Republic of Germany made purchases online that were worth about 1 billion euros while 17 years later, Germans purchased for more than 58 billion euros making use of the world wide web. These numbers are pretty impressing, especially, if one takes in mind that out of everything the German population buys per year, online shopping accounts for only about 10% of the total purchases. Besides, the Centre for Retail Research that has been foreseeing the trends in online retail sales in Europe for more than a decade as well as in the United States for the year of 2017 stated:

The online retail sector is the main driver of growth in European and North American retailing, achieving in Europe growth rates of 18.2\% (in 2015), 15.6\% (2016), and expected increases in 2017 of 14.2\% and 13.8\% in 2018. In contrast, the annual growth rates for all types of retailing (from stores and online) have ranged between an average of 1.5\% and 3.5\% pa. The recession induced many shoppers to buy online rather from traditional stores. The fact that internet search is comparatively easy and predictable has made online retailing attractive for a wide range of products. Retail focus on the growing use of mobile technology is an additional factor in making online retailing attractive and convenient. As before, the European online market is dominated by the UK, Germany and France. These three countries are responsible for £152 bn online sales, equivalent to 75.1\% of European online sales.

\textit{See “Online Retailing: Britain, Europe, US and Canada 2017”, Centre for Retail Research (2017).}

For more recent information that also takes into account the “dramatic boost in online sales resulting from the coronavirus pandemic”, \textit{see Centre for Retail Research (2020).}
It can be said that, when it comes to the development of new technologies in the history of human mankind, “the internet stands in its own category, and has been particularly defined by its subsequent commercialization.”

This leads to today’s internet situation. Are there policies, norms, principles, rules or regulations that regulate the use and further development of the internet? Who are the ones in charge of shaping today’s internet? Overall, what does “internet governance” stand for?

It must be pointed out that those who created the internet like Berners-Lee wanted the internet to be totally free without any governmental structures. Roy Balleste describes the situation as follows:

The creators of the internet, a group of graduate students, professors, business members from the private sector, and government engineers, did not think of the internet as being governed, or even as requiring governance; rather they saw it as being coordinated in a collaborative and voluntary fashion. The study of Internet governance thus reveals a historical process of claims that demonstrates the lack of a universally accepted system of governance.

Nevertheless, more and more are of the opinion that the internet is in need of a set of rules in order to be operated properly and meet people’s needs. First and foremost, the Internet Governance Forum (IGF) plays an important role in shaping the internet of today.

The work of the IGF started in 2006 with preparatory meetings that led to background reports. At those meetings, public policy issues were discussed in detail in order to provide responses to these points of concern.

The IGF aims at the following:

- The purpose of the IGF is to maximize the opportunity for open and inclusive dialogue and the exchange of ideas on Internet governance (IG) related issues; create opportunities to share best practices and experiences; identify emerging issues and bring them to the attention

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36 Supra note 10, at 11.
37 Supra note 10, at 20.
38 That is why, not only have there been working groups within different governments and within Europe and the world, but also have there been different models of internet governance that were developed—such as the model of Self-Regulation, the model of Government Regulation or the model of International Institutions. See supra note 10, at 129–149.
39 Internet Governance Forum (IGF) describes itself as:

The IGF is a forum for multi-stakeholder dialogue on public policy issues related to key elements of Internet governance issues, such as the Internet’s sustainability, robustness, security, stability and development. The United Nations Secretary-General formally announced the establishment of the IGF in July 2006 and the first meeting was convened in October/November 2006. See “About IGF FAQs”, IGF (2020).
40 Some of the most discussed subjects by the IGF was “Privacy and Data Protection” as well as “Privacy, protection and their relation to human rights”, see Supra note 10, at 95.
of the relevant bodies and the general public; contribute to capacity building for Internet governance.

The main aim of the IGF is to facilitate inclusive, productive discussions on Internet related public policy issues from a general perspective, while keeping all stakeholders involved. This includes having a harmonized and consistent approach when covering IG issues. To further this aim, the IGF adheres to the generally used UN principle of discouraging ad hominem attacks. As such, participants should refrain from singling out individual persons, companies, countries or entities during their interventions and throughout the general discussions and debates in main sessions, workshops and other events at IGF meetings. Concrete examples can be highlighted in the overall coverage of IG issues as long as it is not done in a blatantly inflammatory or potentially libelous way. Singling out one entity without broader context could not only discourage further participation of this entity, but endanger inclusive and productive discussion at the IGF. 41

The internet remains a work in progress. Only the future will tell what the IGF’s (as well as other stakeholders’) role will be with regard to the development of the internet.

2.2 Social Networks: Basic Facts

In order to further delimit the problem, and after giving an idea of what today’s internet is, some of the basic facts about social networks have to be presented.

Therefore, in the following, the development as well as the current situation concerning social networks will be described in order to provide answers to questions such as:

How did these networks get started? Which one was the first social network? How did social networks develop? And what is today’s situation?

Furthermore, facts will be pointed out regarding the number of persons joining social networks, the amount of time they are spending on these platforms, the activities or purposes of the people who are using these services as well as on psychological effects social networks might have concerning its users and on possible financial benefits a person might have because of social media. At the end, a short list of pros and cons for social networks will be given.

It has to be noted that due to the easier access to devices like computers, smartphones and tablets and the constant development in technology all around the world, nowadays people use the internet way more than ever before and it is not a secret that social networking has become one of the most popular activities for users of the internet. 42

As of today, there is a number of social networks that are worth mentioning—for example:

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41 Id.

42 For more detailed information on the use of the world wide web, especially in regards to online shopping, see supra note 35.
WhatsApp
WhatsApp is a messaging service and social network that is designed to send and receive texts, documents, photos, videos and locations as well as voice calls worldwide.\(^{43}\)

Instagram
Instagram can be described as a mobile application and social network where people can post and share images and short videos.\(^{44}\)

TikTok
TikTok is a social networking service that allows its users to share short videos.\(^{45}\)

Snapchat
Snapchat is another multimedia mobile app and it sends images that are automatically deleted shortly after.\(^{46}\)

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\(^{43}\)As of July 2020, WhatsApp with its 2 billion users was number 3 when it comes to the most popular social networks, see supra note 5. Furthermore, according to WhatsApp:

More than 2 billion people in over 180 countries use WhatsApp to stay in touch with friends and family, anytime and anywhere. WhatsApp is free and offers simple, secure, reliable messaging and calling, available on phones all over the world. See WhatsApp (2020).

\(^{44}\)Founded in 2010 and purchased by Facebook in 2012 for US$1 billion, Instagram is a social network where people post and share pictures and videos as well as so-called “stories”—videos that are only visible for 24 h. With more than 1 billion people worldwide who are actively using this social media platform on a monthly basis and 500 million users who are even actively using Instagram every day, Instagram ranks number 6 of the most popular social networks as of July 2020, see “Instagram—Statistics & Facts”, Statista (May 14, 2020c). See also supra note 5. For further information on how Instagram is used for commercial purposes and how its users make use of Instagram in order to earn their living, see “Instagram for Business: Everything You Need to Know”, Business News Daily (March 6, 2018).

\(^{45}\)TikTok is a Chinese-owned social media app that was started in 2016 and has ever since began its success story around the globe as people love to upload their own videos to the app and launch or join so-called “challenges”—for example, TikTok dance challenges are very popular amongst the users of this social network. With its 800 million users as of July 2020, TikTok became the seventh most popular social network in only a few years, see supra note 5. Due to the plan of President Trump to ban TikTok from the United States as he claims, overall, that the Chinese government might spy on U.S. citizens who are using the app, TikTok entered into negotiations in order to stay in business within the United States. A deal is not yet closed, but it seems as if the Trump administration might agree on the compromise that TikTok proposed taking in mind the security concerns the U.S. has. For further information, see “TikTok’s Proposed Deal Seeks to Mollify U.S. and China”, The New York Times (September 14, 2020).

\(^{46}\)Snapchat was launched in 2011 and has become the fastest growing app in the US with about 200 million users as of January 2015; see “Is Snapchat Really Confusing, or Am I Just Old?”, Slate (January 29, 2015).

Snapchat’s posts are automatically deleted after a while and not only this, but also the fact that Snapchat’s median age is 18—in contrast Facebook’s median age is 40—makes Snapchat the biggest enemy to Facebook; see “The Inside Story of Snapchat: The World’s Hottest App Or A $3 Billion Disappearing Act?”, Forbes (January 20, 2014).

As of July 2020, Snapchat with its almost 400 million users was number 13 when it comes to the most popular social networks, see supra note 5.
Twitter can be defined as a news and social network service.\(^{47}\)

**Facebook**

As of today, Facebook still is the most popular social network.\(^{48}\)

The starting point of social networks can be illustrated by the very first social network created, Friendster.\(^{49}\) The best known and most frequented social network as of today is Facebook with more than 15,000 employees and more than a dozen offices in the US as well as more than 30 offices in other cities around the globe.\(^{50}\) That is why, in the following, Facebook should serve as an example to present the basic facts of social networks.\(^{51}\)

With its 2.6 billion monthly active users, Facebook has more monthly active users than Instagram, TikTok and Snapchat together.\(^{52}\) Moreover, looking at Facebook’s monthly active users, it has to be noted that this means an increase year over year of almost 12% since Facebook was launched in 2004. Also, the almost 1.8 billion users that log on to Facebook on a daily basis have increased by 12% over the years since Facebook’s beginning in 2004.\(^{53}\) Although founded in the United States, Facebook is not only an American phenomenon, but rather a global one and more than 85% of all profiles are created outside of the U.S. and Canada.\(^{54}\)

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\(^{47}\) Created in 2006, according to Twitter’s own website, its mission is “To give everyone the power to create and share ideas and information instantly, without barriers.” See “Twitter Just Filed For Its IPO, And Its Mission Statement Is Super Short”, Business Insider (October 3, 2013).

\(^{48}\) See supra note 5.

\(^{49}\) Facebook was founded in a Harvard dorm in 2004 by Mark Zuckerberg, Dustin Moskovitz, and Chris Hughes and became the world’s leading social network in less than 10 years playing an important part of people’s lives all over the world. For more detailed information on the history of Facebook, see Taulli (2012).

\(^{50}\) As of June 30, 2020, there were 52,534 people working for Facebook as full-time employees in 70 offices and 17 data centers around the globe, see “Who We Are”, Facebook (2020d).

\(^{51}\) For an overview of the history of social networks, see “The history of social networking”, Digital Trends published on (May 4, 2016). See also supra note 37.

\(^{52}\) Instagram has 1 billion monthly active users, TikTok 800 million and Snapchat about 400 million, see supra note 5.

\(^{53}\) See Press Release “Facebook Reports Second Quarter 2020 Results”, Facebook (July 30, 2020).

\(^{54}\) For example, in mid-2017, there had been 307 million people using Facebook who are located in Europe. See The London School of Economics and Political Science (2017).
But how much time does a person spend on Facebook? And what are people actually doing there?

The average time a user from the United States spends on Facebook is 37 min per day, and it seems to be worth mentioning that during their visits, most people share content—over all, pictures and comments.\(^{55}\) That is why, in total, more than 50% of all users are joining Facebook in order to share content with other people and 65% of all users watch photos, while 46% watch videos, so that 100 million hours of video content is watched every day on Facebook.\(^ {56}\) Furthermore, 15% make use of Facebook to do online shopping and 800 million people are using Facebook Marketplace every month.\(^ {57}\) Moreover, users update their statuses on a regular basis and they generate so-called “Likes” that indicate that a person is agreeing on another person’s content. As of May 2013, 4.5 billion likes were generated every day and the average user of Facebook likes 13 posts every month as of July 2020.\(^ {58}\) Besides, the average Facebook user usually shares one article and comments 5 times a month as well as checks on 12 advertisements that are promoted on Facebook. This way, 57% of all Facebook users to be precise take advantage of Facebook to share content with others and 33% actually use Facebook to network.\(^ {59}\)

According to Facebook, its mission is the following:

Founded in 2004, Facebook’s mission is to give people the power to Build community and bring the world closer together. People use Facebook’s apps and technologies to connect with friends and family, find communities and build businesses.\(^ {60}\)

As already pointed out, Facebook with its users all over the globe is a gigantic network that wins more and more power by being part of so many people’s everyday lives.

So, does Facebook’s mission as stated on their own website really apply to the majority of its users? Or are there other goals and purposes people might be driven by?

It must be kept in mind that with the large number of people who are using social media, a network like Facebook cannot be ignored—especially when users are visiting their social network on a very regular basis. And it is unnecessary to point out that such a platform can offer great business opportunities—not only to larger brands and corporations, but also to individuals who are just getting started in promoting their own products, ideas, businesses or simply just themselves. Many

\(^{55}\)For further information on statistics regarding Facebook and its users, see “Facebook Revenue and Usage Statistics (2020)”, Business of Apps (July 30, 2020).

\(^{56}\)Id.

\(^{57}\)For more information on Facebook Marketplace, see Facebook Marketplace available via Facebook https://www.facebook.com/marketplace/learn-more/.

\(^{58}\)Supra note 55.

\(^{59}\)Id.

\(^{60}\)Supra note 53.
examples show how social networks can be the starting point for someone to realize an idea as well as influence and even push someone’s business.\footnote{To give an example, I would like to share the success story of a young lady from Berlin who had been working at one of Germany’s most well-known newspapers being the personal assistant of the editor-in-chief for the newspaper’s edition online. After many years of doing her job, a job that others would have been more than happy to get and that was pretty well-paid, she decided from one day to another to quit and to rather follow her dream to work in fashion. So, like many others she started her own blog including participating in all kind of social media platforms—especially, Instagram and after a while of positioning herself, making the right business decisions—over all, deciding on how to post what on whatever platform -, she actually started earning good money because more and more people were following her. After all, many of her followers as well as companies contacted her and they signed agreements, magazines published her photos and pointed to her website and she continued her journey as a so-called influencer making a living. \textit{See} “Hello Shopping” available at \url{http://helloscopping.de/medien/}. Another great example is Chiara Ferragni as Ferragni used to be a so-called simple girl from Italy who successfully built an empire making use of social media which led to her being on the Forbes 30 under 30 list twice. In order to better understand her story, \textit{see} “Chiara Ferragni – how a ‘crazy blogger’ turned her life into a shop window”, \textit{The Guardian} (November 29, 2016). For more information on how to use social network platforms as a marketing tool, \textit{see} Faßmann and Moss (2016).}

According to Facebook, as of May 2013, there had been 16 million local business pages created which means a 100% increase since June 2012 and a total of 42% of marketers state that Facebook is critical or, at least, important to their business.\footnote{Nowadays, the aspect of using social media platforms like Facebook or Instagram that is owned by Facebook as a business tool, is of even more importance than 7 years ago. Today’s mission of Facebook as referred to above demonstrates this very well—especially, when one compares today’s mission to Facebook’s mission a couple of years ago: Founded in 2004, Facebook’s mission is to give people the power to share and make the world more open and connected. People use Facebook to stay connected with friends and family, to discover what’s going on in the world, and to share and express what matters to them. \textit{See} Press Release “Facebook Reports Third Quarter 2016 Results”, \textit{Facebook} (November 2, 2016).}

What is it that really matters to Facebook users? Do they follow the above stated mission of Facebook over all, staying connected with friends and family?

Before further developing this subject, it has to be given a brief summary of the pros and cons of social networks as to our previous discussion:

**Pros of Social Networks**

As far as easy and fast communication amongst people from all over the world goes, social media is definitely contributing to it big time.

Furthermore, and as pointed out already, there are also business opportunities for individuals who make use of social media platforms.

**Cons of Social Networks**

It must also be taken into account that there are threats coming from social networks, too—especially when these are becoming more and more powerful and influential.
Not only does the internet itself pose general threats to its users—as for example, piracy and data theft as well as heading towards a future where nothing is ever forgotten, but rather constantly supervised and one becomes a so-called “glass person”—, but also specific ones.

By creating an atmosphere of intimacy and promoting to share emotions, thoughts and opinions, a user might give up on personal information too easily and without thinking about any possible consequences. This way, others could detect weaknesses in individuals and not only could this lead to victimization, but also to major manipulation.

Furthermore, it becomes incredibly easy to create fake images of oneself or even other persons, and as already said, social networks contribute to mobbing as well as to depression and even suicidal thoughts and actions.

Especially, the psychological effects of social media on the individual and on society will be further developed in the next part when discussing the so-called Facebook Generation.

First, it has to be asked what the term of the so-called Facebook Generation encompasses.

In addition, as far as to the questions on what exact data is gathered and processed through social networks and what possible impact this might have, this will also be explored.

2.3 The “Facebook Generation”

Accordingly, the Facebook Generation, also called “Generation Facebook,” will be described in what follows.

There are a number of questions that pop up when starting to think of the term “Facebook Generation,” such as: First and foremost, who falls under this term?

And what are the reasons for joining social networks?

Which ones are the most frequented ones amongst the Facebook Generation? And what happens to a person who is on social networks all the time? Are these people just doing what everyone was doing before social networks became part of their lives? Especially when it comes to teenagers, do today’s teens still have the

63 Besides, there are millions of fake user accounts on social media platforms. As of 2012, there were 83 million fake profiles on Facebook alone. These accounts made up almost 10% of all active pages on Facebook. See “83 million Facebook accounts are fakes and dupes’, CNN (August 3, 2012).

For more information on fake Facebook accounts and how Facebook is dealing with this issue, see “Does Facebook Really Know How Many Fake Accounts It Has?”, The New York Times (January 30, 2019).

As of May 2019, there were 120 million fake accounts on Facebook, see supra note 55.

64 The report “The Millennial Generation Research Review” gives a good first impression of what the subject at hand is, see U.S. Chamber of Commerce Foundation (2012).
same needs as teenagers had who were growing up a generation before them? And are they just channeling these needs through a new technology with new opportunities?

What are the effects of social networks on people? Are there psychological effects on the individual or even on the society as a whole? After all, might this new technology be changing our world more dramatically than we actually think presently?

First of all, it must be noted that, when referring to Generation Facebook, we are talking about a certain demographic group of individuals born while the internet came to life, so that these people were growing up making use of the internet as well as of social media. Instead of communicating via one-to-one meetings, phone calls or emails, for Generation Facebook, social networks are the most important way of getting in touch with each other.

Most of those who are considered belonging to the Generation Facebook started to make use not only of computers, but also of mobile devices—such as smartphones and tablets—from an early age on, and participating in social networks has been just a normal part of their lives in order to communicate and connect to others from around the globe from early on, too.65

This way, not only do they have relationships with persons in the places where they live or visit, but they also share their lives with people who do not form part of their physical everyday lives when they meet their friends in person. These relationships rather take place in the digital world and do not interfere or overlap with the real world. Nevertheless, for the members of the Generation Facebook, the relationships they have to those they only meet in the digital works are as crucial as the ones with actual physically present friends.

That is also why, new technologies are important to the younger generation—not only in their private lives, but also when it comes to their workplaces.

According to Gary Hamel,66 “organizations must provide Generation Facebook with a social environment at work to reflect the social context of the Web.”67

Besides, Katrin Bennhold, a New York Times correspondent68 has been exploring and writing about the subject of Generation Facebook. That is why, she was

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65In order to give an overview not only of the actual usage of Generation Facebook when it comes to new technologies and social networks, but also on the emotional experiences caused by social media platforms on this generation, see Wood et al. (2016).

66Gary Hamel is an American author and business consultant and he was ranked “one of the world’s most influential business thinkers”, The Wall Street Journal (2009). Furthermore, Hamel was amongst the top 10 most influential business gurus, see “In Pictures: The 10 Most Influential Business Gurus”, Forbes (October 14, 2009) and is still referred to as “one of the world’s leading management thinkers”, see “Gary Hamel: Leadership Lessons From The Corona Crisis”, Forbes (April 23, 2020).

67See also “Generation Facebook (Generation F)”, SerachCIO (October 2012).

68Katrin Bennhold is a German native who has been moving around the globe living in five different countries on three continents. She has been a Nieman fellow at Harvard University in 2012 and 2013. Furthermore, Bennhold who has been working for The New York Times since 2004 is managing the bureau of the The New York Times in Berlin at the moment. See “Katrin
interviewing, amongst other teenagers, a young 19-year-old US citizen who is part of the Generation Facebook.

In an interesting newspaper article, Bennhold asks:

What kind of citizens, voters, consumers, leaders will kids like Trevor grow up to be?

In order to find an answer to this question, Kartrin Bennhold was further researching on the subject and writes:

I decided to go back to the place I was a teenager in the days before cellphones and e-mail: the Ratsgymnasium in Osnabrück, an average school in an average town in northwest Germany. For three days in April I embedded in the everyday lives of 13- to-19-year-olds, hanging out in and after class, watching them interact and interviewing the adults in their lives.

Their teachers say they have poor spelling and short attention spans. (“This is an ADD epidemic in the making,” one muttered darkly.) I found them hyper self-conscious, narcissistic and a little superficial. Memory is on a hard disc — many of them don’t even know their own mobile number by heart.

But most of the Facebooking teens I met among the 1280 students here are also definitely more international-minded, flexible and tech-savvy than we were 20 years ago. They can study for a math test whilst IMing and listening to music; they take piano tutorials on

Bennhold’s, *The New York Times* (August 23, 2020), available at https://www.nytimes.com/by/katrin-bennhold.

Although Bennhold never thought of herself as an outsider, she was surprised to find herself a “digital immigrant” at her old high school in Germany. As Technology has never been more than a work tool for Bennhold, she found the so-called Facebook Generation “clicking at a different rhythm”.

69 See “Generation FB”, *The New York Times* (June 23, 2011).

This article gives a pretty good overview of different aspects regarding the Generation Facebook and how this generation is different to the previous one. The article does not only highlight the differences in between the teenagers from the generation right before the internet and social media become so popular and the Generation Facebook teens, but it also describes how social networking actually works by having the teenagers of Generation Facebook being involved and by explaining what these teenagers actually do every day and how as well as why they do and share so much on social networks sites. Furthermore, the article gives an idea on how much time the younger generation actually spends on social media platforms and how social networks interfere in and occupy the every-day lives of Generation Facebook. Besides, the article also touches to aspect of bullying. For further information on young adults and privacy online, see Marwick et al. (2010).

70 Id.

71 The definition of IMing is “Instant Messaging”.

For more information on the latest developments in instant messaging, especially when it comes to its use at work places, and its impact on society, in particular its changes regarding communication amongst people, see “The Instant Message Generation Gap”, *The Wall Street Journal* (April 17, 2018).

The article describes the following:

...Slack, one of the most widely used messaging apps, allows group chats, direct messaging to individuals, and voice and video calls across multiple devices.[... ] While email is still the leading form of business communication, IM accounts are expected to grow 8% annually for the next four years, to 8.6 billion world-wide, says the Radicati Group, a Palo Alto, Calif.,
YouTube and battle monsters in virtual games with virtual friends from all over the world. They share everything, from their latest break-up to prized study notes.

The social networking addiction may be accentuating the worst in youth, but I also saw it bring out the best: this is not Generation Y, this is Generation Why Not? — multi-tasking and crowd-sourcing, collaborative and open-minded. The kids of today may not be able to spell Zeitgeist but they are fundamentally of their time. And after getting to know them a little I came away reassured that the many daunting problems previous generations are bequeathing on them might just be in good hands.\textsuperscript{72}

Bennhold further describes the pros and cons of the life the younger generations due to the impact new technologies have on them and concludes the following:

At my old school I was struck by how much teenagers have changed. But I was also struck by how little the school had changed, and I don’t think it’s an exception. Teachers are right to fret about attention deficits and lazy thinking. But no fundamental rethink seems to have occurred about how teaching and learning should take place in the age of social networking.\textsuperscript{73}

So, this means that the Facebook Generation, although still facing the same needs and having similar dreams and expectations from like to the previous generations, yet, are leading a different lifestyle that requires an adaptation of certain institutions like, for example, the schooling system to this new reality?

Just recently a memo of Facebook’s executive Andrew Bosworth who has been working for Facebook for more than 10 years was exposed.\textsuperscript{74} In that memo called “The ugly”, the Facebook employee writes:

\begin{flushleft}
research firm. Employers say they reduce the need for meetings and make it easier to sustain conversations among team members, share updates and get quick tips and answers. Email can seem clumsy, slow and officious by comparison. […] The tempo of IMing changes the way many people organize their days. […] A new generation of workplace apps, including Microsoft Teams, Stride by Atlassian and Google Hangouts, aim to simplify communication by bundling instant messaging with team-collaboration, web-conferencing and social-networking tools. […] \\

There has also been a recent study on instant messaging where instant messaging is described as the following:

Instant Messaging (IM) plays a major role in online communication, whether through dedicated software or through chat integrated in a social network’s platform. IM-based online conversation enables private, synchronous, interpersonal communication while being invisible and possibly anonymous; facilitates self-disclosure and intimacy; and possesses advantageous features of expressive writing and social support. For adolescents, the use of IM is a legitimate, available, and free alternative vehicle for communicating with peers to ventilate negative emotions and to receive social support and advice. \textsuperscript{75}See Dolev-Cohen and Barak (2013), pp. 58–63.
\end{flushleft}

\textsuperscript{72}Id.

\textsuperscript{73}Id.

\textsuperscript{74}For more detailed information on this memo, see “A Look at Facebook’s “ugly” memo”, CNet News (March 30, 2018).

For further information, see “Facebook Memo Reveals Angst Over Growth Cultures Consequences”, The Wall Street Journal (March 30, 2018).
Maybe it costs a life by exposing someone to bullies. Maybe someone dies in a terrorist attack coordinated on our tools.

To give an actual example of mobbing within a social networks, there has been a case that led to suicide due to social media and disrespectful treatment one another. In this very sad case, a 13-year-old teenage girl commits suicide after being ignored by her alleged boyfriend who she had fallen in love with after getting to know him online. In the end, it turns out that this boyfriend was a former girlfriend of hers who wanted revenge.

Besides, studies have shown that social media has an impact on people’s health—especially, when it comes to younger adults.

So, the question remains whether all the information that is already out there and accessible to whoever is interested in it, changes the way teenagers are behaving nowadays.

Once again, coming back to Bennhold as she comes to the following assumptions:

Sometimes it’s not clear whether the kids today control the information or the information controls them. […] But that’s just it: The flipside of this attitude (meaning that the Generation Facebook has a pretty easy attitude towards privacy) is that teens like Eva, Johannes, Leo and Arne are much less selfish with their knowledge than we were. They share their study notes not just among friends or in their class, but across the country: Abiunity.de is a goldmine of shared files on every exam subject on the German syllabus. Unlike us, many of them study regularly in groups and seem to be much better at it. “They are much less hierarchical than you guys were,” observes my former biology teacher, Gerd Schiefelbein. Arne plans a trip around the world after graduating from high school this summer and dreams of studying marine biology in Australia. Leo wants to move to Britain. Today they use social networking to rally around the coolest band of the day and organize ad hoc parties with amazing turnout. As adults they will have the tools to rally large communities around the causes they care about at unprecedented speed. They don’t mind small

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75 See “Cyber-Mobbing Tod eines Teenagers”, *Der Spiegel* (November 18, 2017).
76 According to Bennhold “Social networking has penetrated just about every aspect of teenage interaction, not least dating etiquette.” See supra note 69.
77 Furthermore, it is said there are tens of millions of fake accounts on social networks, see “Have You Been a Victim of Social Media Theft?”, *The New York Times* (January 29, 2018).

For example, the Journal of Medical Internet research published a study that comes to the following results:

Approximately 69% of US adults reported having access to the Internet in 2007. Among Internet users, 5% participated in an online support group, 7% reported blogging, and 23% used a social networking site. Multivariate analysis found that younger age was the only significant predictor of blogging and social networking site participation; a statistically significant linear relationship was observed, with younger categories reporting more frequent use. […] In general, social media are penetrating the US population independent of education, race/ethnicity, or health care access.

See Chou et al. (2009).

On the other hand, there are also studies that support the contrary. One recent study comes to the conclusion that its findings “do not support the narrative that young adolescents’ digital technology usage is associated with elevated mental-health symptoms.” See Jensen et al. (2019).
tailored ads, but abhor big intrusive ones. They trust one another more than politicians and big companies. My bet is that they will be demanding customers and demanding voters.78

We will conclude this chapter with Bennhold’s assumptions, as this is a very positive way of thinking and only the future will tell how the members of the Generation Facebook will shape tomorrow’s reality.

2.4 Data Gathered and Processed Through Social Networks

After giving a description of the world wide web and basic facts regarding social networks, as well as explaining the so-called Facebook Generation, it is time to focus on the data gathered and processed through social networks. As everyone knows, social networks are collecting their user’s data.79

But, first of all, where does this data come from? What is the amount of data gathered and processed? How did this data flow develop? And more important, what kind of data do social networks gather and process? How exactly do these networks use the data retrieved from their users? And how can a user have an impact on the usage of his or her own data?

Who is interested in the data? And why is that? How is the data and its gathering and collecting controlled? Overall, who has the right to use, sell or work with the data?

It, once again, has to be pointed out that, on the one hand side, social networks provide an easy way of communication amongst individuals from all around the world. The users of social networks engage with one another constantly as they are posting texts as well as videos and pictures exchanging ideas and opinions. They are commenting on and discussing all kind of subjects. And while doing so, usually, the individual does not pay anything in order to make use of this new and easy way of electronic communication. So, on the one hand, it seems as if these social networks offer free platforms to anybody who wants to join and be part of a community of people who share their lives, visions, dreams and fears with each other. But on the other hand, some might come to the conclusion that the users of social networks are actually paying after all as they are giving away lots of their very personal data to the social networks they use. One could even say that the users are charged big time—especially as it has to be taken in mind that it remains pretty unclear what exactly social networks actually know.80

78See supra note 69.
79Not only is Facebook’s business model based on collecting data from their users, but also Facebook’s CEO Mark Zuckerberg just recently stated that his social network even collects data on non-users, see “Zuckerberg Says Facebook Collects Internet Data on Non-Users”, Bloomberg News (April 11, 2018).
For a definition of the term data, see Kirch (2008), Vol. 1, p. 192.
80To take Facebook as an example, Mark Zuckerberg’s statement “In general, we collect data on people who have not signed up for Facebook for security purposes.”, once again, emphasizes that anybody using the internet is affected no matter if they are users of Facebook or not. To get a better idea on what Facebook knows about individuals, see “What Mark Zuckerberg Didn’t Say About What Facebook Knows About You”, The Wall Street Journal (April 14, 2018).
To give a better example in order to explain the topic of data in the context of social networks, the author will take a closer look at Facebook and its practices. This way, numbers, for example, the amount of users and maybe the data obtained from them will become more clear.

So, there is Facebook that, of course, is collecting data on a daily basis, but it is by far not the only social network doing so. Besides, there are also other internet services that collect data in a similar way social networks do.

In the following, basic facts will be given on the production of data in social networks by taking Facebook as an example: so, what kind of data does Facebook collect?

It has to be noted that there are different categories of data Facebook is constantly retrieving from its users which will be presented in the following.

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81 As already described, the so-called generation Facebook uses a number of other social networks—such as Instagram, Twitter, Snapchat or TikTok.

82 For example, so-called “web tracking” leads to finding out about someone’s very own behavior online. As already explained, web tracking means that a website uses special software tools in order to keep certain tabs on its visitors and, this way, monitor the visitor’s behavior online to improve the online experience of this person with that website. Obviously, many websites are making use of web tracking in order to find out where internet users are at, what these people are interested in or what they like and buy. And it has to be pointed out that web tracking was not invented by social networks, but it is pretty problematic when it comes to data protection, although not too many people might be caring about it yet, and there might rather be more concern when it comes to data collected through social networks.

Accordingly, an article describes the following:

A study that looked at web tracking over the last 20 years found that at least 75% of the world’s 500 most popular websites contain web trackers, up from fewer than 5% in 1998. [..] The rise of web tracking and more targeted advertising has helped fund the explosion of online content and build such web behemoths such as Google, Facebook, Amazon and others. [..] Websites today commonly include tracking code from third parties, such as advertisers, social media sites and website analytics services. In the simplest tracking mechanism, those third parties store a “cookie” containing a unique identifier (such as “USER1234”) in the user’s browser.

Whenever a user visits a website containing code from one of those third party trackers, that code is used to look for the user’s unique identifier stored in the user’s browser. If it finds the unique identifier, it sends information about what the user viewed to its collection of information about them out to the company that placed it.

Thus, the third party trackers are able to build “browsing profiles” of users. While these don’t include their name, they do include information of interest to advertisers.

See “They really are watching you: web tracking surges with online ads”, USA Today (August 16, 2016).
2.4.1 Data Actively Provided to Facebook by Its Users

First of all, there is the data a user actively provides to Facebook. For example, upon registration a user usually gives away information such as his or her name, address, gender, birthday or Email-address as this is required by Facebook. Furthermore, many users add more information, such as, for instance, their education, work place and hobbies, as well as the music, books, artists, TV shows and so on. This is not mandatory according to Facebook’s policy, but especially those who use Facebook on a regular basis are constantly contributing to more data the networks can collect on them. For example, the famous like-button as well as people’s status updates, their links, posts, comments and friendships as well as participating in groups and events or their communication through mail or chats makes it possible for Facebook to retrieve more and more information as its users are actively providing it. The like-button, a so-called social plug-in, in particular is a perfect tool in order to retrieve gigantic amounts of information as it is not only existing within the social network itself, but also on many other websites and because of it complex software, the

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83In order to be able to create a Facebook profile, the user has to provide all the above mentioned personal information. For more detailed information on Facebook’s data policy, see “Data Policy”, Facebook (August 21, 2020a).

In order to get an overview of all of Facebook’s policies, see “Facebook Terms and Policies”, Facebook (2020b).

84The like-button allows Facebook to learn certain facts about a person such as the IP-address and location of the person’s device, or what web browser is used and it becomes clear that this way, it is easily possible to create a pretty exact user profile of any person surfing online. Although, there are certain things one can do, over all, install specially designed programs, in order to stop Facebook from collecting one’s information, some of these programs do not work properly and others even turn out to be another toll that actually collects and reports to Facebook.

In this context, it has to be also noted that Facebook’s like-button has been of concern in Germany—especially, when it was first introduced. Overall, those who are working for consumer protection have been fighting companies that make use of the like-button like Beierdorf or Paypack nationwide. In 2016, for example, a German court ruled that the like-button was actually illegal when it comes to those websites of companies. The District Court Düsseldorf had to decide a case of the consumer advice center of the German State of Nordrhein-Westfalen against Fashion ID, the online shop of the German clothing Company Peek & Cloppenburg. The legal line of argument led to the conclusion that the like-button was retrieving too many information of the consumer who was visiting the online shop’s website and who did not even know that certain of his or her information was exposed, so that by doing so, the like-button was violating laws that are supposed to protect the individual’s personal data.

For further information on the like-button as well as the court’s ruling, see “Der Facebook-Daumen ist ein raffinierter Spion”, Die Welt (March 9, 2016).

For the complete text of the ruling of the District Court Düsseldorf—Landgericht Düsseldorf Urteil (Aktenzeichen 12 O 151/15), see NRWE—Rechtsprechungsdatenbank der Gerichte in Nordrhein-Westfalen meaning the German State of Nordrhein-Westfalen’s website, available at https://www.justiz.nrw.de/nrwe/lgs/duesseldorf/lg_duesseldorf/j2016/12_O_151_15_Urteil_20160309.html.

85Usually, plug-ins contain so-called tracking-cookies which are designed in order to be automatically placed on a person’s computer and which are recognizing the software of a plug-in, so that they report all the person’s behavior online right away back to Facebook even if that particular person does not even have an account with Facebook.
button once placed on a website allows Facebook to know about anybody who is just visiting a website that has the like-button no matter whether the person actually makes use of the like-button or not. As there are millions of like-buttons existing and Facebook is constantly staying connected to each and every website that contains one of them, as of today, almost every user of the internet is being spied on non-stop while Facebook monitors the users’ behaviors online, their preferences, buying patterns and much more. 86

2.4.2 Metadata

There is also another category Facebook’s users are not always aware of. The users provide Facebook with way more information than the above mentioned as Facebook saves a lot of so-called “metadata”. Metadata stands for the collection of information about the communication of people—for example, time, place, language, sender, recipient or let’s better say how a person communicates—in contrary to the collection of content meaning what exactly a person actually says or writes. 87 According to David D. Cole: 88

Of course, knowing the content of a call can be crucial to establishing a particular threat. But metadata alone can provide an extremely detailed picture of a person’s most intimate associations and interests, and it’s actually much easier as a technological matter to search huge amounts of metadata than to listen to millions of phone calls. 89

86 It also has to be noted that not only does Facebook see who or what IP-address visits what website, but also what the individual does on such a website where a like-button is placed—for example, how long one is staying on that site, which link one clicks on or what product one looks at or buys etc., see supra note 84.

87 See Granick (2017), p. 20.

88 David D. Cole is the current Legal Director of the American Civil Liberties Union, the oldest and largest civil liberties organization in the United States of America. After graduating from Yale Law School, besides other achievements, he has been successfully litigating a number of constitutional cases in the Supreme Court of the United States and he has been the Hon. George J. Mitchell Professor in Law and Public Policy at Georgetown University from 2014 till 2016.

For further information on David D. Cole, see “David Cole”, American Civil Liberties Union (2020).

89 Furthermore, Cole also writes:

As NSA General Counsel Stewart Baker has said, “metadata absolutely tells you everything about somebody’s life. If you have enough metadata, you don’t really need content.” When I quoted Baker at a recent debate at Johns Hopkins University, my opponent, General Michael Hayden, former director of the NSA and the CIA, called Baker’s comment “absolutely correct,” and raised him one, asserting, “We kill people based on metadata.”

See “We Kill People Based on Metadata”, The New York Review of Books (May 10, 2014).
That is why collecting metadata is one of the most important tasks of an intelligence analyst.\(^\text{90}\)

And looking at the United States, it has to be noted that the collection of metadata and its tremendous revelations regarding the country’s citizens has caused an attempt of a reform of the National Security Agency (NSA) in 2014. Unfortunately, although this bill was unanimously approved by two committees, it did not become binding law.\(^\text{91}\)

Coming back to metadata and social networks, it can be said that, especially, those users who are permanently logged on to Facebook, are giving away tons of information as Facebook uses, over all, automated services to constantly check on its users.\(^\text{92}\)

\(^\text{90}\)In her book, Jennifer Stisa Granick states:

Metadata is sensitive, revealing, and highly coveted by intelligence analysts. Metadata collection is a huge part of what the intelligence community gathers. In a one-month period alone in 2013, a single unit of the NSA, the Global Access Operations unit, collected metadata on more than 97 billion emails and 124 billion phone calls from around the world. \textit{Supra} note 87 at 20–21.

\(^\text{91}\)David D. Cole describes the approval of the initiative as the following:

It is precisely this power to collect our metadata that has prompted one of Congress’s most bipartisan initiatives in recent years. On May 7, the House Judiciary Committee voted 32-0 to adopt an amended form of the USA Freedom Act, a bill to rein in NSA spying on Americans, initially proposed by Democratic Senator Patrick Leahy and Republican Congressman James Sensenbrenner. On May 8, the House Intelligence Committee, which has until now opposed any real reform of the NSA, also unanimously approved the same bill. And the Obama administration has welcomed the development. \textit{See supra} note 89.

Nevertheless, in 2018 not only the House, but also Senate simply reauthorized the surveillance powers and did not even really debate on it and there were neither any amendments nor privacy reforms, \textit{see} “Congress demanded NSA spying reform. Instead, they let you down”, \textit{ZD Net} (January 19, 2018).

\(^\text{92}\)For example, Facebook can constantly track its users and can see every move they make if connected to Facebook via smartphone as a smartphone is usually always carried around by its owner. Also, Facebook saves the metadata of uploaded videos and pictures, so that not only the device in action—for instance, a smartphone, tablet or computer—is discovered, but also time and place are recognized and saved by Facebook. Furthermore, Facebook is able to scan all kind of uploaded pictures in order to recognize faces and certain landscapes, places and even food. Although the automated facial recognition is turned off for users from Europe according to Facebook, it becomes clear that one cannot really know the exact amount of information this social network actually retrieves.

In order to get an idea on how Facebook itself looks at the issue of collecting data, here is what its website states:

Promote safety and security. We use the information we have to verify accounts and activity, combat harmful conduct, detect and prevent spam and other bad experiences, maintain the integrity of our Products, and to promote safety and security on and off of Facebook Products. For example, we use data we have to investigate suspicious activity or violations of our terms or policies, or to detect when someone needs help. \textit{See supra} note 83.
2.4.3 Big Data

This leads to the third category of data—the so-called “big data”. Big data comes from a statistic analysis of the above explained data. This new information, therefore, is data won from existing information by analyzing this existing data. Facebook looks at the data and performs its own analysis and experiments that, sometimes, are presented to the public. Besides, Facebook also combines different sources of data in order to retrieve even more data. Additionally, there are others out there who participate in retrieving data such as market research institutions. And Facebook cooperates with these firms, overall, in order to better target its clients coming from the advertising field who are posting their advertisements on Facebook. This way, Facebook combines its own information with the one from others. By doing so, it often comes down to its users’ Email addresses and phone numbers in order to link the right data with each other.

So, what exactly is it that Facebook wants to achieve with all the data that was collected?

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93For further information on big data, see “Why “Big Data” Is a Big Deal”, Harvard Magazine (March-April 2014).

There, the author refers to Gary King’s study on social media who says that the potential of big data is to benefit society and that this benefit could be far beyond what has been accomplished until now. He names the example of Google that could perform a quicker prediction of flu outbreaks by analyzing clusters of search terms, big data, than by just using the regular hospital admission records within the United States.

94For instance, Facebook already did its research on the subject whether a huge amount of positive or rather negative comments can lead to emotional contagion, so that more and more people would follow the same ideas. The feed experiment that was performed by Facebook in collaboration with academics from Cornell and University of California concluded:

> Emotions expressed by friends, via online social networks, influence our own moods, constituting, to our knowledge, the first experimental evidence for massive-scale emotional contagion via social networks.

For further information on this mass study including more than 689,000 Facebook users regarding emotional manipulation, see “Facebook reveals news feed experiment to control emotions”, The Guardian (June 29, 2014).

95As Facebook constantly buys more and more firms—as, for instance, platforms like Instagram or WhatsApp—there are plenty of possibilities to gain tons of information even outside the social network itself. To give an example, although Facebook promised not to use any of the information obtained from users of WhatsApp, terms and conditions later on changed, so that data was also transferred to Facebook after all. Several European countries reacted and also the European commission has fined Facebook with 110 million euros because of misleading information when taking over WhatsApp.

For further information, see “Facebook fined £94 m for ‘misleading’ EU over WhatsApp takeover—European commission says fine is a ‘clear signal’ to companies that they must comply with EU merger rules”, The Guardian (May 18, 2017).

96One of the most prominent and recent examples of a company going into business with a social network is the firm Cambridge Analytica that made use of the collection of millions of Facebook users’ personal data by examining all the users’ personal data. For more information on the events in 2018 involving Cambridge Analytica, see Kaiser (2019).
What is Facebook’s business model?

According to Facebook’s official statements, there are only two purposes in collecting data: On the one hand side, Facebook wants to guarantee and improve its performance for its existing users and, this way, keep these users as well as gain new ones.

On the other hand, Facebook is keen of optimizing the advertisements presented on its websites and as already explained, Facebook collects the personal data of its users. This way, Facebook is able to provide each user with personalized matching advertisements. Therefore, it must be crucial to Facebook to know its users as well as possible.

It is known that there are about 1300 characteristics—as for example, educational level, monthly income, shopping patterns, address, gender etc.—that Facebook uses in order to identify the needs of its users.

This way, Facebook can better work together with the advertising companies and increase its revenues.

That is why, when thinking about the data Facebook collects, one could come to the conclusion that Facebook must be keeping most of the data to itself and particularly, does not want to give away any personal data to third parties—especially, as Facebook should not be considered a globally operating investigation agency, but rather a company that wants to place advertisements in order to make money.

But what if a third party wants to access Facebook’s data?

Obviously, there must be many firms and also state agencies that are interested in making use of Facebook’s huge collection of data and would want to, for example, retrieve personal information about an individual’s personal information.

Facebook’s business model is, overall, built on providing individualized advertisements to its users as the social network earns money based on revenues coming from those advertisements posted on Facebook’s websites. For further information on Facebook’s business model, see “Why Facebook Will Never change Its Business Model”, Forbes (2018).

There Professor Colin writes:

Facebook has compelling reasons to be committed to its current business model. It is therefore disingenuous and gallingly inaccurate for Zuckerberg to justify his company’s business practices by comparing Facebook with “a lot of media, having an advertising-supported model as the only rational model that can support building this service to reach people.” In reality, Facebook has hollowed out the readership and drained the advertising revenues from media companies, causing many to shift to subscription-based revenue sources for survival.

For example, Facebook is trying to attract advertisers by providing them with more than 1300 categories for ad targeting, see “What Facebook Knows About You”, ProPublica (September 28, 2016).

For example, there has been an insurance company that was advertising cheaper rates if a person allowed the insurance company access to his or her Facebook profile. Here, not the social network’s users, but rather Facebook itself stopped the firm from accessing the individual’s personal data as according to Facebook’s own terms and conditions, when it comes to giving away any data away to third parties, this data is not supposed to be used to determine if a person is eligible for a loan.

For more information, see “Facebook blocks Admiral’s car insurance discount plan”, BBC News (November 2, 2016).
In this context, it has to be noted that there are some cases when Facebook actually has to release its data. This usually happens when it comes to criminal prosecution and a court orders Facebook to provide the investigative authority with the necessary data. Furthermore, there are countries like the United States that might force Facebook to cooperate with its secret services. And there are also researchers who get data from Facebook from time to time in order to be analyzed.

It, once again, becomes clear that being active on such a social media platform like Facebook can expose way more about a person than he or she actually expects. And as explained before, even if the individual does not join any social network, does not obtain an account with Facebook, but rather might have actually never created any profile there, it is still very likely that his or her personal information is being collected and used by a social network or even a third party.

And as described already, overall, social plugins collect anybody’s information and even the installation of special software in order to stop Facebook from collecting one’s information, does not guarantee that all the various collections of one’s data are being stopped.

100 In order to better understand what rule applies if a law enforcement official wants access to Facebook’s data, Facebook has created operational guidelines as well as a so-called “Law Enforcement Online Request System”, see “Information for Law Enforcement Authorities”, Facebook (2020c).

101 See “Microsoft, Facebook, Google and Yahoo release US surveillance requests”, The Guardian (February 3, 2014). There, it is explained that every 6 months, due to secret court orders, tech companies like Facebook have to turn over tens of thousands of its users’ accounts and this way, their users’ personal data, to U.S. governmental authorities.

102 This way, British researchers found out that it can easily be determined what gender a Facebook user has, whether he or she is homo- or rather heterosexual and which religion he or she practices solely according to the likes—again, the so-called “like-button” comes into play—of a certain user. To give another example, there has been a mass study on emotional contagion done by Facebook together with Cornell University and the University of California, see supra note 94.

103 In order to provide an example, we’ll come back to Facebook’s like-button as obviously, not everybody is aware of the fact that when it comes to the like-button, not only likes posted on Facebook are collected by Facebook, but also those likes that a person posts on any other website. Furthermore, the person’s behavior online is monitored and automatically reported to Facebook even when not making use of the like-button as the simple fact that a website contains such a social plug-in, such as the like-button, leads to the direct transferal of all kind of information to Facebook. And there is more, even if the person is neither logged on to Facebook nor does he or she click on the like-button, the information regarding the activities of that particular person visiting the website that has a like-button also automatically goes to Facebook. One could say that there are millions of invisible cameras constantly watching the individual while surfing the world wide web and Facebook being, at least, one of the biggest spies.

104 Facebook’s CEO Mark Zuckerberg just recently stated in his hearing regarding the Facebook’s privacy practices in Washington before the House Energy and Commerce Committee:

In general we collect data on people who are not signed up for Facebook for security purposes. See supra note 79.

105 See, overall, supra notes 79, 80, and 82.

Moreover, it is also without doubt that “The data business is changing and is becoming more sophisticated,” see Dixon and Gellman (2014), p. 84.
After all, even if a computer bans and blocks any kind of data collection, the questions remain:

What about the data that has already been collected? And how does one find out what exact data Facebook already collected?

In general, there is a link provided by Facebook that makes it possible for any user to know about certain data Facebook collected on her or him.\textsuperscript{106} Usually, it is not only surprising, but rather pretty scary once one realizes how much of one’s personal information one has been giving away freely and without any charge to a firm called Facebook.\textsuperscript{107}

Besides, there is an even more concerning fact: Facebook collects data as described above—above all, through its social plugins—not only on its users, but on everybody.

So, how would someone who does not have an account with Facebook and who, therefore, could not be capable to follow Facebook’s instructions on how to download the collected data, access his or her Facebook data?

\textsuperscript{106}On its website, Facebook informs its users on how to find out about the data Facebook collects on them. Facebook explains the following:

Download Your Info: This includes a lot of the same information available to you in your account and activity log, including your Timeline info, posts you have shared, messages, photos and more. Additionally, it includes information that is not available simply by logging into your account, like the ads you have clicked on, data like the IP addresses that are logged when you log into or out of Facebook, and more. To download your information, go to your Settings and click Download a copy of your Facebook data.

Facebook further describes all the different categories of data that are available to its users to be downloaded. For instance, a user will know what videos and pictures as well as photos metadata, credit cards, likes on other sites, political views, religious views, login-data and profile information Facebook has saved.

For more detailed information, see “What categories of my Facebook are available to me?”, \textit{Facebook Help Center} (2020a).

\textsuperscript{107}If one would like to find out what exact data was collected about oneself, it would also be interesting to learn about habeas data, a statutory remedy that can be found overall in countries within Latin America.

For further information on habeas data, see González (2015).

The abstract of this article reads as follows:

Habeas data enables individuals to petition their government, and certain private entities, to learn what information has been kept on them and for what purposes, as well as to challenge, rectify, and even delete such information. With the recent revelations of the National Security Agency’s massive electronic surveillance of people throughout and beyond the United States, learning about habeas data could constitute a vital intervention for the discourse of U.S.-based legal scholars writing in English, as well as for the community of critical socio-legal scholars who affiliate with LatCrit. To both constituencies, the afterword urges attending carefully to the terrible histories that birthed habeas data, while being cognizant of their continuities with today’s “neoliberal states of insecurity and surveillance,” in order to fashion a strategic alliance capable of grounding habeas data rights within the United States Constitution.

Habeas Data will be further discussed in Chap. 4, overall Sect. 4.2.1.3.
It would be interesting to find out if Facebook was allowed to gather such a person’s information, especially, as these people did not agree on any terms and conditions of Facebook as they never signed up. So, if Facebook collects data on a person who is not even joining Facebook, what about those who are using fake profiles? And what about deleting a Facebook account? Does one who no longer wants to join Facebook and, therefore, deletes their profile, automatically deletes all the data? What about, for instance, the content that was posted on other user’s profiles?

When it comes to deleting a profile, first of all, it has to be said that truly deleting one’s profile is not that easy as Facebook usually provides its users with the option to deactivate rather than delete their profiles. Furthermore, some of the data—such as comments posted—has to be removed by the person who wants to delete his or her profile one by one. Moreover, to delete one’s profile usually takes about 3 months.  

After all, it becomes clear that as electronic communication progresses, there is no comparison to data gathered and processed in the past that was typically retrieved through questionnaires and analyzed by an actual human being. Nowadays, the collection of data is becoming unlimited and its evaluation is getting faster and faster as it is done automatically due to data mining and text algorithms and software.

2.5 Privacy Concerns Arising from Social Networks and the Concept of Privacy

Now that a basic description of the world wide web as well as the most important facts regarding social networks have been given and the so-called generation Facebook as well as data gathered and processed through social networks have been explained, in the following, those concerns that arise from social networks will be discussed.

After giving a brief overlook of the most common problems related to social media platforms, the main focus will be on privacy concerns.

It becomes very clear that one can learn a lot about others just by studying their social media profiles. Especially when combining profiles of one person on various

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108 For further information, see “Deactivating or deleting Your Account”, Facebook Help Center (2020b).

109 See Bilgin and Wührer (2014), p. 126.

There it is said:

The plethora of applications with its user-generated data seems to be unlimited. The fact is that available information also accessible to companies and marketing researchers and departments will increase dramatically. Data sources that will attract the attention of future international marketing researchers will be mobile data, user-generated content and text mining, social networks and path data, eye tracking, web browsing, […].
social networks, one is often capable to find out more things regarding a particular person than a private investigator would have detected in previous times.

And we are only talking about private individuals looking at each other’s social media profiles here, not to mention the social media platforms collecting data of their users themselves as described.\textsuperscript{110}

All this easily obtained knowledge about each other’s lives because of the fact that people can post almost anything they want on social media, and they do share all kind of information no matter if it comes down to the food they like, the places they visit, their hobbies, friends and family, things they do on a regular basis or just occasionally, political opinions or religious beliefs they might have and many other subjects.

So, after discussing why a person puts all this information out there and what might be the reasons behind this more and more common behavior for people from all around the globe and, especially, after getting an idea of the so-called generation Facebook,\textsuperscript{111} it comes down to the following questions:

Why are there any concerns, at all, if people share and give away their information voluntarily on social media?

And it should also be of interest whether there are differences between spreading information throughout social networks and any other situation when people expose their personal details voluntarily. So, if there is a difference, what exactly makes this difference?

In the end, all the remarks will lead to the discussion of privacy.

That is why it is essential to explore the concept of privacy.

When and how was the concept of privacy developed? What does it include? And did it change over time? What are the differences from country to country or culture to culture? And what are the reasons why some countries might be treating privacy differently than other countries? Furthermore, in this context, it has to be questioned what privacy in the context of globalization and new technologies as well as terrorism means. And what about the concept of privacy when it comes to the world wide web? Overall, what about privacy particularly concerning social networks? It also has to be asked if there are real threats to privacy nowadays. Or maybe the concept of privacy only exists on paper and privacy has been banned from people’s real lives already a long time ago? How much privacy should still be left as of today?

First of all, possible concerns should be uncovered and the question is why there are any concerns at all, if people share and give away their information voluntarily on social media platforms.\textsuperscript{112} What are the possible dangers to the individual or society as a whole when people spread information throughout social networks?

\textsuperscript{110}See Sect. 2.4.

\textsuperscript{111}See Sect. 2.3.

\textsuperscript{112}To get started, it has to be pointed at Chamath Palihapitiya, a former Facebook executive who left as Facebook’s vice president for user growth in 2011. In 2017, already before the scandal involving Facebook and Cambridge Analytica, he stated:
As of today, one can assume that the average person who makes use of electronic communications is aware of the fact that the world wide web bears a lot of dangers as one’s computer and this way, oneself can easily become a victim of malicious software programs, so-called malware, such as computer viruses, malicious computer programs such as Trojans, or computer worms. And there is also the threat of phishing one can run into to only name a few of the risks one always has to take in mind while surfing the world wide web in order to protect one’s personal data such as, for example, sensitive banking information.

Furthermore, when it comes to social networks, one should know that social media platforms might mean an even bigger threat to one’s personal data. As already explained, social networks like Facebook are gathering and processing data big times. Besides, people might even share more information on those websites of social network platforms than on any other sites that can be found in the world wide web as people might feel less exposed within a social network, but rather “amongst friends”. It is easy to imagine that this factor comes into play when speaking of those who are after specific data of individuals. To focus particularly on social networks makes total sense when people there are even more open to give away their personal information. That would also explain why there are certain computer viruses and worms specifically created for social networks, and why so-called cross-site scripting is used on social network sites. These tools are all

“It literally is a point now where I think we have created tools that are ripping apart the social fabric of how society works. That is truly where we are,” he said. “The short-term, dopamine-driven feedback loops that we have created are destroying how society works: no civil discourse, no cooperation, misinformation, mistruth. And it’s not an American problem. This is not about Russian ads. This is a global problem.”

See “Former Facebook VP says social media is destroying society with ‘dopamine-driven feedback loops’”, The Washington Post (December 12, 2017).

113 For further information on malware, see OECD (2008).

114 To give a brief explanation what phishing means, according to the dictionary it signifies:

an attempt to trick someone into giving information over the internet or by email that would allow someone else to take money from them, for example by taking money out of their bank account. See Cambridge Dictionary (2020).

For more detailed information on phishing, see “Phishing”, Computerworld (January 19, 2004).

115 It has to be pointed out that in 2007, a study of the European Network and Information Security Agency (Enisa) did warn already regarding giving away too much of one’s very own private information and regarding fake friends. The study further came to 19 recommendations addressing the users of social networks and drew the conclusion that a user should only expose that amount of information he or she would share with a stranger he or she might meet walking in the streets. See “Die Gefahren des sozialen Netzes”, Der Spiegel (November 23, 2007).

116 See Sect. 2.4.

117 Id. See also Sect. 2.3.

118 Already in 2011, experts were stating that about 40% of all social network users are targets of malware referring to Facebook and Twitter, see “40% of Social Network Users Attacked by Malware”, Time (March 23, 2011).

119 Cross-site scripting has been an issue for quite a while already and Microsoft describes cross-site scripting on its website as the following:
designed to surpass a computer’s security and expose it leaving it being vulnerable or plant certain programs on a device in order to retrieve specific information. Moreover, it is pretty popular to make use of phishing-techniques that are built to get sensitive data from users of social networks.\(^{120}\)

In addition, the sole fact that anybody can easily retrieve and use another person’s data posted on social networks, is not always pleasant as there are not only friends and family looking at one’s profile.\(^{121}\)

There has also to be taken in mind that not only oneself, but also many others contribute to one’s very own collection of data. In many cases—especially, the more friends or followers a social network user has—it becomes quite impossible to be in control of where and when one’s face pops up on a social media site as there are, over all, so many posts and links and friends tagging each other, so that one can easily lose control of his or her own appearance on one or more social networks. And even if one is aware of where he or she is being exposed, it is often difficult to erase, for example, one’s image or a link or a comment related to it.\(^{122}\) This is unfortunate if one has to deal with awkward pictures or embarrassing comments, but it really becomes a problem and in extreme cases can lead to real bullying when it comes down to, over all, reputational damage or even identity theft.\(^{123}\) Besides, it is pretty

Cross-Site Scripting would potentially enable a malicious user to introduce executable code of his choice into another user’s web session. Once the code was running, it could take a wide range of actions, from monitoring the user’s web session and forwarding a copy to the malicious user, to changing what’s displayed on the user’s screen. Even more seriously, the script could make itself persistent, so that the next time the user returned to the web site, the malicious user’s script would start running again.

See “Information on Cross-Site Scripting Security Vulnerability”, Microsoft (February 20, 2014).\(^{120}\)

Furthermore, besides all the above described, it also has to be mentioned that users are often bombarded with so-called spam meaning tons of commercials while visiting their social media sites which is also more than annoying, even though not considered being a concern or thread, see “Social spam is taking over the Internet”, IT World (April 3, 2012).

In the article, the author describes the phenomenon of social spam and gives a good example. He also points out that the difference of social spam compared to regular spam is that social spam— unlike, for example, email spam—is not illegal and he comes to the conclusion that this has to change.

Furthermore, the phenomenon of spam has been discussed for more than a decade already and people keep on asking what one could do. see “Spam 2.0: Fake user accounts and spam profiles”, Google Webmaster Central Bog (June 26, 2009).\(^{121}\)

For example, a possible next employer, co-worker or even one’s insurance company could view one’s information and draw their own conclusions.

It has been described how difficult it is to erase a Facebook profile—especially, when it comes to content a user has been posting on a different user’s site and not on his or her own profile’s site. See Sect. 2.4.\(^{122}\)

For an overview on the issue of identity theft, see “Identity Theft and Social Media: How are they related?”, SecurityIntelligence (August 5, 2016).

The article refers to the Federal Bureau of Investigation’s Internet Crime Complaint Center (IC3) which describes identity theft as “when someone appropriates another’s personal information without their knowledge to commit theft or fraud”.

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\(^{120}\) Supra note 114.

\(^{121}\) For example, a possible next employer, co-worker or even one’s insurance company could view one’s information and draw their own conclusions.

\(^{122}\) It has been described how difficult it is to erase a Facebook profile—especially, when it comes to content a user has been posting on a different user’s site and not on his or her own profile’s site. See Sect. 2.4.

\(^{123}\) For an overview on the issue of identity theft, see “Identity Theft and Social Media: How are they related?”, SecurityIntelligence (August 5, 2016).
easy to just create a new profile on any social network by using whatever name one wants to invent. Especially, celebrities or people of public interest often have to deal with fake profiles that were made by using their real names creating the illusion that the person behind it is the celebrity or the one of public interest him or herself while in reality it is someone else who, in many cases, wants to destroy a person’s reputation.\textsuperscript{124}

Moreover, there are also those who are building certain profiles on social networks in order to get closer to people who they would like to get specific information from. By taking advantage of the more intimate and friendly environment often coming with social networks, these people might be able to achieve retrieving sensitive and even confidential information. This way, a trustful or unmindful user might expose in-house information related to his work and/or colleagues and employers and even corporate secrets, so that, in the worst case, it might come down to a successful business espionage.\textsuperscript{125}

Besides all of the above mentioned and as already described before,\textsuperscript{126} it is also common that people become victims of mobbing as social networks are great platforms to exclude, belittle and denounce a person. This can lead to young adults even committing suicide as given an example in a previous chapter.\textsuperscript{127}

Furthermore, there is the unpleasant phenomenon of stalking, too. A social network user can easily become a stalking victim if another decides to bombard him or her with countless messages and comments, likes and Emails—especially, as the stalker usually stays anonymous.\textsuperscript{128}

\textsuperscript{124}Furthermore, it has to be noted that:

The Federal Trade Commission (FTC) reported that debt collection, identity theft and impostor scams were the most common categories of consumer complaints received by the agency’s Consumer Sentinel Network in 2015. Identity theft complaints were the second most reported, increasing more than 47% from 2014, in part due to tax identity theft. Per the FTC, impostor scams — in which criminals impersonate someone else to commit fraud — remained the third most common complaint in 2015. \textit{Id.}

There has also been the case of St. Louis Cardinals manager Tony La Russa that is worth mentioning, see “Celebrity Social Media Identity Theft Hits MLB Coach, but Can Happen to Anyone”, \textit{The Huffington Post} (July 24, 2009).

The article states that “There is no limit to the damage someone can do by using your name and picture in order to impersonate you online.”

\textsuperscript{125}Sometimes, the internet is even described as a “goldmine” and there has been a report that came out earlier in 2016 assuming a total amount of £144 bn only in business fraud because of the fact that fraudsters are making use of details they are retrieving from individuals online, see “Identity fraud up by 57% as thieves ‘hunt’ on social media”, \textit{The BBC} (July 5, 2016).

\textsuperscript{126}See Sect. 2.2.

\textsuperscript{127}See Sect. 2.3.

\textsuperscript{128}There has already been a report warning about stalking when it comes to social media sites in 2012, see “Social networking sites fueling stalking, report warns”, \textit{The Guardian} (February 1, 2012).
All this shows very clearly that giving away one’s information on social networks even voluntarily, and especially when it comes to very private information, could cause great damage and could even lead to psychological terror.\textsuperscript{129}

And as already described, modern technology makes it so much easier to collect and process huge amounts of data of any individual who is making use of electronic communication, so that one cannot even compare how information was spread in former times when a person was exposing personal details voluntarily. The major difference between today and back then is that even if whatever information was getting out into the world, it did not stay there forever, but was rather disappearing at a certain point. Anything that is posted online, in contrast, stays basically forever and can be found and repeated way easier than it was ever possible before the internet and social networks became that popular that they transformed into one of the main means of communication amongst human beings.

That said, the subject of privacy will now be further explored.

It seems as if privacy has always been of concern.\textsuperscript{130} Going back in history, it must be acknowledged that even in the Bible a number of references to privacy can be found and during the times of Classical Greece and Ancient China as well as Early Hebrew culture, the protection of privacy was important.\textsuperscript{131}

But how would we define privacy today?

In order to get started by giving a very brief and simple definition of privacy, one could state that private stands for “confidentiality, data protection and private sphere protection”\textsuperscript{132} and not for everyone and the Oxford dictionary defines privacy as “a state in which one is not observed or disturbed by other people” or “The state of being free from public attention”\textsuperscript{133} and as described, there must have always been the particular need for privacy as privacy is supposed to lie in human nature.

At least, most people must still feel the need not to share each and every detail of their lives, their feelings and thoughts with one and another, although this concept might have changed and shifted into the direction of keeping less from the outside

\textsuperscript{129}Accordingly, giving away personal data and information voluntarily must be considered potentially dangerous behavior. The motivation of such behavior can not only be seen in the simple fact that many users of social media just do not care about their right to privacy, but must rather be found in the users’ individual circumstances like peer pressure or needs of the profession or the marketplace. The latter often leads to the question of whether one can still attract clients in a competitive profession if one lacks of presence on social media platforms.

For further information on how to brand in the age of social media, see Holt (2016). Furthermore, when it comes to teenagers or young adults, social networks play an important role while developing one’s identity and way of interacting with others, see Spies, Shapiro and Margolin (2014).

\textsuperscript{130}It has to be noted that although there are, of course, cultural differences that lead to a different understanding of privacy, people must have been always caring about their privacy.

\textsuperscript{131}Privacy back then must have been understood as the right to solitude, see Hixson (1987), p. 3. See also Moore (1984).

\textsuperscript{132}Kirch (2008), Vol. 2, p. 1157.

\textsuperscript{133}Oxford University Press (2020).
world for many people nowadays—especially making use of the new technologies as an easy way of communication and participating in social media sites.\footnote{See Sect. 2.3.}

There have been several different concepts or definitions of privacy over the past and I would like to explain two of them as they were well-developed and explained in the second half of the last century and are pretty useful in order to understand the different approaches to the concept privacy.\footnote{See Stanton (2004), pp. 571–575.}

The first one goes back to the legal scholar and expert on privacy, Alan Furman Westin.\footnote{Alan Furman Westin (October 11, 1929–February 18, 2013) was a political scientist and American legal scholar. After graduating from Harvard Law School and earning his Ph.D. in political science from Harvard University, he dedicated lots of his work to the realm of privacy. His book “Privacy and Freedom” was a groundbreaking guide and is now one of the classic textbooks on the subject of privacy. See Westin (1967).}

In 1970, Professor Westin described privacy as:

\ldots the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.\footnote{See Westin (1967), pp. 330–364.}

Besides, according to Professor Westin there are four different states of privacy:

- solitude,
- anonymity,
- reserve, and
- intimacy.\footnote{Id.}

These states describe how privacy works. For example, solitude means not being watched and observed by others, while anonymity stands for not being free from identification in a public environment.\footnote{Id.}

Furthermore, Westin’s theory finds an explanation for the reason why privacy is essential by establishing four different functions of privacy:

\ldots
• personal autonomy,
• emotional release,
• self-evaluation, and
• limited and protected communication.140

So, for instance, personal autonomy signifies making one’s own choices and developing one’s own personality and individuality without being manipulated, exposed or dominated by someone else and emotional release means being able to feel and show one’s very own personal feelings without being forced to take in mind anybody else or other people’s point of views and traditions, but rather release all kinds of emotions and tensions from social demands and let go in order to relax emotionally and, this way, manage one’s every day routine even better.141

This way, Professor Westin’s theory claims that each and every individual is in need of privacy and it describes how human beings deprive others from access to their very own space for a certain period of time in order to self-protect themselves.

Soon after Westin’s theory was introduced in 1970, another scholar’s theory came out.

In 1975, the social psychologist Professor Irwin Altman142 described his so-called privacy regulation theory. According to this theory, privacy is:

...the selective control of access to the self or to one’s group.

Altman understands privacy as a process of optimizing the individual him- or herself in order to manage and regulate his or her limits the way his or her aim for being in touch with as well as keeping the right amount of privacy is met. During that process, the actual level of privacy does not always match with the level of privacy one desires and therefore, a regulation is needed no matter if a verbal one or rather a non-verbal one. Altman’s concept leads to the regulation following according to the reactions of a third person regarding our very own openness and this way, privacy is not a one-way-street and the level of privacy is constantly adjusted or, as Altman says, “regulated”.143

After all, it has to be stated once again that the definition of privacy varies a lot depending on the environment and context used. Besides the two given concepts of privacy, there have been numerous other older and younger ideas as well.144

All this said, it can be stated that privacy concerns are already massive when it comes to social media sites and it is very likely that they will become even bigger in the near future, but besides the two mentioned and any other philosophical or social approaches to privacy, there still remains the major issue of whether there is a

140 Id.
141 For more information including Westin’s definition of self-evaluation as well as limited and protected communication, see id.
142 For more detailed information on Irwin Altwin, an American psychologist, see Plous (2020).
143 See Altman (1975).
144 Id.
general right to privacy, especially, under International Law. This leads to the following questions:

Is there an actual right to privacy? And if so, what are the differences from country to country? And what are the reasons why some countries might be treating privacy differently than other countries? Furthermore, in this context, it has to be questioned what privacy in the context of globalization and new technologies as well as terrorism means—especially when it comes to the world wide web. Overall, what about privacy particularly concerning social networks? It also has to be asked if there are real threats to privacy nowadays. Maybe the privacy only exists on paper and has been banned from people’s real lives already a long time ago? How much privacy is still left?

In the following chapters conflicting claims, claimants, identifications and bases of power as well as past trends in decision and conditioning factors will be further discussed in order to explore the subject of social networks in the context of privacy concerns in depth.

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