

CHAPTER 1 MULTIMEDIA DEFINITION AND APPLICATION

Multimedia Communications by Marie Rutherford

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Please visit the web version of Multimedia Communications (<https://ecampusontario.pressbooks.pub/multimediacomm/>) to access the complete book, interactive activities and ancillary resources.

Learning Outcomes

- Define multimedia and explain its application
- Outline the main components involved in multimedia communications
- Explain the evolution of digital and social media and describe its interconnectivity with multimedia
- Explore online engagement behaviours and digital footprint concepts
- Practice and apply multimedia concepts
- Identify and define key chapter terms

To open this chapter, watch the following video from Helen Morris-Brown on ***The Psychology of Communicating Effectively in a Digital World (16 mins)*** on YouTube. (<https://youtu.be/3aPaRWUqO-w>)

Introduction to Multimedia

Multimedia is a form of communication which combines diverse elements of communication formats. These elements include text, sound, audio, and video. The combination of these elements provides an opportunity to present content in an **interactive** and engaging manner. Multimedia is an effective communication method as it enhances the presentation of information and if designed effectively it often captures the attention of the audience.

Digital media communications encompasses the exchange of information through digital technologies. Multimedia is a **subset** of digital media

Multimedia technology is often computer assisted tools or computer based applications which allow the developer to present content. Through the use of multimedia technology a creator can develop, manage, and manipulate multimedia elements to customize a presentation.

Application of Multimedia

Multimedia is everywhere. Its usage and application is found in entertainment, education, social media, website and webpage design, virtual reality, and in many business sectors. Organizations use multimedia presentations for training, onboarding, advertising, marketing, product promotion, and much more.

Categories of Multimedia

Multimedia is placed into two category types based on how users interact with it.

Linear. This is a non-interactive format of multimedia where the ability for the user to interact with the content is not presented. The user also has little or no control over how the information is presented.

Non-Linear. This is an interactive format of multimedia where the opportunity is presented for the user to engage in some way with the multimedia presentation. Interactive features can include; hyperlinks, buttons, games, surveys, tutorials, simulations, and games. **Hyperlinks** are added to a presentation to take the viewer to another location within the document or outside of the document. While **int buttons** are added to transform the presentation into an interactive activity and engagement tool.

Enhancing Engagement: The Power of Multimedia

Multimedia presentations are powerful as a communication tool. A presentation can simplify complex concepts and make them easier to digest. Multimedia leverages the human desire for visual appeal by incorporating images, videos, sounds, and graphics. These elements can capture attention and engage the

viewer. Adding clickable buttons and interactive elements like quizzes enhances the end user experience, by often associating a deeper meaning to the content.

Compared to text alone, videos and sounds can elicit an emotional response. These response can support an association with the content to make it more memorable for retention.

Creating Multimedia

Creating a multimedia presentation involves several key steps to ensure it is effective and engaging. Throughout this resource these steps will be revisited and explored further.

1. **Preparation:** Identify your audience, define the purpose, and gather content.
2. **Planning:** Outline your presentation and storyboard multimedia elements.
3. **Design:** Choose a presentation tool and integrate multimedia elements.
4. **Content Development:** Write your script and edit your content.
5. **Technical Setup:** Check software/equipment and test multimedia elements.
6. **Practice:** Rehearse, time your presentation, and get feedback.
7. **Delivery:** Engage the audience and be prepared for questions.

This chapter explores the evolution of communication media, tracking its development from traditional print to interactive multimedia formats and digital platforms.

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1.1 HISTORICAL CONTEXT OF COMMUNICATION

History of Communication

Over thirty years ago, if you wanted to research a topic for a class assignment, you turned to printed books, multi-volume encyclopedias, and periodicals such as journals and newspapers. The only way to access these sources was a trip to the library. Sources like multi-volume encyclopedias were expensive, took a long time to produce, and quickly became out of date. After you found your resources, you either took notes on them at the library, or trudged home carrying heavy books to flip through later. Now, of course, a quick Google search on your phone from the comfort of your own bedroom will produce the books, newspapers, and journal articles you need for your assignment. Some will ask you to pay for access, but others (often through your library) are free.

The way we convey information to one another has evolved: from oral traditions to the printed book; from the first overseas telegraph to the Internet. When you look at the research scenario above, you can see the impact of the Internet on your daily life as a student. In this chapter, you will see how each stage of the evolution in communications created a profound impact on personal life and on society as a whole. Before the Internet we were mainly consumers of information, now we can be the creators; before the Internet we had to wait long periods of time for updates and revisions, now information is updated frequently, sometimes within seconds. We invent something that changes our way of communicating, and it in turn changes how we act as a society. Or as Marshall McLuhan said and J. M. Culkin (1967) summarized, “We shape our tools and then our tools shape us” (p. 70).



A collection of media – books, computer disks and chips, vinyl record, phone, newspaper, cameras, radios. **Source:** Image by Julius Drost, Unsplash license

From Oral to Print Culture

As a student you have no doubt read a newspaper article, book, or possibly an academic article (either in hard

copy or online) for a class assignment. Distilling important information onto stone tablets, scrolls, and eventually in printed books and journals has been the way certain societies have conveyed information for centuries. When you think about the information contained in the books and periodicals you have read, it has probably ranged from purely entertainment, like what you might read in some magazines, to an in-depth research paper with data that you read for class. This is thanks to publishing technology that allows us to produce mass numbers of periodicals and books each day.

Writing things down was our first revolution in communication. Before writing, our first form of communication, oral, allowed us to pass down our knowledge, art, ideas, and culture from one generation to another through speech or song. Our oral traditions are still evident when we listen to or read folk tales, ballads, chants, prose, or verses (Vansina, 1985). Oral traditions made it possible for a society to transmit oral history, oral literature, oral law, and other knowledge across generations without a writing system. When cultures started to write down their knowledge it changed the way society communicated.

Writing produces information in a static way such that it can be passed along to someone as nearby as our neighbour or as far away as across the ocean without the message changing and without the need to memorize it. The information in written works can be preserved and passed down for generations. Today, we can go to the library and find a book on psychology published in 1911 alongside one published in 2024. With oral communication, you rely on a person and their memory for information, but with a writing culture, access to information is through a scroll or a book. While oral communities rely on elders or those designated to remember information, books allow readers to work independently to learn on their own.

How the Printing Press Changed Society



Antique printing press made of wood. **Source:** Printing Press by Andrew Plumb, CC BY-SA 2.0

In 1447, Johannes Gutenberg created a printing press in Mainz, Germany; this press revolutionized the way we communicate. Gutenberg’s printing press was not the first machine to print books and pamphlets. In fact, Chinese monks were applying ink to wooden blocks and pressing them onto sheets of paper using a technique called block printing, about six hundred years before Gutenberg’s printing press (Palermo, 2014). Gutenberg’s invention, however, was an improvement on the presses that came before. His movable blocks of type (letters) were made of a mix of metals that proved to be the perfect combination, at that time, for mass printing books and pamphlets. Also, his invention came at a perfect time in Europe; literacy rates were on the rise and those with money were buying more and more books. Therefore, there was a commercial market for book production and this is why the printing press took off in Europe before other societies (Graff, 1987).

Of course in 1447, Gutenberg and his fellow citizens had no idea what far-reaching effects this new way of communicating would have on world history, just as we have no real idea how the Internet is affecting us. The effects of the printing press are still being felt today for better and for worse. Neil Postman (1994) calls this the “Frankenstein Syndrome,” a situation in which technology is developed for a limited and specific purpose (p. 21). “But once the machine is built, we discover—sometimes to our horror, usually to our discomfort, always to our surprise—that it has ideas of its own” (Postman, 1994, p. 21). The print medium has given people the ability to widely share different opinions and theories; this has both positive and negative aspects.

The Next Wave: Electronic-Media Communications

The next great revolution in communication came in 1843 with the telegraph, the first electronic messaging system. It used Morse code to send messages across wires laid between towns and even across oceans. By the mid-twentieth century, we had various electronic ways to communicate throughout the world: the telephone, movies, radio, and television (Naughton, p. 125).

As with the print revolution, the electronic-media revolution meant



Antique automatic telegraph receiver made of metal and wood. **Source:** Automatic Telegraph Receiver by Cliff (<https://www.flickr.com/people/28567825@N03>), CC BY 2.0

we had new ways to communicate. Like print, it affected how we act as a society. We could now convey emotion and powerful images to get our message across. In our living rooms we could see the true horror of war or famine and be prompted to do something about it. On the negative side, we were also bombarded with ads that influenced us to ask our parents to buy that new Barbie Dreamhouse.

Ownership of Information Before the Internet

By the mid-twentieth century, information production was supported by large-scale infrastructure. Across the globe, people read newspapers, went to see blockbuster movies, and read bestselling books. Information had become a money-making commodity that could be bought and sold every day. By 1995 (when the Internet took off), large media conglomerates like News Corp (<https://newscorp.com>), owned by Rupert Murdoch, owned newspapers from across the world.

The push to industrialize the production of information in the twentieth century meant information became part of what Yochai Benkler has called “the industrial information economy” (as cited in Naughton, 2014, p. 84). For the average citizen, writing up your ideas with a pen and paper, and making photocopies and posting them around town as flyers was still a way to communicate your opinion, and maybe you could get access to airtime at your local community TV station, but overall, information was produced and disseminated by large corporations. While freedom of the press and alternative and independent printing houses meant that dissent and new ideas still emerged, there was an air of closed professionalism when it came to traditional print and media (Naughton, 2014).

Why the Internet Represents a Communications Revolution

Consider

1. How many digital devices do you own that allow you to access the Internet?
2. How often do you post something to a platform where more than ten people can see it?

You will likely notice that you own more than one device connected to the Internet and spend hours creating

and posting work or comments for dozens if not hundreds or thousands of people to see. Just like the people of Johannes Gutenberg's time, we are living in the midst of something new and if we reflect on it, we can see that it is changing not only the way we communicate, but also the way we function as a global society. The perfect combination of the arrival of both the affordable personal computer and the opening of the Internet to the public in the 1990s created the current communications revolution.

In technical terms, according to InternetSociety.org, "The . . . internet consists of tens of thousands of interconnected networks run by service providers, individual companies, universities, governments, and others. Open standards enable this network of networks to communicate. This makes it possible for anyone to create content, offer services, and sell products without requiring permission from a central authority" (Internet Society, n.d., para. 1). Thanks to open standards, the Internet is not owned by one global company. The Internet is a carrier of information in the forms of websites, email, files, videos, VoIPs, and files yet to be invented (Naughton, 2014; Leiner et al., 1997). The Internet has facilitated a revolution in how we communicate because it allows information to be stored, created, and distributed to large numbers of people, across the world, in a matter of seconds. Or to put it another way, billions of pieces of information, including the digital artifacts of our human history, plus our own creations, can now be accessed at the touch of our fingers.

In over thirty short years, the Internet has become, for many, as commonplace as electricity and running water. The Internet is a truly global revolution in communications. According to another survey, of thirty-eight countries, by the Pew Research Center, the majority of citizens polled consider free expression in cyberspace, without government control, to be a fundamental right (Wike, 2016).

The Internet, like the printing press, is an example of what Professor Clayton Christensen (2003) called disruptive technology. Christensen was primarily concerned with how a new technology can significantly alter the way that businesses or entire industries operate. Just like companies, society is also forced to alter the way it acts. We can already see a few disruptive changes the Internet has made to the way we communicate:

- Global spread of information quickly and for little cost. Information now spreads faster and wider for little cost.
- Reliance on the Internet. We no longer seek out traditional sources to quickly find information.
- Reliance on the Internet for information is disrupting traditional forms of relationships, like asking our friends or seeking out experts in our local community.
- We broadcast ourselves. Everyone can be a producer of information and production cost is low (Naughton, 2014).
- E-commerce. We now shop online for everything from airline tickets to groceries.

Who Controls the Internet?

From the very beginning, the Internet ran on the revolutionary principles of neutrality and openness. Of

course, to connect to the Internet, we need to pay an Internet service provider (ISP), so accessing the Internet has never been free. But net neutrality means that once you are online, you can access any website, upload your own works, and participate in any social media platform of your choice. You may need to pay for apps or memberships, but with neutrality, it is your right to choose, for instance, between Netflix and any other streaming service. It has also created platforms for people to express their views and for other people to learn about these views. Important social movements and even political revolutions are now played out online.

While neutrality and openness sound utopian, the reality is that the Internet is in a constant battle with larger forces who want to control it and censor its content. Censorship of content is controlled by the government on a country-by-country basis. While most democratic countries have only moderate Internet censorship, other countries go so far as to limit the access of information such as news and to suppress discussion among citizens (Murdoch & Roberts, 2013). Internet censorship also occurs in response to or in anticipation of events such as elections, protests, and riots.

Case Study: The Role of Social Media and the Tunisia Revolution

On December 17, 2010, demonstrations erupted in Tunisia. A few weeks earlier the website WikiLeaks had released classified information from the US diplomatic service around the world, making it, according to WikiLeaks, “the largest set of confidential documents ever to be released into the public domain (https://en.wikipedia.org/wiki/Public_domain)” (WikiLeaks, 2011, para. 1). Included in the online documents was evidence of corruption against the Tunisian government of Zine al-Abidine Ben Ali, who had been in power since 1987. That day, a desperate act by an unemployed fruit seller was all the catalyst that was needed. The Tunisian people had finally had enough of corruption, high unemployment, and lack of political freedom, such as freedom of speech (Anderson, 2011). The Internet played a significant role in organizing the protests and demonstrations that followed, and in disseminating news and pictures to the rest of the world. Reporters and civilians on the ground used Twitter to send out up-to-the-minute reports. Protesters used Twitter and Facebook to organize and set the times and places for their demonstrations. They also used the two social media platforms to warn one another about and to keep one another safe from the military and the police (Anderson, 2011).

Soon after the protests began, the government ramped up its attempts at controlling the Internet. These started simply enough with site blocking, but soon turned more sinister. Tunisia’s Internet Agency started to harvest the passwords and usernames of bloggers, reporters, political activists,

and protesters by injecting hidden JavaScript into the login pages of many popular sites, like Facebook (O'Brien, 2011). They then subsequently logged into these sites using the stolen credentials, and deleted the protesters' Facebook groups, pages, and accounts. They also used the information to arrest and jail those involved (O'Brien, 2011). The demonstrators prevailed anyway, and twenty-eight days later, on January 11, 2011, Ben Ali fled to Saudi Arabia. The successful revolution in Tunisia inspired what would become known as the "Arab Spring," a revolutionary wave of both violent and non-violent demonstrations, protests, riots, coups, foreign interventions, and civil wars in North Africa and the Middle East. For the first time in history, social media and the Internet were key players in an uprising.

Questions

1. Marshall McLuhan (1967) said of the print revolution that it "created national uniformity and government centralism, but also individualism and opposition to government as such" (p. 235). What role does social media play in allowing opposition to the government but also in facilitating government centralization?

Online and Digital Media

In the last 25 years, online and digital media has grown in leaps and bounds to become a fixture in the daily life of most people in Canada. Prior to the turn of the century, traditional media, which consisted of mainly print, radio, and television/movies, was limited to a few places and had a somewhat limited presence in lives and societies. For example, in the 20th century radio and television grew to become features in the home. Movies were primarily enjoyed in theaters until VCRs and DVD players brought them into homes. The closest thing to a portable mass medium in the 20th century was reading a book or paper on a commute to and from work.

Digital media in the 21st century are more personal and more social than traditional media. A small device that fits in your pocket has the ability to connect you with the world, from anywhere and at any time. It has changed the way you communicate, and in particular the way you approach communication in business. In this chapter, you will learn more about the evolution of digital media, consider how people engage with digital media, and how you can begin to use digital media as a business professional.

Becoming a Digital Citizen in the New World

We are living in a time of revolution in methods of communication. Using the Internet allows us to share our

information and creations. It also provides a platform for the inclusion of both mainstream and marginal voices and it creates a space for us to participate within our chosen society (Mossberger, Tolbert, & McNeal, 2008). However, we need to act as informed citizens when using these new ways of communicating.

In the next chapters, you will learn how to conduct yourself as a digital citizen on the Internet. This means remaining critical of what you read and carefully considering how you conduct yourself online. As connected users we need to be aware that while sharing videos, images, and memes can give us instantaneous positive feelings, uncritical use of social media can also lead to poor decision-making and life-altering consequences (Alvermann, 2017).

Attribution & References

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1.2 EVOLUTION OF DIGITAL AND SOCIAL MEDIA

Digital Media

Digital media, is a general term used to describe all types of **electronic data** such as text, images, audio and video. Digital media may also refer to the electronic devices that store data. As well, digital media is the communications methods that transmit the data, consider email, text and messaging, video calling as digital media. From a technical perspective digital media are composed of and/or are designed to read numerical codes (hence the root word ‘digit’). The most commonly used system of numbers is binary code, which converts information into a series of 0s and 1s. This shared code system means that any machine that can decode (read) binary code can make sense of, store, and replay the information.



A snippet of binary code, green computer-font lettering on a black background. **Source:** Binary code by Christiaan Colen, CC BY-SA 2.0

Analog media are created by encoding information onto a physical object that must then be paired with another device capable of reading that specific code. In terms of physicality, analog media are a combination of mechanical and physical parts, while digital media can be completely electronic and have no physicality; think of an MP3 music file, for example. To make recordings using traditional media technology, grooves were carved into vinyl to make records or changes were made in the electromagnetic signature of ribbon or tape to make cassette tapes. Each of these physical objects

must be paired with a specific device, such as a record player or a cassette deck, to be able to decode and listen to the music. Digital media changed how most people collect and listen to music. Now music files are stored electronically and can be played on many different platforms, including tablets, computers, and smartphones. Many people who came of age in the digital revolution are now so used to having digital music that the notion of a physical music collection is completely foreign to them.

In news coverage and academic scholarship, you will see several different terms used when discussing digital media. Other terms used include new media, online media, social media, and personal media. In this chapter these items will be combined and referred to as **digital media**.

Digital media and technology are now changing faster than ever before. In short, what is new today may not be considered new in a week. Despite the rapid changes in technology, the **multiplatform compatibility** of much of digital media paradoxically allows for some stability.

Key to digital media is the notion of **technological convergence**. The ongoing digitalization of traditional media allows them to circulate freely and be read/accessed/played by many digital media platforms without the need for conversion (Siapera, 2012). This multi-platform compatibility is relatively new. In the past, each type of media had a corresponding platform. In the past, the human eye was the encoding and decoding device needed to engage with analog forms of print media. In the present you can read this textbook in print, on a computer, or on an e-reader, tablet, smartphone, or other handheld device. Another characteristic of new media is the blurring of lines between producers and consumers, as individual users now have a more personal relationship with their media.



A close up photo of controls for a video cassette player. **Source:** VCR Detail by Petr Kratochvil, CCO/PDM

Consider

1. Do you have access to any single-purpose media devices?
2. What are some advantages and disadvantages to being able to consume numerous types of media on one device, such as a tablet, smart phone, or laptop?

Major Digital Media Organizations

Several organizations have evolved to be considered leaders in the digital media universe and they include>

- Google leads primarily based on its digital advertising
- Amazon leads in streaming content and digital advertising
- Facebook (Meta) leads with social media sites Facebook, Instagram and What's Up
- Spotify leads in streaming music and offers podcasts as well
- Netflix leads in streaming services offering movies, TV shows and original content

Social Media

Media and mass media have long been discussed as a unifying force. The shared experiences of the Russia-Canada hockey series in 1972, or following the terrorist attacks of September 11, 2001, were facilitated through media. Digital media, in particular, is characterized by its connectivity. In the past, a large audience was connected to the same radio or television broadcast, newspaper story, book, or movie via a one-way communication channel sent from one place to many. Today, digital media connects mass media outlets to people and allows people to connect back to them via the internet. Technology has allowed for mediated social interaction since the days of the telegraph, but these connections were not at the mass level they are today.



Read the following web article on Social Media Statistics in Canada (<https://madeinca.ca/social-media-statistics-canada/>)

The most influential part of the new web is **social networking sites (SNSs)**. A social networking site is an online platform that allows users to create a public profile and interact with other users. Social networking sites usually allow a new user to provide a list of people with whom they share a connection, and then allow the people on the list to confirm or deny the connection. After connections are established, the new user can search the networks of connections to make more connections (Rouse, 2022). Although SNSs have existed for over a decade, earlier iterations such as

Friendster and MySpace have given way to the giant that is Facebook. Facebook, as of April 2018, has more than 2.23 billion users worldwide (Statista, 2018). More specific SNSs, like LinkedIn, focus on professional networking. The ability to self-publish information, likes/dislikes, status updates, profiles, and links allows people to craft their own life narrative and share it with other people. Likewise, users can follow the narratives of others in their network as they are constructed. The degree to which we engage with others' narratives varies based on the closeness of the relationship and situational factors, but SNSs are used to sustain strong, moderate, and weak ties with others (Richardson & Hessey, 2009).

Social media enable interactivity between individuals that share a social network and also allow people to broadcast or ‘narrowcast’ their activities and interests.

You might conceptualize social media in another way—through the idea of collaboration and sharing rather than just through interpersonal connection and interaction. The growth of open source publishing and Creative Commons licensing also presents a challenge to traditional media outlets and corporations and copyrights. Open source publishing first appeared most notably with software programs. The idea was that the users could improve on openly available computer programs and codes and then the new versions, sometimes called derivatives, would be made available again to the community. Crowdsourcing refers more to the idea stage of development where people from various perspectives and positions offer proposals or information to solve a problem or create something new (Brabham, 2008). This type of open access and free collaboration helps encourage participation and improve creativity through the synergy created by bringing together different perspectives and has been referred to as the biggest shift in innovation since the Industrial Revolution (Kaufman, 2008).



Image showing colourful 3d blocks with various social media icons on them **Source:** Social Media Mix 3D Icons – Mix #2 by Blogtrepreneur, CC BY 2.0

Watch the video: The Evolution of Communication: From smoke signals to digital age and beyond ! (1 min) on YouTube (https://youtu.be/Quye56Y_0TY?si=CA30HHDyKofe6X5b)

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1.3 ONLINE ENGAGEMENT BEHAVIOURS

Online Engagement

The key differentiating factor between traditional and digital media is the ability to interact, or engage with the communicator, and others in a community. Think back to the basic process of communication: the messenger (encoder) sends a message through a medium, which is received and decoded by an audience. In traditional media, the process was primarily one-way. In digital media, users have the ability to interact and respond to the message — in other words, they can ‘engage’ with the message and messenger.

But why are people drawn to digital communication? For the answers to this question, you might consider Maslow’s hierarchy of needs, which provides you with an understanding of the motivation that might be behind online engagement. Although engaging online doesn’t really satisfy physiological or safety needs, it certainly speaks to the other categories in the hierarchy as see in Figure 1.3a.

Examples from social and digital media paradigms:

- Love and belongingness needs: engaging online can provide a tremendous feeling of being accepted. Online communities grow friendships, intimacy and a feeling of affiliation.
- Esteem needs: Engagement from friends, colleagues and even strangers can feed the desire to improve one’s reputation or gain respect.
- Self-actualization needs: Digital media is full of examples of people who are working to realize their personal potential, “to become everything one is capable of becoming” (Maslow, 1987, p. 64).

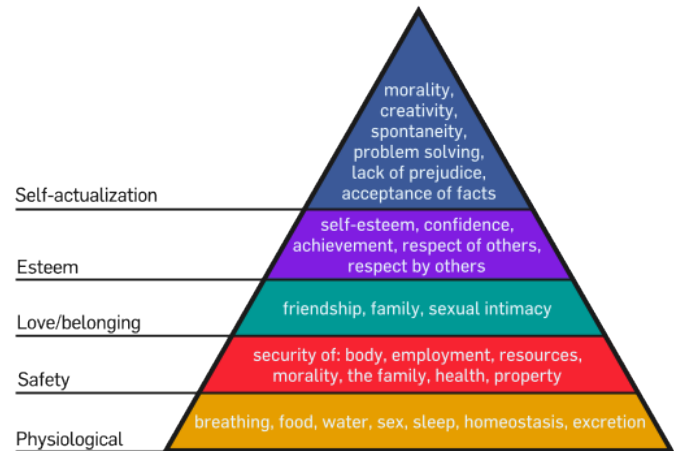


Figure 1.3a. Maslow’s hierarchy of needs in a triangle illustration. The bottom of the triangle is physiological needs (breathing, food, water, sex, sleep, homeostasis, excretion), the second level up is safety (security of: body, employment, resources, morality, the family, health, property), the third level up is love/belonging (friendship, family, sexual intimacy), the fourth level up is esteem (self-esteem, confidence, achievement, respect of others, respect by others), and the top of the triangle is self-actualization (morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts). **Source:** Maslow’s Hierarchy of Needs by Factoryjoe, CC BY-SA 3.0.

Social Media Engagement Behaviour Typologies

New research is emerging to explore how and why users engage online, particularly in business. A study by Dolan, Conduit, Fahy and Goodman (2015) broke down customer (user) experiences with social media, based on intensity of activity (low/passive to high/active), and the valence, or emotional force, of the contributions (negative to positive).

- **Co-creation:** this is the highest level on the matrix, in which users are earning, sharing, advocating, socializing and co-developing. They are actively collaborating and developing content and engaging with others.
- **Positive contribution:** users are engaging with content and others, but not necessarily adding content. They may 'like' posts, repost, mark as a 'favourite' or post a positive comment.
- **Consumption:** this is a passive form on engagement, where users are reading and watching, primarily using social media as a source of information.
- **Dormancy:** these users may have previously been engaged online, but may occasionally be described as 'lurkers'. They make no contributions nor do they engage online. They have passively disengaged.
- **Detachment:** detached users have actively disengaged with a social media platform, person or brand. They will 'unlike' or adjust settings so they do not see information or content.
- **Negative Contribution:** users will make negative active comments to try and influence others to change their feelings or opinions about a brand, subject, person or platform. Negative contributors are often seen posting comments on news articles that will contradict or slander the author (known as 'trolls').
- **Co-Destruction:** users will create new negative content with the aim of diminishing the reputation, trust or value of a person/brand/platform. For example, videos or posts created to highlight negative attributes of a politician would be considered co-destructive.

You may notice your own behaviour patterns listed here — and noted that your behaviours change based on multiple factors. As a business professional, you will have to consider your own behaviour type(s), and how you might encourage others to actively and positively contribute to your own brand, organization or company.

Consider

1. Have you ever disengaged with a particular platform, person or brand based on their social media content?
2. What factors contributed to your decision?
3. What could that platform, person or brand have done to retain you as a follower or subscriber?

Social Media and Multimedia

Both social media and multimedia are intertwined. Social media platforms allow for creativity as many are built around audio and video components and users can share content in a dynamic way. The increased reach of social media allows content creators to share their content with a wider audience. Multimedia creators share their ideas more effectively, while entertaining the viewer, and it creates a perceived personal relationship. Many utilize social media to share their story personal or business related. Posted videos tend to have a longer shelf life long after they were originally posted. Consider further, the real-time engagement social media offers, the broadcaster can live stream and responds to questions from viewers immediately.

Attribution & References

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References

Dolan, R, Conduit, J, Fahy, J., & and Goodman, S. (2015). Social media engagement behaviour: A uses and gratifications perspective. *Journal of Strategic Marketing* 24(3-4), 261-277. <https://doi.org/10.1080/0965254X.2015.1095222>

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1.4 DIGITAL FOOTPRINT CONCEPTS

Digital Identity, Footprint, and Professional Contexts

As digital technology has become more common, affordable, and portable, more and more people from all parts of society are starting to increase their online and digital participation. Understanding the new opportunities, rules, and potential pitfalls of the digital world doesn't necessarily come automatically with long-term use. Not everyone using digital technology knows how to handle the range of available tools to their best extent, and even experienced digital technology users can fall prey to hackers, lose control of how they are represented online, or otherwise fail to maintain their **digital identity** in an optimal manner.

It used to be that applying for a job was fairly simple: send in a résumé, write a cover letter, and call a few references to make sure they will say positive things. However, there is a new step that is now a common part of this application process—hiding (or at least cleaning up) your virtual self, or your '**digital footprint**'.

The ubiquity of digital media allows anyone to easily start developing an online persona from as early as birth. Although this footprint may not accurately reflect the individual, it may be one of the first things a stranger sees. Those online photos may not look bad to friends and family, but your online digital footprint may be a hiring manager's first impression of you as a prospective employee. Someone in charge of hiring could search the internet for information on you even before calling references.

Consider: Your Digital Footprint

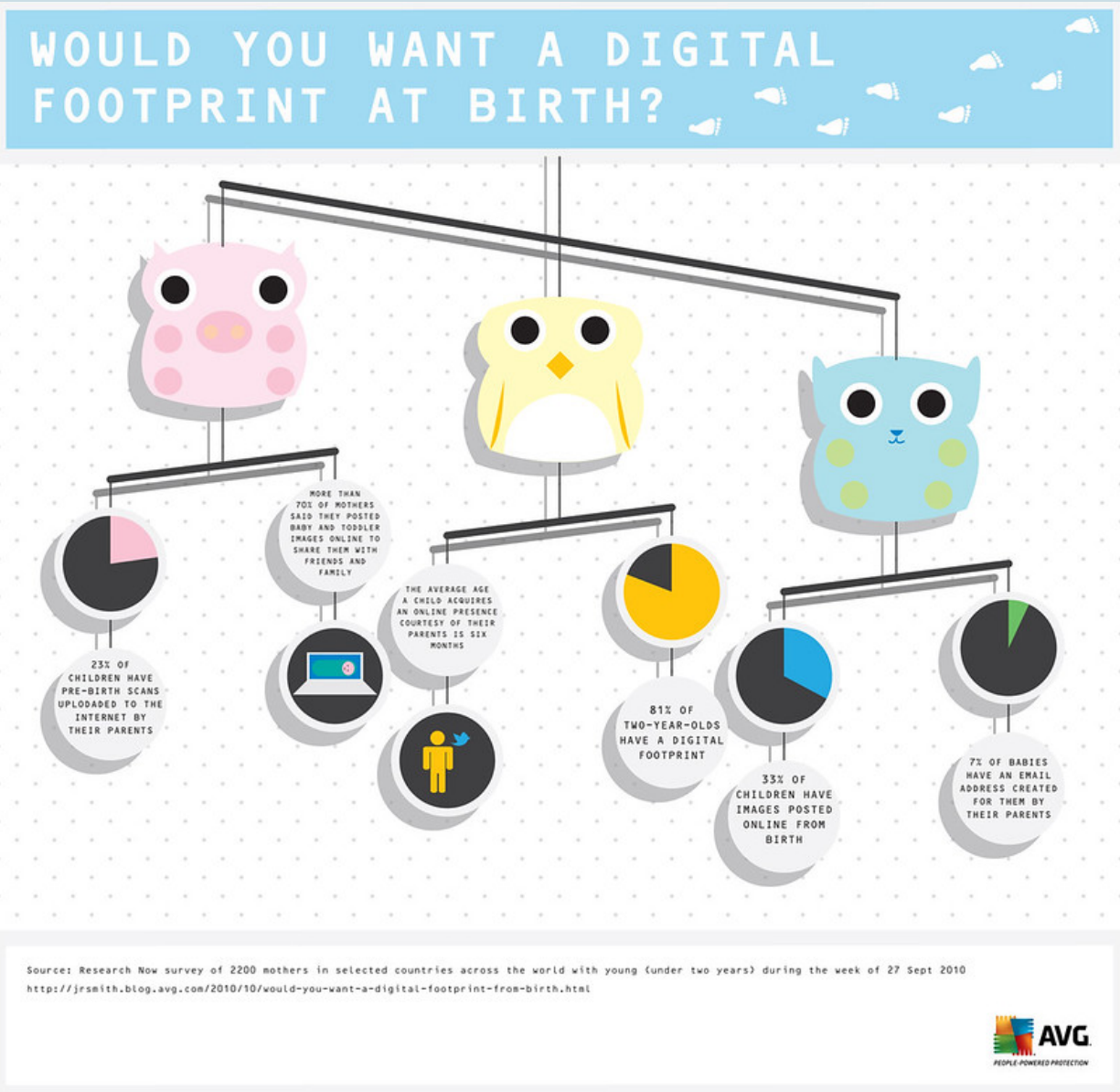


Figure 1.4a: Would you want a digital footprint at birth? Image described below. AVG Digital Footprint by Official AVG, CC BY-NC-ND

As noted in the image above, A Research Now survey of 2200 mothers in selected countries across the world with young (under two years) during the week of 27 Sept 2010 (Smith, 2010) noted that:

- 23% of children have pre-birth scans uploaded to the internet by their parents
- more than 70% of mothers said they posted baby and toddler images online to share them with friends and family
- the average age a child acquires an online presence courtesy of their parents is 6 months
- 81% of two year olds have a digital footprint
- 33% of children have images posted online from birth
- 7% of babies have an email address created for them by their parents

Reflect

- Do you think that children's digital footprints have increased or decreased since this study was published?
- What sort of digital footprint do you have?

First impressions are an important thing to keep in mind when making an online persona professionally acceptable. Your presence online can be the equivalent of your first words to a brand-new acquaintance.

While it's possible to deactivate your **social media** accounts, once something is online, it's impossible to delete it completely. Photos, videos and posts will likely outlive you. As a business professional, you'll need to begin to carefully curate what you post online, and what has already been posted.

This doesn't mean you should delete everything: in fact, employers and clients want to see that you have interests and connections outside of work. However, be aware that their first impression of you may be digital – you'll want to put your best 'foot' forward!

5 Ways to Improve your Digital Footprint

1. Google yourself. This is the best way to see what a potential employer or contact will see first, if they decide to do a search on you.
2. Edit your own posts, including photos, video and multimedia. Content that involves drugs, alcohol, illegal activities, strong political views, or any other controversial activity should be removed.



Read the article
Strengthen Your
Professional Presence
on Social Media (<https://hbr.org/2022/08/strengthen-your-professional-presence-on-social-media>)

3. Ask friends and family who have posted controversial content to take it down.
4. Set up professional accounts on one or more platforms, such as LinkedIn. This will increase the chances of employers/clients seeing your professional side first, and is an inexpensive way to build your professional network.
5. Keep it positive with future posts and contributions. That will greatly reduce the chances that you will post something that could get you into trouble down the road.

Attribution & References

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- Consider your Digital Footprint image is reused from AVG Digital Footprint by Official AVG, CC BY-NC-ND . / No changes made.

References

Smith, J.R. (2010, October 6). Would you want a digital footprint from birth? *AVG Blogs*.

<https://jrsmith.blog.avg.com/2010/10/would-you-want-a-digital-footprint-from-birth.html> Accessed via Wayback Internet Archive

1.5 EXPLORE, PRACTICE AND APPLY

Overview: Explore, Practice and Apply

Activities found on this page are designed to provide opportunities to explore, practice, and apply concepts presented in chapter 1.

Explore

Explore Activity 1

Think about all the ways you use technology in your personal life (e.g. for entertainment, shopping, sharing photos, communicating with people, etc.). Who do you interact with digitally, and how do you do this (i.e., what applications/websites do you use and for which purpose)? Now think about yourself as a student and the ways you use technology for learning? Make a list or draw a diagram of your activities, noting the groups or networks you interact with digitally and thinking about how you use digital technology in the various spheres of your life. Make a drawing of your digital self on paper using the image shown here.

My Digital Self

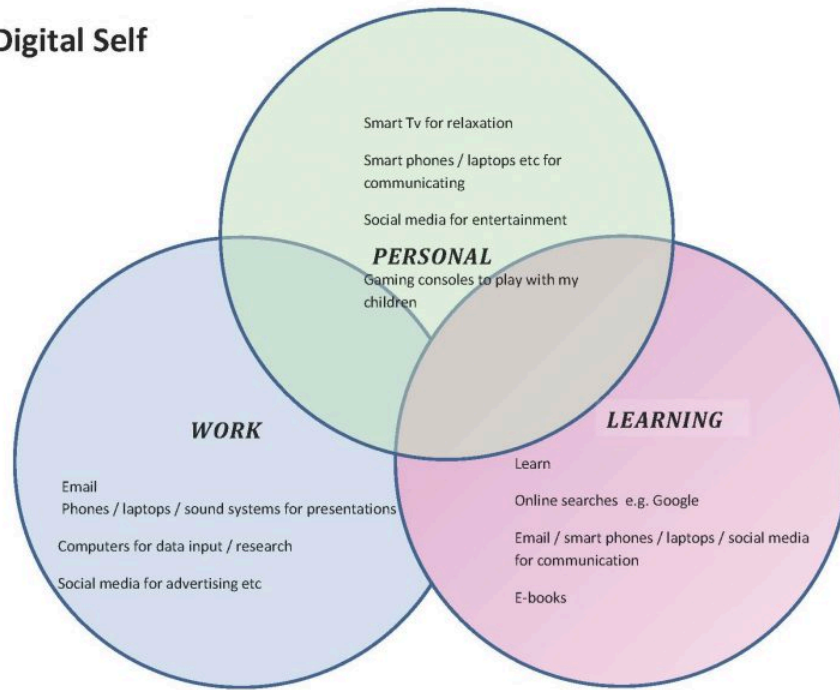


Figure 1.5a: My digital self example. In this Venn diagram, the use of digital technology in your personal, work and learning life is explored. Personal use might include smart tv for relaxation, smart photos or other devices for communication, social media for entertainment and gaming consoles to play with kids. Work use might include email; phones, laptops and sound systems for presentations; computers for data input or research and social media for advertising. Learning uses might include online searches/Google, email, smart phones, laptops and social media for communication and e-books. **Source:** *Digital Citizenship Toolkit*, CC BY 4.0

Practice

Practice Activity 1

Assessing Multimedia Elements. Interactive timelines are visual representations which allow users to interact with and to get more information and learn more about what the timeline is depicting. A sample collection of 15 timelines are found by navigating to Visme Blog. (<https://visme.co/blog/interactive-timeline-examples/>)

Complete the following steps:

- Select one of the 15 available timelines and review the elements included in the timeline.
- Using word processing software start a new document. Using your document, list the title of the timeline selected.
- Identify the main elements used in the timeline. Elements can include text, images, graphs. List these elements in your document.
- Now analyze the elements and list three ways the timeline is an effective multimedia presentation.
- List any suggestions for improving the timeline for the reader.

Practice Activity 2

Discussion questions. Review the questions listed and provide a response for each.

1. What elements of a multimedia presentation are important to you?
2. What influence do you think multimedia?
3. How could multimedia presentation be viewed in a negative way?

Apply

Create a short slide deck presentation – My Hobby

Objective:

To create a short presentation that showcases your favorite hobby using various multimedia elements such as text, images, audio, and video.

Materials Needed:

- A computer or tablet with internet access
- Presentation software (e.g., PowerPoint, Google Slides, or Canva)
- Access to images and/or other media (video)

Steps:

1. Choose Your Hobby:

- Select a hobby that you are passionate about and would like to share with others.

2. Research and Gather Content:

- Collect information about your hobby. This can include its history, why you enjoy it, and any interesting facts.
- Find images online that represent your hobby.
- Locate a short video demonstrating your hobby

3. Create Your Presentation:

- Slide 1: Introduction
 - Title: “My Favorite Hobby”
 - Your name and a brief introduction to your hobby.
- Slide 2: About the Hobby

- A brief history or background information about the hobby.
- Include a relevant image
- Slide 3: Why I Love This Hobby
 - Write a few sentences about why this hobby is important to you.
 - Add an additional multimedia element
- Slide 4: Demonstration
 - Locate a video that covers information about your hobby
 - Insert your video demonstrating the hobby.
- Slide 5: Conclusion
 - Summarize what you've shared and encourage others to try the hobby.

4. **Review and Edit:**

- Go through your presentation to check for any errors or areas that can be improved.
- Make sure all multimedia elements (images, audio, video) are working correctly
- Be sure to save you slide presentation.

Attribution & References

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- Explore Activity 1 from Introduction to Digital Literacy In *Digital Citizenship Toolkit* by Cheryl Brown, CC BY 4.0

1.6 KEY CHAPTER TERMS

Chapter 1 Terms

Analog Media:

It means methods of mass communication that includes non- digital and analogic media such as broadcasting, radio and tv, records and tapes.

Buttons:

Clickable features on a GUI which will launch a program when clicked or touched usually for physical or online applications.

Co-creation:

The procedure by which several stakeholders join forces in order to produce content, merchandise, values, etc.

Co-destruction:

Happens when a combination of the user and platform interactions lead to the loss of value.

Decoding:

The act of making meaning or understanding out of a communication by the receiver.

Digital Footprint:

Internet activities which many people leave behind while interacting with the internet.

Digital Identity:

The virtual persona of a person together with his/her personal information existing on the cyberspace.

Digital Media:

Information that appears in webpages, social networking sites or applications that are accessed through the Internet.

Digital Platforms:

Web 2.0 applications or platforms for the distribution of content, including YouTube, Facebook or e-commerce applications.

Dormancy:

A situation whereby the various accounts, content or platforms one has online are suspended but not closed.

Dynamic Content:

Content which may be in the form of interactive content, product/service offerings or anything that adapts its content in relation to the user activity.

Electronic Data:

Any data collected and sent through electronic means, inclusive of writing, voice or pictures amongst others.

Hyperlinks:

Hypertext links that are embedded into the material read by a user as clickable spots linking to other documents, Web sites, or media.

Interactive:

Media or tools that enable users to interact and respond, for example, games or quiz.

Linear:

Content that is presented in a temporal way that will be expected from a conventional movie or a lecture.

MP3:

An MP3 format of transmitting and storing sound files popular due to its usage of lesser space in its compression.

Multimedia:

The integration of writing, speaking, showing and informing all combined in a single project or presentation.

Multiplatform Compatibility:

The facility by which content or applications are, capable of running on different smartphones or operating systems.

Negative Contribution:

Activities that negatively affect the quality or feel of a platform or community; sending unsolicited messages or posting fake information.

Non-linear:

Material which is composed loosely and does not have to be consumed in a linear way, such as an

interactive story.

Social Media:

Media that allow the users to generate, access, modify and share information, content and audiences over the internet.

Technological Convergence:

This is where one technology integrates various types of technologies to form a single product for instance; smartphone comprises a camera, global positioning system and internet.

Virtual Reality (VR):

A newer form of project involving the creation of advanced computer generated environments that give the user the sense of experiencing real or fictional places or events.

Attribution & References

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