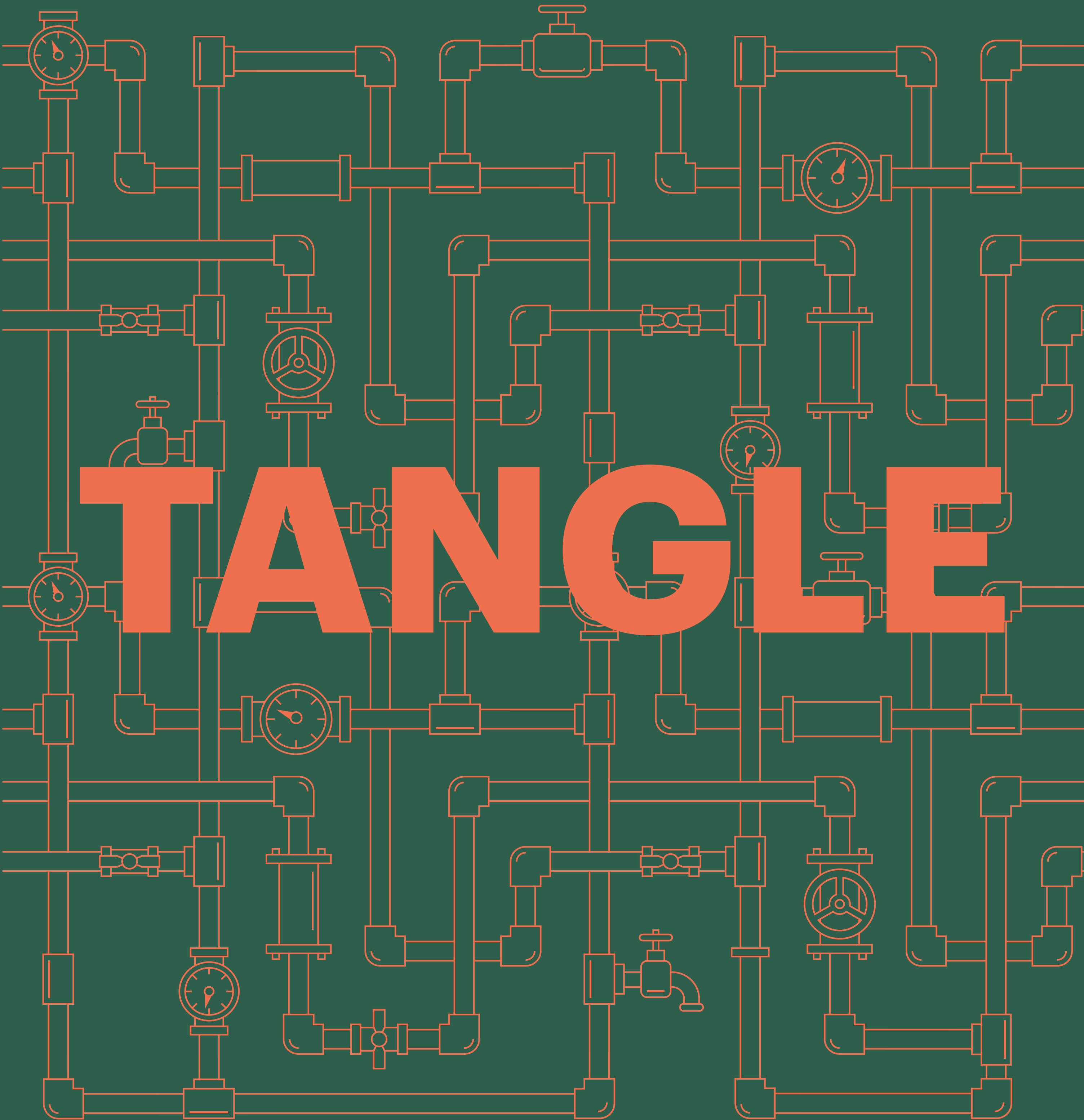
ON RESEARCH

ONE VISION | ONE NETWORK | ONE JOURNAL

SPRING 2023



From Marching Bands to Cultural Phenomena: The Changing Landscape of Super Bowl Halftime Performances

How Storytelling Promotes Luxury Brands: A Case Study of Hublot

Making A 90-Degree Turn: To What Extent can Consumer Demand Drive Vertical Farming to Become a Viable Option in the Market for Sustainable Produce?

Business School

ON RESEARCH

Journal of EU Business School
Vol. 10. (September 2023)

"The means of defense against foreign danger, have been always the instruments of tyranny at home"

JAMES MADISON

ONRESEARCH is a peer-reviewed open access journal of EU Business School

ISSN: 2624-7844 (Online)

Frequency: 2 Issues per year (Spring/Fall)
Tenth Issue: September 2023
Ninth Issue: November 2022
Eighth Issue: June 2022
Seventh Issue: November 2021
Sixth Issue: May 2021
Fifth Issue: November 2020
Fourth Issue: May 2020
Third Issue: November 2019
Second Issue: May 2019
First Issue: September 2018

Visit Us
Website: research.euruni.edu

Contact
Email: research@euruni.edu

FOREWORD

The lifting of pandemic-related restrictions across most countries has left societies and markets with a sense of hangover and exhaustion from old recipes, signaling the start of a new era after one of the most intricated crises experienced by humanity. In this new awakening, great debates about humanity's limitations are resurfacing and include discussions about whether technological advances and achievements should be capped for ethical reasons. The movie "Oppenheimer" serves as a reminder that this debate is not new, and that as advanced societies, we still lack a unanimous answer to this matter. It is to be noted that currently the very creators of artificial intelligence (AI) tools seem to harbor concerns about its potential consequences, akin to those who developed the atomic bomb many decades ago

The conditions for flourishing and the growth of welfare states, nourished by international cooperation and free trade, appear to be ending with the rise of new protectionism and resurgent nationalism. Distrust of collaborative approaches seems to be an undesired consequence of the pandemic, despite COVID having provided us with clear examples of the benefits of deliberate coordination (the market coordinates unconsciously through the "invisible hand") which mobilized significant resources particularly when lives were at risk. In contrast, moral deliberation is permeating business: the environment, equitable and sustainable growth are becoming part of the mission statements of companies that recognize their responsibility as catalysts for societal change.

No less marshy is the macroeconomic outlook that sets the framework of constraints and opportunities for business. Here too, the hangover of old recipes seems to have taken hold and the mechanism of grand macroeconomic relationships seems exhausted. Inflation and economic growth appear to have been supplanted by more concrete and pressing issues such as market scarcity, climate impact, hunger and supply chain disruption.

Few generations have been as conscious of the significance of lived disruptions as ours. We are no longer at the presumed end of history, predicted intermittently since the 19th century by political philosophy. Instead, we find ourselves perpetually transforming into something new. Businesses and economic agents see the need for constant adaptation, that we have come to call resilience, as a positive impulse. Innovation and inventiveness have undoubtedly become the only drivers of productivity growth. Each of our articles focuses on a particular transformation and the need for adaptation in what we call the post-pandemic period.

To begin at the broadest level, the significant challenges currently faced by societies, including climate change and population expansion, need innovative and creative business proposals to supply adaptive strategies. Global impact investing, for example, has gained favorable traction and unprecedented growth, increasing companies' awareness of their societal responsibilities. This is playing a significant function in emerging and developing economies through the provision of funds to companies striving to enhance social and environmental sustainability. The article written by Caroline Nyanchama Mongare scrutinizes how impact investing can facilitate growth in Sub-Saharan Africa while ensuring inclusivity in providing funds for SMEs and start-ups.

Solutions to mitigate climate change include vertical farming, which can reduce the impact of climate change and population growth on global food markets. Vertical farming could also enhance the stability of this vulnerable system. The study conducted by Theodor Brühl and Antonia Koumproglou suggests policies that the Government could implement to incorporate vertical farming in its plans to improve environmental sustainability in the German agricultural sector.

Generative AI, particularly ChatGPT, has the potential to be a game-changer across a range of industries. The opportunities and issues it raises for social media – from the platforms and creators to the advertisers and consumers– and the practical questions stakeholders should ask themselves to fully reap the benefits, are examined by David Friedman based on current research in generative AI. It also provides a brief overview of several nascent generative AI systems.
Of all the innovations associated with globalization and technological change, the one that is destined to remain highly influential in business is social media. The research by Kenza El Fatu and Konstantinos Biginas verifies the enormous influence that social media has on customers and the importance that it is for marketers and organizations to seize this powerful and influential tool to create brand awareness, relationships with customers, sales and brand loyalty.

One sector that underwent significant change during the COVID-19 pandemic is education. The closure of educational institutions for safety reasons resulted in students and teachers having to attend online classes, which has led to an increase in technostress among educators. The study conducted by Romny Ly and Bora Ly seeks to ascertain the impact of transformational leadership on the emergence of technostress negativity among instructors in Cambodian academic institutions. It proposes that strong leadership can facilitate attitudinal change and decrease lecturer resistance. Moreover, the shift to online instruction and increased use of videoconferencing in higher education has brought about new challenges. During the initial transition to online learning, both faculty and students reported feeling drained and most faculty members admitted to being ill-equipped to handle the demands of online teaching. The article by Konstantinos Biginas, Gratien JJ Pillai and Antonia Koumproglou critically analyses the preparedness and management of two UK HEIs and the integration of Microsoft Teams into their pedagogical strategy. The paper aims to provide a comprehensive overview of ongoing online teaching and learning activities, utilizing Microsoft Teams as the primary platform, and establishing the connection between change management processes, onboarding and training of teaching staff.

Changes in the legal environment and regulatory regime are also forcing changes in the role of the private sector. Recent research suggests that, following the introduction of the GDPR, the role of procurement within the privacy framework has become more strategic. The article by Taoufik Samaka aims to understand the skill development needs of procurement staff following recent changes in European privacy law, so that the appropriate training can be planned.

This edition of ON Research also considers the increasing need for mobility as globalization and a single world have become the norm for living, production and work. The number of international assignments for corporate employees has risen significantly over recent years. Many employees view this as a way to boost their careers and benefit from improved living standards. The research conducted by Jayani Prithvi aims to understand the ideal compensation package. This is a complex subject for both the expatriate and organizations.

The article by Elisa Paz examines the changing cultural manifestations within sport by exploring the halftime show as a platform where political issues and entertainment intersect. The article seeks to provide a better understanding of the cultural significance of the halftime show and to determine how it contributes to the construction and representation of American popular culture.

The research by Peter Mutiso Maundu focuses on a concrete success story based on creativity, innovation and entrepreneurial spirit. The article examines the contribution of storytelling in promoting Hublot as a luxury brand. Based on the theory of narrative transportation, the study found extensive use of storytelling in the brand's promotional campaigns, although this was not evident in the company's annual reports.

This issue marks the tenth edition of this journal, and we cannot fail to acknowledge the invaluable contribution of our former Editor-in-Chief, Dr Suddha Chakravartti, and the former Managing Editor, Dr Svetlana Elinova. Their dedication and professionalism have made it possible to publish more than one hundred articles, always striving for rigor and relevance to address current issues.

Josep M Altarriba
Editor-in-Chief

TABLE OF CONTENTS

FROM MARCHING BANDS TO CULTURAL PHENOMENA: THE CHANGING LANDSCAPE OF SUPER BOWL HALFTIME PERFORMANCES

Elisa Paz Perez

ABSTRACT: *The Super Bowl halftime show is a highly anticipated event in the United States, but it is watched around the world. It has evolved considerably over the years, influenced by technological and social changes. This article aims to contribute to communication and media studies by providing a better understanding of the cultural significance of the halftime show and how it contributes to the construction and representation of American popular culture, disseminated internationally through traditional, online, and social media.This article examines the evolution of Super Bowl halftime shows and the elements that led to these changes, as well as how they shaped the impact and cultural implications of the event. Building on this idea, the impact of the halftime show, this article also explores the halftime show as a platform where political issues and entertainment intersect, mentioning some notable examples that have sparked conversation and public debate. Finally, audience engagement and reaction are also discussed, explaining how viewers engage with the event and how media consumption habits are articulated in this popular media production.*

KEYWORDS: halftime show, Super Bowl, media studies, cultural studies, popular culture.

The Super Bowl halftime show has become a cultural phenomenon that attracts millions of viewers each year, with the audience for this year's show even surpassing that of the football game (Berman, 2023). The halftime show, which originally featured national marching bands, has evolved to feature the world's most famous pop stars and elaborate productions that go beyond entertainment to address and make nods to social and political issues, demonstrating how popular culture reflects the current social climate. This article examines how Super Bowl halftime shows attract audiences involved in social and political issues and how this has shaped the evolution and impact of the event and its cultural implications. Although the halftime show is designed to attract a broad audience, it typically features popular musical artists that appeal to a younger audience, which may explain its evolution into a more overtly sociopolitical event. To do so, relevant literature was reviewed, along with industry reports and publications, as well as a critical analysis of the performances and a selection of tweets exchanged during this year's show. The objective of this short article is to contribute to communication and media studies by offering a deeper understanding of the cultural significance of the halftime show and how it contributes to the construction and representation of American popular culture, disseminated internationally through traditional, online, and social media.

THE EVOLUTION OF HALFTIME SHOWS

Super Bowl halftime shows have evolved considerably over time, reflecting different cultural trends and values. Halftime shows are performances that take place during the brief breaks in a sporting event; they are very common and a traditional form of entertainment in the United States.

In the 1970s and 1980s, marching bands and the nonprofit organization *Up with People* were the main performers in the Super Bowl halftime show. These performers staged music and dance performances promoting various themes related to social and cultural issues. The main objective of the spectacle was to "fill the field" so that everyone in the audience could be entertained. It is important to note the technological context of the halftime show during these decades. There were no big screens on the field, and those sitting in the upper deck seats could not enjoy a solo show. Therefore, this type of performance allowed everyone to enjoy it (Williams, 2013).

Figure 1: U.S. Air Force Band performing in 1985 (AP).

In the 1990s, with the advancement of technology, the introduction of giant screens in stadiums, and the increasing interest of celebrities due to their media exposure, this type of performance became obsolete. The transition was to popular musicians performing at halftime shows, usually with multiple artists sharing the stage (with the exception of New Kids on the Block in 1991, Michael Jackson in 1993 and U2 in 2002). Paul McCartney started the trend of rock bands and artists headlining, which continued until 2010. In this new decade, pop stars are the main claim of the halftime show, from the Black Eyed Peas in 2011 to this year's performance with Rihanna

(*NFL*, 2012). This shift from rock to pop can be explained by changing musical trends, the growing popularity and mainstream appeal of pop artists, and the NFL's desire to attract a younger audience. In addition, there is also the spectacle dimension that pop stars can offer for this type of performance, as these performances are usually visual and theatrical (in terms of lighting, sets, costume changes, etc.), which can arguably be more engaging for a halftime show. As a result, the performance becomes more memorable, creates more buzz, and attracts more media attention, resulting in greater audience engagement.

POLITICAL POP CULTURE: THE HALFTIME SHOW AS "INFOTAINMENT"?

While the essence and concept of the Super Bowl halftime show has changed overtime as previously highlighted, it is worth noting that this transformation does not only affect the structure or musical genre of the show, but also how these productions help shape and represent popular culture, as the event is one of the most watched through different media and platforms.

There are visual aspects that can undoubtedly contribute to highlighting national culture, such as the colors of the performances that take up the colors of the American flag (which, at the same time, are the colors used in the NFL logo and the logo of Pepsi, which was the sponsor of the event until 2022), but there is an aspect that stands out in relation to the theme of popular culture: the articulation of infotainment and the incorporation of political messages or symbols in the performances.

This issue is not new, since the aforementioned organization (*Up with People)* organized upbeat and patriotic shows that promoted cultural values related to positivity and unity. The main transformation related to this aspect, however, is that while the performances of Up with *People* could be seen as filled with political and cultural symbolism, they were deemed to be a safe and non-controversial choice for the halftime show, which is not always the case for shows that addressed political and social issues.

Examples include the 2004 halftime show with Janet Jackson and Justin Timberlake, during which the infamous "wardrobe malfunction" occurred, exposing Janet Jackson's breasts to national (and international) audiences. This sparked an intense debate about censorship and American values related to indecency in the media, which led to increased regulation of broadcast content by the Federal Communications Commission (FCC). More recently, this controversy has been reopened from an intersectional perspective, examining the role that race, gender, and media coverage have played in public debate (Holland, 2009; Leonard & Lugo-Lugo, 2005; MacIsaac, 2019).

Another relevant example is Beyoncé's performance of her song "Formation" at the 2016 halftime show, in which she participated as a featured artist. The song celebrates black culture and several elements of the performance were criticized by conservative media for precisely this reason. For instance, the outfits of the backup dancers being compared to those of the Black Panther Party. The pop star also appeared to reference Malcolm X and Michael Jackson in her performance. Ultimately, this performance sparked a national conversation about race and police brutality (Gammage, 2017).

Figure I: Beyoncé performing during the Super Bowl 50 Halftime Show (Harry How/Getty Images)

Other examples include Lady Gaga's 2017 performance, which incorporated several messages of inclusion and unity in the wake of the 2016 presidential election (D'addario, 2017), and Jennifer Lopez and Shakira's 2020 performance, showing the Puerto Rican flag while singing "Born in the USA" or children in cages to protest migration policies, as well as celebrating Latin American heritage (Van Bauwel and Krijnen, 2021). More subtle examples include Eminem's act of kneeling at the 2021 show or even Rihanna's refusal to participate in 2019 and her acceptance four years later after Jay Z's Roc Nation partnered with the NFL to produce the halftime show, which was seen as an attempt to respond to the league's controversial handling of Colin Kaepernick's past protests against racial injustice in the United States (Holmes, 2019).

While these debates take place across generations, it seems that the political content resonates more with younger generations, as studies show that Generation Z and millennials are more progressive on issues such as climate change and racial justice, and more likely to be politically engaged than previous generations (Parker et al., 2019; Pew Research Center, 2018).

AUDIENCE ENGAGEMENT

Public reaction to the Super Bowl halftime show varies considerably, and these performances are often met with both praise and criticism, based on the show itself, but also how controversial its content is. Generally speaking, it is a highly anticipated event, with millions of viewers tuning in specifically to watch the performance.

In addition to the reception of the show and the debate about its quality and relevance, it is worth mentioning from an audience research perspective that the halftime show prompts viewers to engage in real-time conversations and interactions on social media platforms while watching the event on TV, a phenomenon known as “social television”, popular among younger generations.

Viewers use social television to comment on the show, share their opinions, interact with others, create and broadcast memes and jokes, and overall share the experience with other viewers (Doughty et al., 2012; Segijn et al., 2020). This practice also amplifies the discussion of potentially controversial or political messages, and conversations are typically clustered around an ad hoc hashtag (Bruns and Burgess, 2011), making it easier to find and participate in the discussion without the need to know the other participants or share the same state or country as them.

The conversation itself can be about different topics. To explore this, tweets posted the day before and the day of the performance were collected using the open-source Python library Tweepy. After retrieving over 1,500 tweets related to this year’s performance and analyzing a random sample of 250 messages, the most repeated expressions were those of excitement and anticipation, Rihanna as a performer, speculation about possible surprise guests, and the performer’s pregnancy.

Another interesting dimension of social television practices is the lack of geographic boundaries for sharing the experience of watching the same media content. In the aforementioned sample, most of the tweets are in English and Spanish, and the comments on the official YouTube video page (posted by the NFL, with over 130 million views at the time of this article’s submission) are in different languages, which speaks to the international reach of the halftime show and how it can be considered part of the cultural “soft power” of the United States (Fattor, 2014; Nye, 2002).

CONCLUSION

The Super Bowl halftime show has evolved from showcasing national marching bands to an international cultural phenomenon featuring popular music and elaborate productions. This article has reflected on how technological aspects, music preferences, and social context shape the structure, marketing, and reception of the show.

It is important to note how this evolution has not only represented but also affected American popular culture and society as a whole. Recent shows featuring political symbols, despite the controversy surrounding them, show that the NFL seeks to attract a young and active audience that is open to social and political issues in the United States. At the same time, the incorporation of this content shapes the cultural implications and impact of the event, which is capable of sparking conversations and debates about various societal topics.

Overall, the halftime show remains a powerful cultural event that reflects and contributes to the construction of popular culture, disseminated through a variety of media platforms. It offers media and communication scholars an excellent opportunity to examine the implications and articulations of these messages from production to reception.

BIBLIOGRAPHY

1. Berman M (2023) Super Bowl 2023: 113 Million Viewers Ranks As The Third Most-Watched Telecast Historically. Available at: https://www.forbes.com/sites/marcberman1/2023/02/13/super-bowl-2023-113-million-viewers-ranks-as-the-third-most-watched-telecast-historically/?sh=58a5f57245d4 (accessed 7 March 2023).
2. Bruns A and Burgess J (2011) The Use of Twitter Hashtags in the Formation of Ad Hoc Publics. In: *Proceedings of the 6th European Consortium for Political Research (ECPR) General Conference*, Reykjavik, 2011.
3. D'addario D (2017) Super Bowl Halftime Show: Lady Gaga Show Review . Available at: https://time.com/4660667/super-bowl-halftime-show-lady-gaga-review/ (accessed 5 April 2023).
4. Doughty M, Rowland D and Lawson S (2012) Who is on Your Sofa? TV Audience Communities and Second Screening Social Networks. In: *EuroITV '12: Proceedings of the 10th European Conference on Interactive TV and Video*, 2012, pp. 79–86.
5. Fattor E (2014) *American Empire and the Arsenal of Entertainment: Soft Power and Cultural Weaponization*. Palgrave Macmillan US.
6. Gammage M (2017) Pop Culture Without Culture: Examining the Public Backlash to Beyoncé's Super Bowl 50 Performance. *Journal of Black Studies* 48(8): 715–731. DOI: 10.1177/0021934717729504.
7. Holland SL (2009) The "offending" breast of janet jackson: Public discourse surrounding the jackson/timberlake performance at super bowl XXXVIII. *Women's Studies in Communication* 32(2): 129–150. DOI: 10.1080/07491409.2009.10162384.
8. Holmes C (2019) Jay-Z and Roc Nation Partner With The NFL. Available at: https://www.rollingstone.com/music/music-news/jay-z-roc-nation-partner-nfl-871200/ (accessed 7 March 2023).
9. Leonard DJ and Lugo-Lugo CR (2005) Women, Sexuality and the Black Breast: Seeming Acts of Transgression in Popular culture and their consequences (The case of the 2003 VMA and the 2004 Superbowl Half-time Show). In: Batra N and Messier VP (eds) *Transgression and Taboo: Critical Essays*. College English Association, Caribbean Chapter Publications, pp. 95–114.
10. MacIsaac J (2019) Nipplegate and the Effects of Implicit vs. Explicit Sexuality in Pop Music Performance. *Nota Bene: Canadian Undergraduate Journal of Musicology* 12(1): 46–64. DOI: 10.5206/notabene.v12i1.8146.
11. *NFL* (2012) Super Bowl - Entertainment. Available at: https://web.archive.org/web/20120208145624/http://www.nfl.com/superbowl/history/entertainment (accessed 22 March 2023).
12. Nye JS (2002) The Information Revolution and American Soft Power. *Asia-Pacific Review* 9(1). DOI: 10.1080/13439000220141 59.
13. Parker K, Graf N and Igielnik R (2019) Generation Z Looks a Lot Like Millennials on Key Social and Political Issues | . Available at: https://www.pewresearch.org/social-trends/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/ (accessed 5 April 2023).

14. Pew Research Center (2018) The Generation Gap in American Politics | Pew Research Center. Available at: https://www.pewresearch.org/politics/2018/03/01/the-generation-gap-in-american-politics/ (accessed 5 April 2023).
15. Segijn CM, Maslowska E, Araujo T, et al. (2020) Engaging with TV events on Twitter: The interrelations between TV consumption, engagement actors, and engagement content. *Internet Research* 30(2). Emerald Group Holdings Ltd.: 381–401. DOI: 10.1108/INTR-08-2018-0389/FULL/XML.
16. Van Bauwel S and Krijnen T (2021) Let's Get Loud: Intersectionally Studying the Super Bowl's Halftime Show. 9(3): 209–217. DOI: 10.17645/mac.v9i3.4152.
17. Williams D (2013) When Up With People dominated the halftime. Available at: https://www.espn.com/blog/playbook/fandom/post/_/id/17649/when-up-with-people-dominated-halftime (accessed 5 April 2023).

Elisa Paz Pérez, PhD, is a lecturer in Media and Marketing at EU Business School, Barcelona Campus. She is also the Communication Officer with the European Communication Research and Education Association (ECREA).

THE IMPACT OF SOCIAL MEDIA IN INFLUENCING CUSTOMERS' BEHAVIOUR AND CREATING BRAND LOYALTY

Kenza El Fati & Konstantinos Biginas

ABSTRACT: *The Internet and the use of social networks have profoundly changed society and the behaviour of individuals. By allowing exchange, interactivity and content creation, these tools have become indispensable in the daily life of users. Social networks represent a new media and a privileged communication channel for organizations. It is important to know that social media networks are becoming more and more important in marketing and communication. They have become an important source of information for customers as well as a way for companies to promote their businesses. For marketers, the question is how consumers react to different marketing strategies. They must therefore discover and understand the factors that determine and influence consumer buying behaviour. Social media platforms have taken an enormous place in our daily lives. Although the subject of consumer behaviour and brand loyalty in relation with social media has been studied by various researchers, it was however lacking some deep understanding when it comes to the consumers' behaviour in each and every step of the decision-making process and the expectations of the consumers in order for their loyalty to be triggered. The objective of this paper is to understand the influence and impact that social media has when it comes to the five steps of the customer decision-making model as well as understanding the reasons that encourage the customer to make repetitive purchases, and therefore become loyal to a brand. In this research, a mixed data collection methodology has been used - quantitative and qualitative data and analysis. 70 completed questionnaires were collected and four in-depth interviews with different individuals were conducted. The research reveals that social media have a very big influence on the decision-making process of the consumers, especially in the information search, evaluation of alternatives and purchase decision stages. The paper also states that in order for the consumer to develop a solid relationship with the brand and be loyal to it, there needs to be a certain feeling of belongingness and a constant communication, attention and engagement from the brand to the consumer. This paper is talking more about a brand-customer-brand relationship. Overall, this research verifies the big influence that social media has on customers nowadays and the importance of marketers and organizations to seize this powerful influence tool in order to create brand awareness, relationships with customers, sales and brand loyalty.*

KEYWORDS: social media, influence, brand loyalty, customer behaviour

With the development of new technologies, internet has been able to develop a new form of communication that is not only beneficial for individuals, but also for organizations and businesses as well. The 21st century is perceived as the era of digital and technological transformations and changes where we have increased access to communication and to information. With the development of the Web 2.0, the way organizations communicate with their consumers and audience has been radically changed with the help of social media.
Web 2.0 is associated with concepts such as 'user-generated content', that is, media content that is created by end-user, people are no longer just reading or consuming web content, they are participating and contributing to its creation (O'reilly, 2005). Web 2.0 is the technological evolution that allows end-users to create and post content, a phenomenon that was mainly reserved for professionals in Web 1.0. Web 2.0 marks the awareness and awakening of internet users, who are at the centre and heart of exchanges on the Web. This new technological advance allows new uses of the internet such as sharing, collaboration and interaction – users become content producers. Changes and technological tools that were derived from Web 2.0 have driven businesses to be more interested into a new kind of digitalized communication, and this new technology appears to be the right place for the development of social media.

Social media is a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user-generated content (Kaplan and Haenlain, 2010). The popularity of social media made not only individuals get into it to share their thoughts. Brands and businesses are in on it as well. Companies realized that they had to switch their communication strategy into a more digitalized form, moving in the same direction as their customers – social media.

The first objective of social media was to allow its users to stay in contact with their friends, family and loved ones, but it rapidly developed during the last few years, allowing brands to get closer to their target groups, making the customer the centre of the business. Brands now use social media to update their communication strategies and make consumers part of this strategy and process. The impact of social media and the technological evolution it brought about was a concern to most business sectors, hence the need for businesses to develop and update the sophistry of their communication as well as the relationship between the brands and their consumers.

In the context of this new marketing reality and with the rise of social media, maintaining customer's relationship has become a big challenge. Firms therefore, must develop strategies based on close relationships with customers.

RESEARCH AIM

The purpose of this study is to examine the importance of brands using social media in influencing the behaviour and buying behaviour of future or existing consumers as well as understanding how social media can create brand loyalty.

RESEARCH QUESTIONS

1. To what extent does social media marketing influence the consumer's behaviour?
2. To what extent does social media marketing help create brand loyalty?
3. Research Objectives
4. To examine how to brands use social media platforms as a way of communication with customers and prospects.
5. To examine how do brands use social media platforms as a way of influencing customer buying behaviour.
6. To closely study the way organizations, use social media as a tool to create customer loyalty.

SIGNIFICANCE AND RELEVANCE

This paper attempts to enrich the existing literature on the role of social media in impacting the buying behaviour of customers as well as creating brand loyalty, by proposing a conceptual model, which will focus on the impact of marketing through social media, on the decision-making process of consumers and how it can create brand loyalty.

Social media is no longer a new topic to discuss, yet it is still evolving and developing. While the literature review shows that social media influences consumer behaviour and does indeed help create customer loyalty, the influence that these networks have on each of the stages of the process remains unclear.

This paper begins with a literature review, precisely defining social media and exploring the topic of social media, consumer behaviour and brand loyalty. It is followed by the methodology which envisaged the findings of the research, and then an analysis of the findings. Limitations will be discussed, and the recommendations are proposed at the end.

LITERATURE REVIEW

Web 2.0

The web is defined as a virtual space. It is a global computer network which links documents together that can be exploited using hyperlinks allowing navigation. Although its technical aspect is very complicated, the web has been democratized since 1995 and continues to develop each and every day. Today, we are in the era of web 2.0. The American-Irish, Tim O'Reilly initiated the term "Web 2.0". In his September 2005 article, "What is Web 2.0", he defined the internet as a platform and no longer as a media. Like many important concepts, Web 2.0 doesn't have a hard boundary, rather, a gravitational core. Web 2.0 can be visualized as a set of principles and practices that tie together a veritable solar system of sites that demonstrate some, or all of those principles at a varying distance from that core (O'Reilly, 2005).

Figure 1 below represents all the ideas that emerge from Web 2.0. In this case, user is at the centre of Web 2.0. He controls his activity on the Internet.

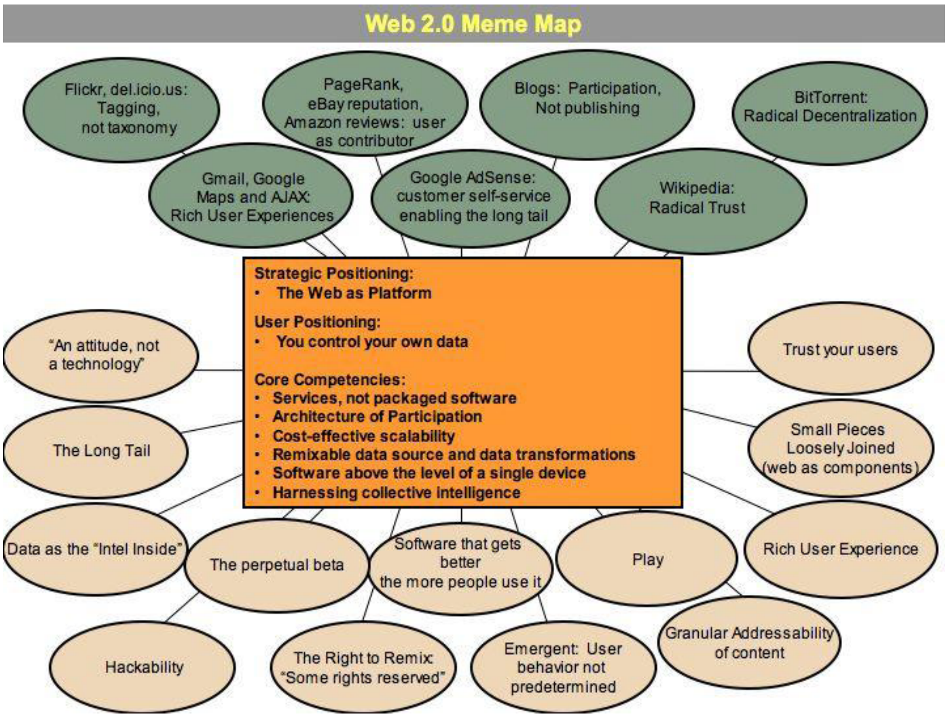


Figure 1: Web 2.0 Meme Map, (O'Reilly, 2005)

Web 2.0 is an evolution in internet technology which allows (thanks to a multitude of devices such as computer, cell phone, touch tablet) a constant interaction between internet users (blogs, social networks), who can themselves create content, thanks to the evolution of browsers. The user does not only download content from various places on the web, he also creates his own content and distributes it via various media such as social networks for example.

Web 2.0 tools are various and diverse, and it is very important to distinguish between them.

1. Blogs as well as micro-blogging tools: A blog is a personal (or group) journal with posts for thoughts, videos, or photos. It allows bloggers to create communities among themselves and with their readers. Creating a blog is easy. What is needed is to leverage the sites to create contents quickly and free of charge. For example, the platform, https://overblog.com. As for micro-blogging tools, they are web pages that are based on the same principle as blogs but limit the user in the number of characters. Twitter is the best-known example. It was created so that individuals can communicate what comes to their mind, quickly and in less than a few characters. Its initial use quickly evolved thanks to the contribution of subscribers who use it

mainly to track topics that are of interest to them.

2. Wikis: It refers to a website that allows several users to work on the same content, modify and enrich it. The best-known and most widely used wiki in the world is Wikipedia, an online encyclopaedia. Its content regularly evolves, thanks to internet users who contribute with new knowledge and information every day.
3. Digital social networks are online sites which primary purpose is to facilitate exchanges between users by creating their profile pages and building their networks of online contacts, who are able to access these pages, communicate and exchange all types of content with their contacts. There are two types of social networks: personal social networks (for personal or private use) and professional social networks (mainly for networking with professional contacts or colleagues).
4. Bookmarking tools are sites for organizing web pages. Contents can be marked with keywords, called "tags" in order to classify it by category or by theme, for use later. For this reason, they are very useful for monitoring information on the Internet. Pinterest and Flipboard are the most used bookmarking networks. Sony was one of the very first to ever launch a bookmarking campaign on Pinterest.
5. Sharing tools are used to put different types of content online and share them with Internet users. We are talking about tools for sharing videos (YouTube, Dailymotion), photos (Flickr, Instagram, Snapchat), music (Deezer, Spotify), slide shows (SlideShare), community sites (Pinterest), etc.

Definition of Social Media

Much older than internet and Web 2.0, is the term "social network". It was introduced in 1954. John A. Barnes, an English social anthropologist, conducted a study on social classes and spoke of social networks. We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections as well as those made by others within the system. The nature and nomenclature of these connections may vary from site to site (Boyd and Ellison, 2007).

In concrete terms, social media is about creating links. Links with friends, family, individuals, etc. It helps people communicate and exchange ideas and information (pictures, video, documents, messages, comments) and socialize with people. It also helps information flow from both sides, keeps people updated about what is happening, and serves as an entertaining tool.

With thousands of social networks on the web, users have a wide choice of exchange platforms. With more than 4.2 billion social network users, each social network has a different target and a different offering for them. There are social networks to connect with friends, with colleagues, with brands, or even to share videos and photos. Depending on the preferences of each person, a network will correspond to the expectations of a user who wants to join a community.

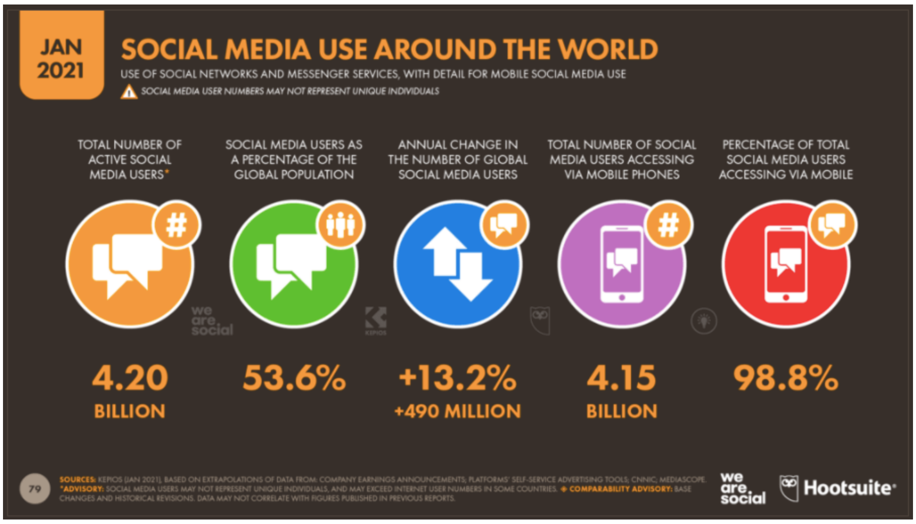


Figure 2: Social Media Use Around the world, Dave Chaffey (2021)

A more recent typology can be drawn up from the research of Armstrong and Hagel (2000) in classifying the world of social networking sites. We can thus distinguish three major types:

1. Personal, and general networks (Myspace) which are often oriented around a centre of interest (music, reading, etc.). The goal of this type of network is to share one's passions with the rest of the community. This category is vast and also includes networking sites such as Facebook, and thematic sites, which for instance may gather for example, car fans or collectors.
2. Sharing platform networks such as YouTube, that allow for broadcast of content, often multimedia (video and sound) to internet users. The uploading and sharing of videos, for example, becomes easier, as they are accessible to all internet users in the community.
3. Professional networks such as LinkedIn, which offers the possibility of putting people in touch with each other as well as sharing professional information (contact details, information on companies). It is possible to have one's own page, but the data shared generally concerns the careers and past experiences of members.

Social Media Marketing

Users have taken over the power of the internet, and communication through television, radio, press, and other media is no longer the only way to generate brand awareness and sales. Companies now position themselves where consumers go to get their information. Social media is now the place where people come together to exchange and share – an ideal niche for business communication. Today, internet users seek information on different social media platforms and this is why companies must be present on these networks. Moreover, the relationship between the brand and the consumer will be strengthened because it will be a communication of proximity, dedicated to a community loyal to the brand or the product. Therefore, organizations need to implement a social media marketing strategy. The two key characteristics of social media are user-generated content and customer interaction, which as well should be considered as a goal for marketing communication in social media (Van Zyl, 2009). Digital communication is increasingly and clearly replacing traditional communication, and traditional media is no longer effective in our digitalized world, especially in the face of a global pandemic. Organizations sense that social media is a new, but permanent environment for marketing (Weinberg and Pehlivan, 2011).

Social media marketing is a set of actions that the company undertakes in order to promote the brand or a specific product / service, using several social media platforms available for this purpose. While traditional marketing consists of publishers on news, TV, radio, magazines etc., giving a one-way information and broadcast, social media marketing empowers the consumer and potential consumers, giving them the ability to express their point of view and be heard by the brand as well as other social media users. A comment, post, tweet, or YouTube video can spread out to millions of people and the consumer's voice can easily be heard and taken into consideration by the brand.

Social media therefore plays a role in a consumer or user's need to belong to a community. An individual often needs to share his or her interests and values with other people who share those vision. The need for recognition, which is found in the need for esteem, is also present in social networks; whether it is recognition from a friend or from the user's favourite brand, giving him a certain discount or make him win a certain giveaway, simply for being a "fan", the user will feel recognition.

***Figure 3*:** Maslow's hierarchy of needs (1943)

The motivations of a social media user, who is a fan of a brand, are to benefit from promotional advantages, be informed of the brand's news and assert their attachment to this brand. Not only that, but social media users also expect a lot from the brand. Some would like the brand to take into account their contributions, others would appreciate a quick response from the brand to their questions, and another group would like the brand to ask for their opinion on a product. Users really expect recognition from a brand and feel appealed by it to the point that most people who are fans of a brand on social media would be more likely to recommend that brand to a friend – a real asset and benefit for businesses.

Social media are a very interesting e-marketing lever to develop a brand's traffic and notoriety. But behind the accessible aspects of social media, time and knowledge are critical in order to regularly relay quality and relevant information as well as to constantly involve internet users.

Creating and managing a community on social media allows businesses to create a close link with its customers and prospects by establishing a more human and interactive exchange.

Establishing this relationship on social networks with its customers and/or prospects can allow the organization to:

1. Highlight its expertise in its sector of activity and thus give credibility to its offer.
2. Communicate directly, quickly, and effectively to a target audience information about the brand's products, services, promotional offers, etc.
3. Answer questions that may lead to a purchase process
4. To directly address customer dissatisfaction and avoid a potential bad electronic reputation.
5. Find new customers through digital word-of-mouth.

Not all companies will just take a step and create a page on social media. The first issue that arises when a company wants to integrate Web 2.0 into its communication strategy is: Is social media compatible with the company? The company must have a large enough customer base to be interested in social media. The company must also have quality content to post several times a week, at least in order to keep its community and avoid losing credibility. The company must also choose what tone to adopt with its members. Indeed, should the company be funny or serious? It is important to be prepared for consumer criticism; should community managers respond directly, or should they forward the question to their supervisor or to another department to ensure an appropriate response? These are all questions that will have to be answered by analysing the company's clientele, i.e., whether the clientele is young, dynamic, international or it is a technical sector, or even whether they should use complicated terms? The tone is crucial because the consumer will get an idea of the company's sympathy through the tone used.

Definition of Consumer Engagement on Social Media

Consumer or user engagement can be defined as having and maintaining a relationship with a brand by interactions, either page visits, purchases or actions like liking, commenting or sharing their content. This is distinguished from loyalty.

According to some researchers, engagement is one of the key steps in the beginning of a recurring purchase process. While for other researchers there are four steps leading to conversions of engagement to purchase: getting users' attention, getting them to like you, interacting with them and finally convincing and persuading them to buy the product or service.

Engagement is the main focus of companies' work on social media. Businesses try to communicate with social media users in order to get some interaction or action reflecting their interest in the brand, wishing to build a relationship that will convert to a consumer loyalty through repetitive purchases. Social media engagement is a concept that organizations tend to perceive as an ultimate goal to achieve. By achieving customer engagement, the brand is able to start its process of influencing the buying behaviour of the customer or prospect, hence their continuous effort in developing this engagement and purchase into brand loyalty.

However, companies need to see user engagement with a brand as one step leading to a second. They should not believe that engagement equals conversion, rather, that engagement is a key variable in the equation, leading to purchases and acquisitions. In order to properly measure engagement in social media, brands should not rely on metrics or standards only, but also look at the performance of competitors as well as the increase and progression in their own social media pages. Although metrics are a tool to measure engagement, it is inevitable and indispensable to get to ask social media users from time to time, in order to understand the right strategies to adopt, to be able to provide the consumer or prospect with the right content that is suitable for their expectations.

According to Calder and Al (2009), not all websites and platforms need to provide the same experience in order to engage the consumers. Consumer engagement on social media goes beyond a consumer-brand relationship. It is a consumer-brand-consumer relationship. It is therefore crucial to ask the question of the impact of social media marketing on the attachment, commitment and loyalty of consumers.

Social media has had a considerable impact and influence on the way customers and companies communicate. A virtual community is an online social entity of potential customers. It is a community that is organized and maintained by a business to facilitate the exchange of information and opinions about the products or services that the brand offers. Social media therefore allows brands and consumers to launch and create virtual communities; not only to be in direct contact in real time with each other, but also to interact, share and strengthen their relationships. Together, users in these communities can discuss, exchange views or share tips, making it easy to spread word of mouth. According to Dessert, Veloutsou and Morgan-Thomas (2015) there are three engagement dimensions: affective, cognitive and behavioural.

Therefore, the presence of a brand on social media offers many advantages to the company. Indeed, consumers are more attached and attracted by informal ways of communication such as a Facebook page or an Instagram account, because it allows them to feel closer to the brand. A social media platform such as Facebook, allows a business to create brand awareness, which can arouse the interest of consumers and finally, the interest will very generally transformed and converted into loyalty and repeat purchases. Social media support loyalty and loyalty programs, owing to the interactivity of the customer, the entertainment, the consumer-brand-consumer relationship and the permanent contact between both parties.

Consumer Loyalty

Consumer loyalty is the biased (i.e. non-random) behavioural response (i.e., purchase) expressed over time by some decision-making unit, with respect to one or more alternative brands, out of a set of such brands, and is a function of psychological processes (decision-making, evaluative) process (Jacoby and Kyner, 1973).

Loyalty is the exclusive attachment to one or several brands during successive purchases. It is the result of a psychological process leading to a preference. Loyalty is different from inertia (false loyalty). Inertia is defined as the repurchase of a brand, due to the absence of an alternative, resulting in the absence of a favourable attitude or particular attachment to the attributes of the brand. A complete measurement of loyalty implies not only taking into account the behavioural dimensions of the customer, i.e. repeated purchase, but also an attitudinal dimension, expressing the predisposition of an individual towards a given brand.

Approaches to Consumer Loyalty

Behavioural approach

As the name approach implies, brand loyalty in this case, is observed through customer behaviour. This approach will always have a limit because there is uncertainty about consumer's behaviour. In other words, variation of the consumer's behaviour in the future is expected. However, the repetitive buying behaviour over a period of time is an indication of the loyalty of the consumer (Brown, 1952)

The behavioural approach is therefore qualified as follows:

1. Conversion: a total loyalty to a given brand.
2. Experimentation and trials: a behaviour that consists of testing different offers available in the market.
3. Transition: giving up a brand in the profit of another considered one.
4. Mixing: alternating the purchase of various products/services of different brands.

Cognitive approach

The cognitive approach is way deeper and richer than the behavioural approach to loyalty. It includes the notion of consumer attitude as one of the factors. A consumer will only be loyal to a brand if he had previously developed a positive attitude towards it. The development of the attitude therefore precedes the triggering of the behaviour. This approach can be found mainly in situations of high involvement on the part of the individual for whom the need for cognition is high. Consumer behaviour as an outcome of social media marketing will be discussed and studied in detail further in the paper.

Measuring consumer loyalty

There are various indicators that allow us to measure a client's loyalty:

1. Consumers' life cycle: According to the time and turnover achieved with a client, the company is able to position him as a new customer, a recurring customer, or a declining customer. Each business needs to know the value of its customers, before setting up a loyalty strategy. This is because not every customer contributes equally to the organizations' sales.
2. The Recency, Frequency and Monetary method (RFM): This tool studies how recently a customer has made a purchase; how many times the customer made a purchase and how much money the customer spends on his/her purchases. This method enables the business to have a good, precise and clear idea about the degree of loyalty of a consumer.
3. Customer Satisfaction Index (CSI). This is a tool that helps measure the satisfaction of a customer with a certain product, service or brand. This measure could give the company a certain idea about the loyalty of a customer. Satisfaction is sometimes the result of an emotion, a cognitive appreciation and often a mixture of both. We tend to think that a satisfied client is a loyal customer, but in reality, a satisfied client is a client that is more likely willing to re-purchase the product or service.
4. The resonance rate of a customer: A satisfied customer tends to repeat purchase, spread the word and his feedback of a particular company or product and would most likely to recommend it to his/her friends, family, and relatives.

Impact of Social Media on Consumer Behaviour

What is Consumer Behaviour

Consumer behaviour is a widely researched and sought-after topic that has long been of interest to various researchers. While consumer decision making is the study of the process and route that a consumer takes in order to make a purchase decision, consumer behaviour is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires (Solomon, Bamossy et al, 2006). Hoyer and MacInnis (2009) described consumer behaviour as the totality of consumer's decisions with respect to the acquisition, consumption and disposition of goods, services, activities, experiences, people and ideas by human decision-making units.

Approaches to Consumer Behaviour

There are various approaches to the topic of consumer behaviour. On the other hand, we have adopted different approaches in our study of consumer behaviour, as a result of social media usage. The most popular of these consumer behaviours as well as our focus in this research paper is: Cognitive, psychodynamic and behaviourist approaches.

The Cognitive Approach: As its names implies, this approach focuses on information processing capabilities of consumers (Schmitt, 2003). It is the way a consumer relies on the information his/she has collected, and the way he/she processes it in order to therefore act in a certain way. With the use of this information, which serves as a stimulus, he/she will behave in a certain way.

Psychodynamic Approach: This approach mainly relies on the psychological part of the human being. Mainly derived from the Neurologist, Freud's research, the psychodynamic approach includes all theories in psychology that evaluate human functioning based on the interaction of drivers and forces within the person, particularly unconscious, and between the different structures of the personality (McLeod, 2007). The key tenet of the psychodynamic approach is that behaviour is determined by biological drives, rather than individual cognition, or environmental stimuli (Bray, 2008).

Behaviourist Approach: In this approach, the consumers' behaviour is mainly linked to external factors. An example of a company that successfully implemented a behavioural marketing campaign is Nescafe, which impressed on its target audience that the cup of coffee is the first thing to have in the morning.

Consumer Behaviour and Decision-Making Process

Consumer behaviour is a complex process involving the activities that people engage in when searching, choosing, buying, using, evaluating and disposing of products and services with the goal of satisfying needs, wants and desires (Belch & Belch, 2004). While making a purchase decision, the customer goes through various steps and stages of thought. Scholars, including Hoyer and MacInnis (2010), Engel, BlackWell and Kollat (1978) as well as Sternthal and Craig (1982) have identified five different stages of customer decision-making process. They are: need recognition, information search, evaluation of alternatives, decision-making and post-purchase evaluation.

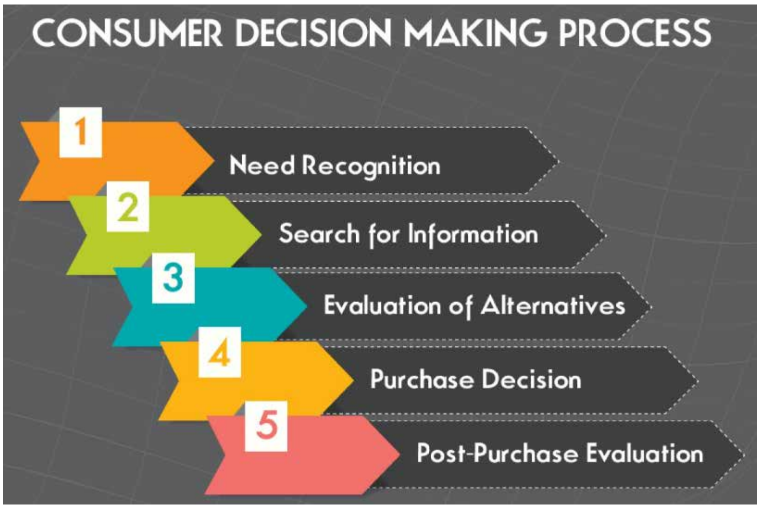


Figure 4: Consumer Decision-Making Process.

Today, the ease of access to information has profoundly influenced consumer decision-making, therefore, it is important to determine what prevents people from becoming customers or consumers from repeat-purchases.

Problem (Need) Recognition: The first stage of the decision-making process is the point where the customer starts to feel a significant difference between the actual situation and the situation that he desires and wants to be in. It is the triggering factor of the decision-making process. Problem recognition occurs when a certain person recognizes that they have a certain need that is unsatisfied. This need can be triggered either by internal or external factors. Internally, for example, if your Smartphone broke, the need of purchasing another Smartphone is triggered; and externally, a smartphone advert on social media, or the recommendation of a relative or a friend may trigger the need of purchasing a need phone even when your phone still worked perfectly.

Information Search: When the need is triggered and the customer acknowledged his/her need, the individual will start a certain information search. This information search includes studying the various options available in the market, gathering information about those options, evaluating the options through various criteria (budget, quality, etc.). In this step, internal and external factors play a big role. Internal factors may be choosing a certain brand according to a positive previous experience with the brand. External factors may be in form of a certain promotional offer or even a feedback of a relative or friend.

Evaluation of Alternatives: Once the customer identifies a variety of alternatives according the criteria and information gleaned from the search, he/ she proceeds to evaluate those alternatives. The consumer usually establishes certain criteria to help the evaluation process. After the assessment of the available choices, they are ready to select the most suitable alternative. The eventual decision regarding the choice, takes into consideration the customer's attitudes as well as intentions.

Decision Making: While evaluating alternatives, most of the consumers start to have preferences for brands and products in their range of choices. However, some factors can change the final decision. These factors can be attitude of others as well as unanticipated situational factors. The attitude of others can be a negative experience (and reaction) with chosen brand whereas unanticipated situational, could be an urgent need to purchase another alternative due to unavailability of the chosen alternative or a case of being sold out. In these situations, the consumer will either decide to buy the next available alternative or return to continue evaluating alternatives.

Post Purchase Evaluation: After the buying decision has been made, and the product/service had been tried, the consumer is either satisfied or dissatisfied with their purchase decision. If dissatisfied, the consumer will save this information for future purchases decisions and will move back to the information search step again, with the hope of selecting a better alternative next time. If satisfied, the consumer evaluate if the product is good enough for a re-purchase, or if he/she can to fully adapt, be a loyal customer and recommend it to people around or if he/she could certainly find better alternative in the market.

Having explored the several steps of the decision-making process, this paper will now examine the impact of social media on the consumer decision making and what relationship exists between these two?

According to Heinonen (2011), consumers have three main gratifications or motives for using internet as a medium, namely: information, entertainment, and social motives. Thus, the influence of the use of social media on the consumers' buying behaviour can occur with any product or service that we intend to purchase.

It is more likely that the consumers' behaviour has a very big tendency to change with the use of social media as these have allowed users to share their views, their feedbacks, ratings etc. The influence of social media over consumers is not only a result of the user's presence on those platforms, but also due to the facts that other people's reviews, feedback and other user generated content might influence the consumer's choices. Previous research indicated that even a small amount of negative information from a few postings, can have substantial impacts on consumer attitudes (Schlosser, 2005).

During a decision-making process, social media plays a big role in influencing consumer's behaviour. Once the need recognition is triggered, social influence plays an enormous role in providing a list of alternatives, based on several reviews found on social networks. The Social Web has had a pronounced impact on how people view their ability to gather unbiased information, while seeking and acquiring a wider range of products and services, including exchanging information of actual experiences both before and after purchase. (Khatib, 2016)

We can therefore conclude that it is more important for brands on social media to collect feedback than to just be on social media. The most important aspect of social networks is the fact that it builds and develops users' feedback as a tool for impacting future customers and prospects.

RESEARCH METHODOLOGY

This study follows a known research model, which is the Onion diagram model. Saunders research onion (2007) is a research methodology that helps the researcher start thinking from the outside of the "onion" and going deeper and inwards with the development of the study. Saunders research onion is mainly made up of 6 consecutive layers that the researcher will have to develop one at a time during the study. These steps are: Research Philosophy, Research Approach, Research Strategy, Choices, Time Horizon, Techniques and Procedures.

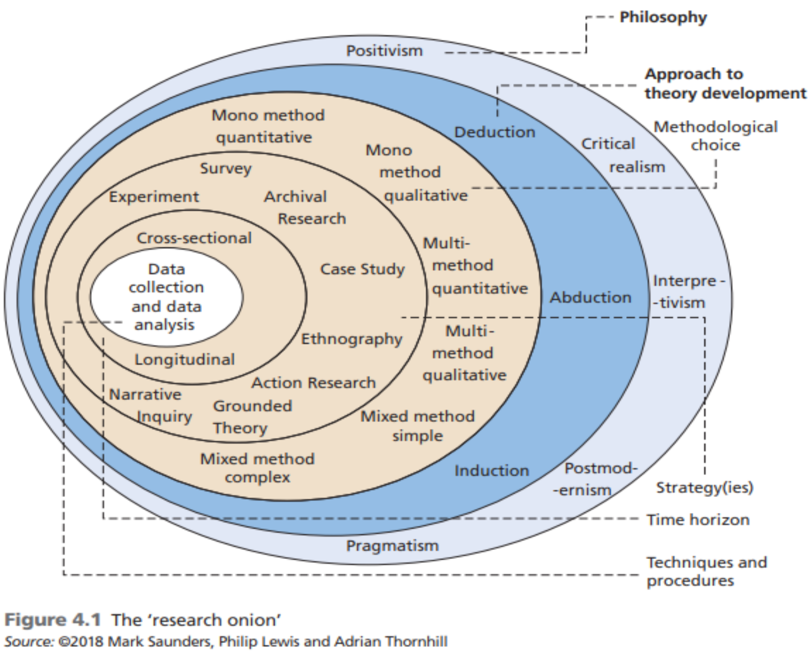


Figure 5: Saunders' Research Onion (2007)

Literature Review Search Techniques

The literature in this study was researched and collected from earlier research papers that were made available for the public. These research papers were on the subject of social media. While some analysed the consumer's behaviour in a certain industry, others discussed the loyalty programs and their success on social media.

The research literature collected and analysed in the previous chapter was mainly derived from online libraries such as EBSCO, EU Dissertations platform on Moodle and also Google Scholar, in order to have coverage from online available books, articles and encyclopaedias.

This topic was clearly chosen because we now live in a digitalized world, especially since the outbreak of COVID-19 pandemic. Everyone goes on social media platforms every day, hence it became important to conduct a thorough and up to date research about this topic.

RESEARCH PHILOSOPHY

There are various research philosophies and approaches that researchers can adopt when conducting a research and study in order to achieve the purpose of the study.

There are 5 types of research philosophy that are available for researchers to choose from: positivism, critical realism, interpretivism, postmodernism and pragmatism.

Positivism claims that only “actual” knowledge gained through the observations and measurements is trustworthy (Kent, 2007). Philosophy of positivism assumes that some knowledge already exists outside of what the research is investigating and the topic that is being researched can be done objectively without including or adding any personal opinions or point of views from the researcher.

RESEARCH DESIGN

A research design is a set of methods and techniques that the researcher uses in order for him/her to combine many of his research components into a homogenous and coherent way. A research design helps the researcher to effectively address its topic, answer the research questions as well as satisfy the research aim. An exploratory research design is a study that explores the research questions and leaves room for further investigations while a conclusive research design aims to give a final word and findings for the topic of the research. In order to satisfy both our qualitative and quantitative data collection methods, this study uses both the exploratory and conclusive research designs. In the exploratory design, the study uses in-depth interviews to collect data, and in the conclusive design, the study uses a questionnaire.

DATA COLLECTION

The aim of our research requires us to collect both qualitative and quantitative primary data. Our data was collected from the public to enable us know more about their behaviours and what makes them loyal to a brand, in the context of social media. The mixed method choice is a methodology of research that helps in the discovery of the topic, within a single investigation, by integrating both the quantitative and qualitative data collection approaches. This method was chosen for us to explore the research topic, enabling us to have a more complete overview of the topic and precise answers to the research questions.

This data collection choice is to strengthen the outcome of each of the methodologies and to clarify any blurred points during the research process. Quantitative methods along with qualitative methods are complementary and need to be paired to improve the study (Patton, 1990).

Thus, it is important to state that even if this method is going to be providing us with more data and the fact that it is more suitable with the nature of our study. The mixed method is going to make us downsize the number of our qualitative and quantitative data candidates and that could diminish the depth of our study.

QUANTITATIVE DATA COLLECTION

Survey research is the method that was chosen in order to collect quantitative close-ended data for our research. We chose to adopt a questionnaire as a method to collect quantitative data in order to ask close-ended questions and get information about feelings, attitudes, perceptions and behavioural intentions of our questionnaire takers and research participants.

Quantitative methods are used when the data have been collected in or are soon converted into numbers for analysis (Bryman and Cramer, 1992). Our questionnaire will be distributed online using an invitation letter or shared via e-mail. We chose to conduct online surveys because it is generally quicker, two thirds quicker than the traditional method. Findings are quicker to analyse and participants are easier to find, hence the research is more accurate.

We used Google Forms to construct the questionnaires. In the questionnaire, we used close-ended questions as a form of multiple-choice answers, so as to analyse data more easily. We kept the questions clear, straight forward phrases and avoided the use of complicated words. Some of the questions had attitude scales (from strongly disagree to strongly agree) in order to measure people's degree of feelings and emotions, the impact of influence social media has on customers and to what extent does social media help create brand loyalty.

The questionnaire was divided into four categories; the firstly was on demographic characteristics, the second was on social media usage, the third was on consumer behaviour in relation to social media and the last one was on consumer loyalty in relation to social media.

This study set to explore how social media influenced the decision-making process of consumers. The sample selection consisted of people that were more likely to make a purchase decision. It consisted of both men and women, and we tried to distribute our questionnaire to people with different education and income levels. The sample consisted of 100 people that we sent the survey to, 70 of which had participated in the survey and responded to every question without skipping any. The questionnaire had 20 questions (attached in appendix-1 of this paper).

QUALITATIVE DATA COLLECTION

A qualitative research method enlightens a topic in a deeper and more detailed way, and as such became handy in our study of social media impact on consumer behaviour and brand loyalty. Qualitative methods are used when data are in words and remain in words throughout the analysis (Bryman and Cramer, 1992).

A qualitative data is a data that characterizes, and does not take place in a numerical form. It is collected using various methods such as focus groups, in-depth interviews, case studies, observation etc. This form of data is important determining the frequency of a trait. It is an exploratory data collection method that consists of in-depth research and analysis of the findings.

In-depth interviews are one of the most used forms of qualitative data collection, mainly because it takes a personal approach. This method consists of the interviewer (researcher) asking open-ended questions to the interviewee (consumer in our case). The interview can be informal, taking the form of a normal conversation or spontaneous and casual, in order to make the interviewee comfortable to answer all of our questions. According to Blaxter et al. (2006), it is worthwhile doing interviews because it offers researchers the opportunity to uncover information that is "probably not accessible using techniques such as questionnaires and observations". Nevertheless, the qualitative data collection method has various disadvantages as well. It is a time-consuming method that requires a lot of energy in order to generate just a few data. It is also a costly research method that is not easy to generalize. Sometimes, analysing qualitative data is seen as the core of qualitative research in general, whereas the collection of the data is the more preliminary step before the analysis (Gibbs, 2018).

We chose a total of 4 people of both genders, from different demographic backgrounds, in order to conduct our qualitative research. Each interview session took approximately 45 minutes to finalize and about an hour to review and interpret the responses. The only condition to participate was "being a regular social media user and that having already made at least, one purchase using social media platforms as an influence channel.

The respondents were:

1. *Wiam* – Female; 30 years old marketing researcher; holds an MBA, unmarried with no kids
2. *Hiba* – Female; 20 years old medicine student; unmarried with no kids.
3. *Jade* – Male, 52 years old financial expert, holds a PhD degree, married with 3 kids.
4. *Nikola* – Male; 46 years old; freelancer; holds a bachelor's degree; married with 2 kids.

The interviews with all four interviewees were conducted in person and were sound recorded in order to realize a more accurate research analysis. With the presence of the interviewer, mutual understanding was be ensured, as the interviewer was handy to rephrase or simplify questions that were not understood by his/her interviewees (Dörnyei, 2007).

The interview was semi-structured designed with various questions already set out, while also allowing opportunity to explore other themes of responses. It had three exploratory parts which included: social media use, influence of consumer behaviour and brand loyalty. The first part aimed at knowing the proficiency of interviewees in the use social media and the extent to which they use it as a shopping or decision-making channel. The second part had questions that sought to explore the influence social media had on the interviewees and the extent to which they were influenced by all types of content on social media. The third and final part was to explore the extent to which social media helped to create brand loyalty and recognition among customers. The questions we have asked our interviewees are listed in the appendix-2 of this research paper.

The questions were asked, going from generalist questions to detailed questions, allowing for a good atmosphere and to avoid a misunderstanding between the researcher and the participant. Questions were developed in a straightforward, understandable as well as clear way, as to enhance understanding and correct data.

By conducting a qualitative data, we ensured that the validity and reliability of our research data. We double-checked the inputted data as well as the outcome. One of the defining characteristics of qualitative methods is that they – more than quantitative methods – provide a participatory function to the researcher (Lub, 2015)

RESEARCH FINDINGS AND ANALYSIS

By conducting a thorough analysis on the surveys collected from participants and from the in-depth interviews, the results aim to answer to what extent social media, when used as a communication strategy, influence the behaviour of the consumer or prospect, as well as the extent to which this communication and marketing tool help to build and create brand loyalty. The research does also investigate the various factors that stop the consumer from making a purchase decision or that stop him/her from trusting and being loyal to a brand.

Questionnaire Findings

Demographics

The data collected from the questionnaire through the 70 participants was analysed with the help of the several analytical tools available on the survey platform.

We realized 70 responses from the 100 questionnaires sent out. About 31,45% of the 70 people belong to the age range 25-39 while 17% others belong to the age range 18-24 (Figure 5)

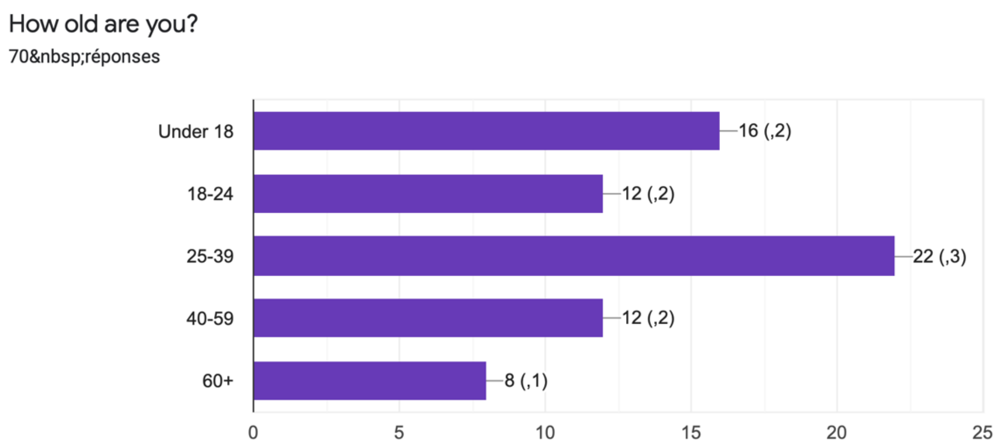


Figure 6: Age of the participants

Choices	Responses (Total of 70)
Under 18	22,86%
18-24	17,14%
25-39	31,44%
40-59	17,14%
60+	11,42%

Table 1: Age percentage of the participants

Out of the 70 people that participated in the questionnaire, 38 were females and 33 were males (Figure 6) giving a near-equal gender response. It was important to have a mixed point of view between both genders in order to realize a generalized data input, without having any form of gender bias.

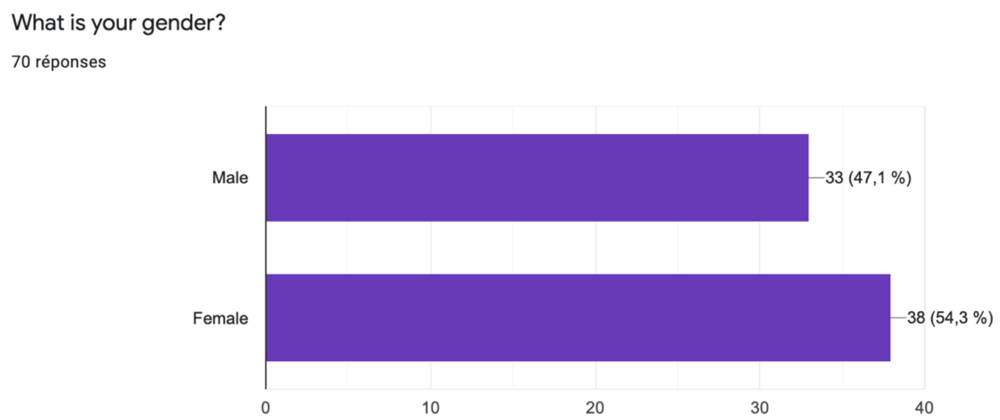


Figure 7: Gender of the participants

As per the occupation of our respondents, 40% are employed or self-employed, 34% are students and almost 19% are unemployed or looking for an opportunity. This distribution is also very acceptable as the different occupations gives insight to various perspectives.

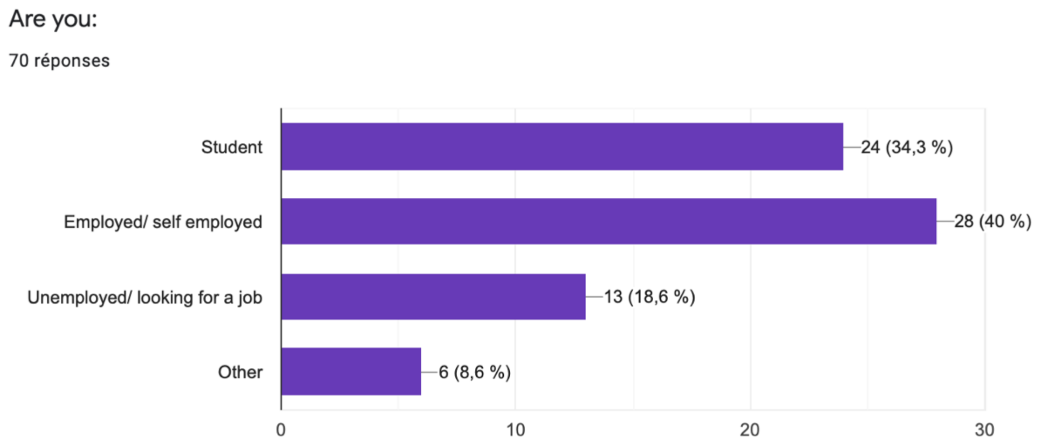


Figure 8: Participants' occupations

Social Media Usage

74,3% of our respondents are frequent social media users, showing a very large number of daily social media users (Figure 8). From Figure 9 and Table 2, we see that more than 34% of our participants use social media for more than three hours a day and 30% use it between two to three hours a day.

We can say that our respondents use social media majorly and on a daily basis. We can also say that these media tools have taken a considerable place in our participant's daily lives.

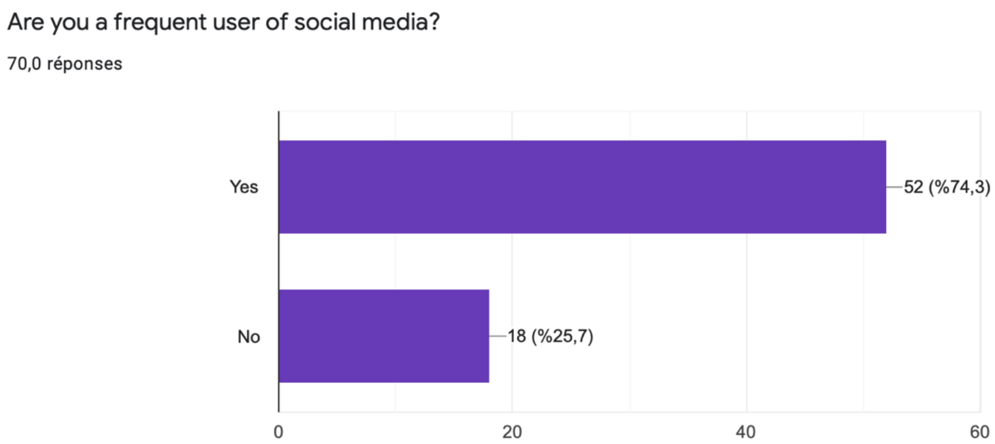


Figure 9: Users of social media

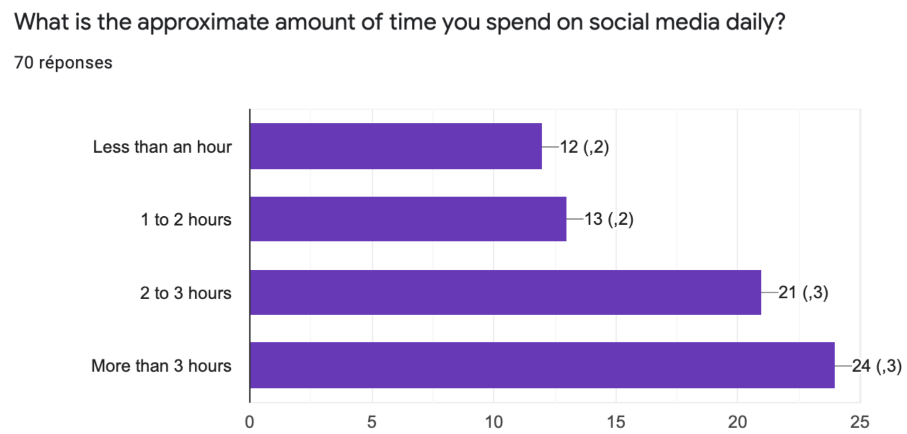


Figure 10: Time spent on Social Media daily by our participants

Choices	Responses
Less than an hour	17,14%
One to two hours	18,57%
Two to three hours	30%
More than Three hours	34,29%

Table 2: Percentage of time spent on social media by respondents.

The findings from our questionnaire show that most used social networks are Facebook, Instagram, YouTube, etc. with Instagram taking the lead and Pinterest last with a smaller frequency. We also notice from Figure 10 that the least used media according to our respondents are the Blogs.

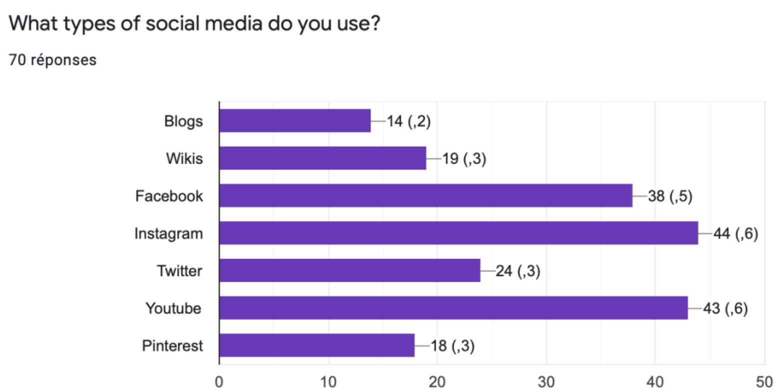


Figure 11: Types of social media used by questionnaire respondents

Influence of social media on consumer behaviour

51 out of 70 respondents stated that they do follow brands on social media (Figure 12). It showed the influence of brand presence on social media has on the information search stage of the buying behaviour model. More than 33% of the participants stated that they follow a brand in order to get information or to be entertained while almost 31% stated that they follow the brand on social media because they simply like it (Figure 13).

The findings in our research was able to demonstrate that the influence of social media on the information search stage is very important and thus aligns with the secondary research findings that we have stated in our literature review. The consumers tend to be highly selective when it comes to brands they follow and also highly selective when it comes to the information search, hence there is a need for them to be constantly updated about the brand.

About 33% of the people stated that they often conduct an information search on social media before making any purchase (Figure 14). And this gets us to link between the findings of the questionnaire to the findings of our literature review

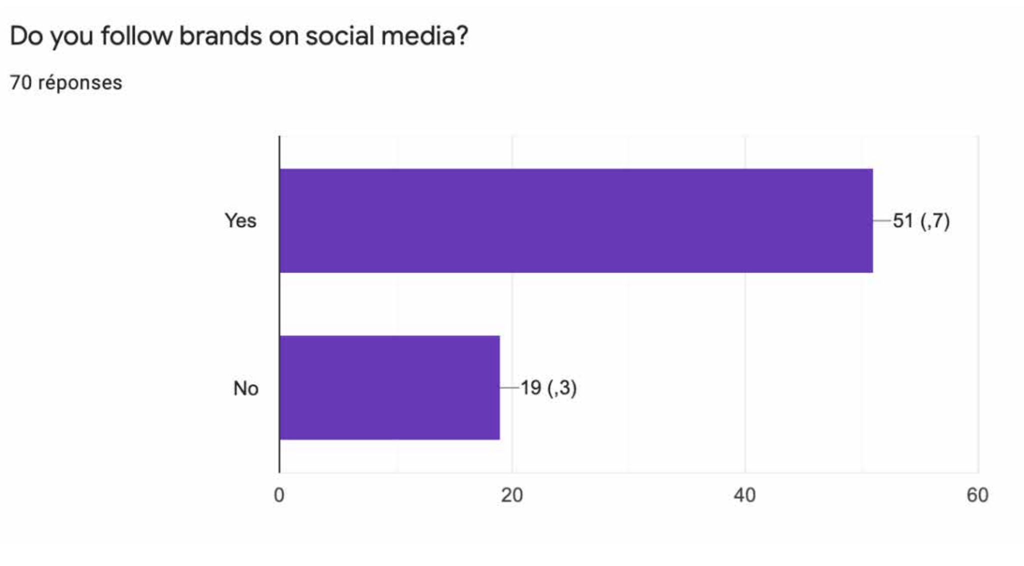


Figure 13: Respondents that follow brands on social media

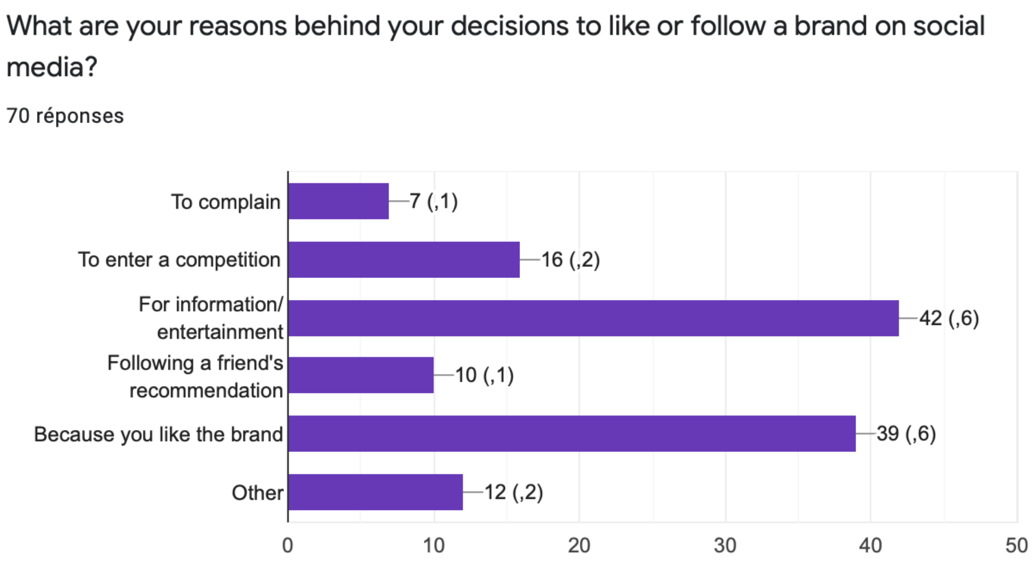


Figure 14: reasons behind following a brand on social media

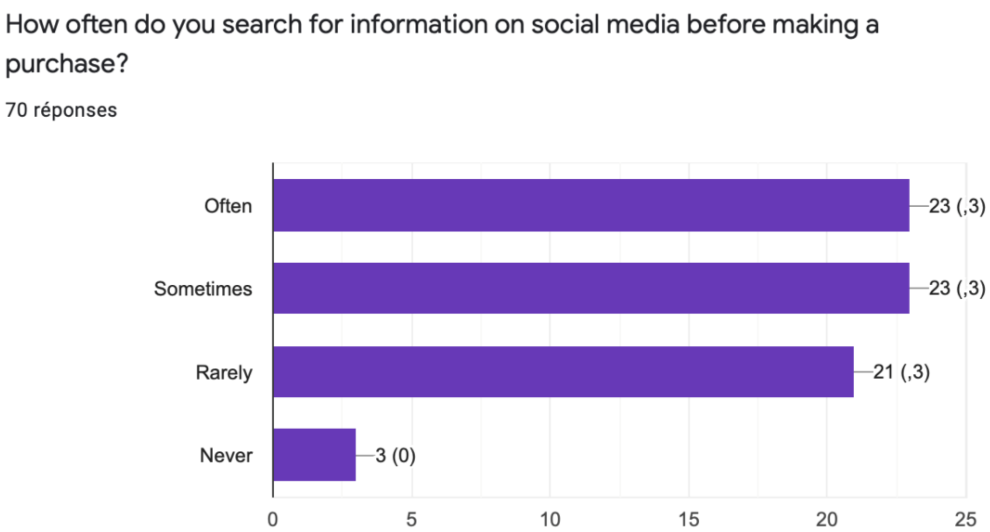


Figure 15: Information search by participants

51% of the respondents stated that social media might affect a certain impression they have about a brand while 30% stated that social media might affect an image or vision they have about a brand (Figure 15). This emphasizes the findings in our secondary data research that the presence of a brand on social media is a major advantage and enhances the impression of quality of the brand. Another point that supports the literature review findings is that nearly 73% of the participants stated that they think social media plays a big role in the promotion of a brand, thus confirming that good promotion of the brand on social media will make the brand more visible to the consumers and prospects, and so be considered as alternative options.

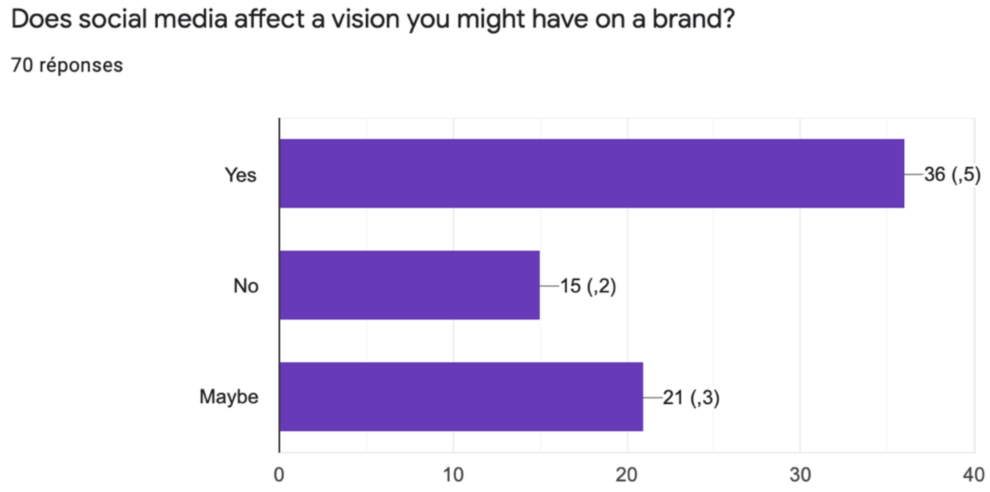


Figure 16: Impact of social media on a brand image.

One of the straight forward questions in the questionnaire was, “How much of an influence does social media have on your purchases decisions?” 34% of respondents stated that it has a moderate influence on their purchase decisions while more than 21% stated it has a strong influence (Figure 16). That confirms the literature that social media plays a big role in the decision making of the consumers. Also, the core information and the way to get to information, also plays a role in the behaviour of the prospect. 30% of the respondents agreed that the feedback on social media influences their purchase decision while only 11% disagreed to that (Figure17).

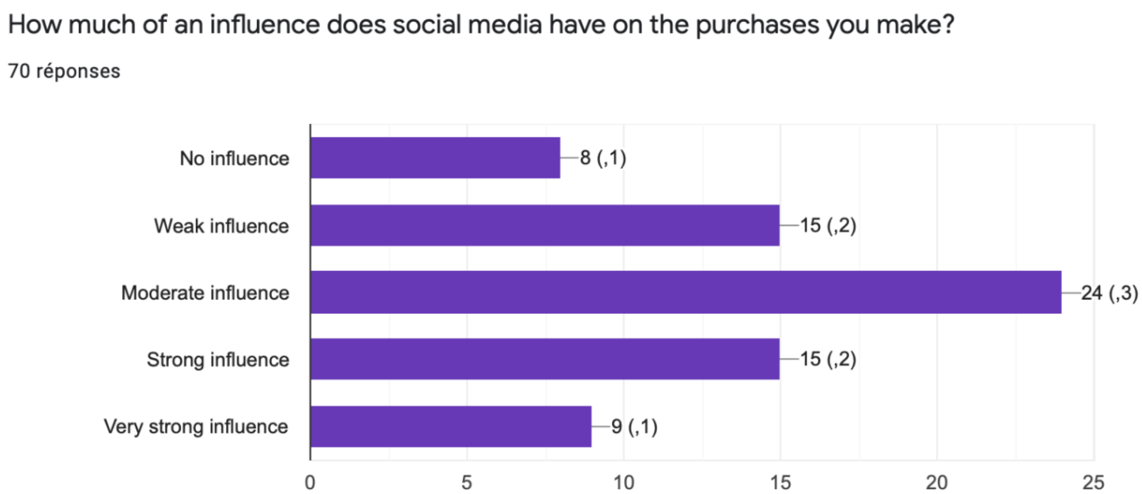


Figure 17: Influence of social media on purchase decision

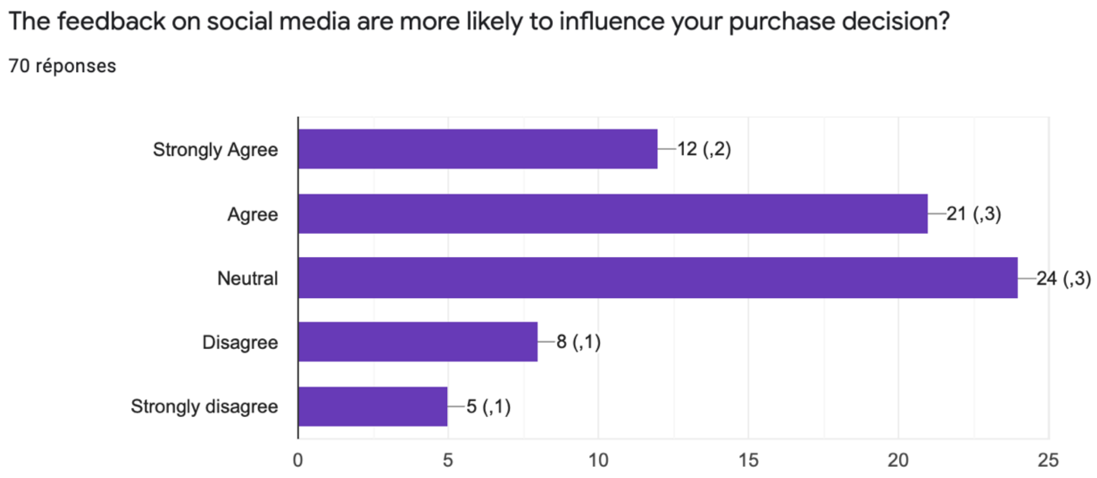


Figure 18: Impact of feedback on consumers' behaviour

The consumer is increasingly aware of the benefits that social media can bring to him/her. In view of these benefits, users are encouraged to share their feedback with other users for both pleasant experiences and negative experiences they ever have had with the product, service or the brand. 17% of the participants stated that they feel encouraged to share their feedback with other social media users after a purchase while nearly 33% of the respondents were neutral and 22% disagree to the matter (Figure 18). The result shows us that the influence of social media on consumer behaviour is considerably high during the information search, evaluation of alternatives and purchase decision stages of the consumer buying-process model while it is relatively lower in the post-purchase evaluation stage. Concerning the need recognition phase of the buying behaviour model, we asked respondents if they ever bought any unplanned product or service due to social media exposure. 40% of them responded negative while 38,5% responded positive, as they had ever bought something for it just being on social media (Figure 19).

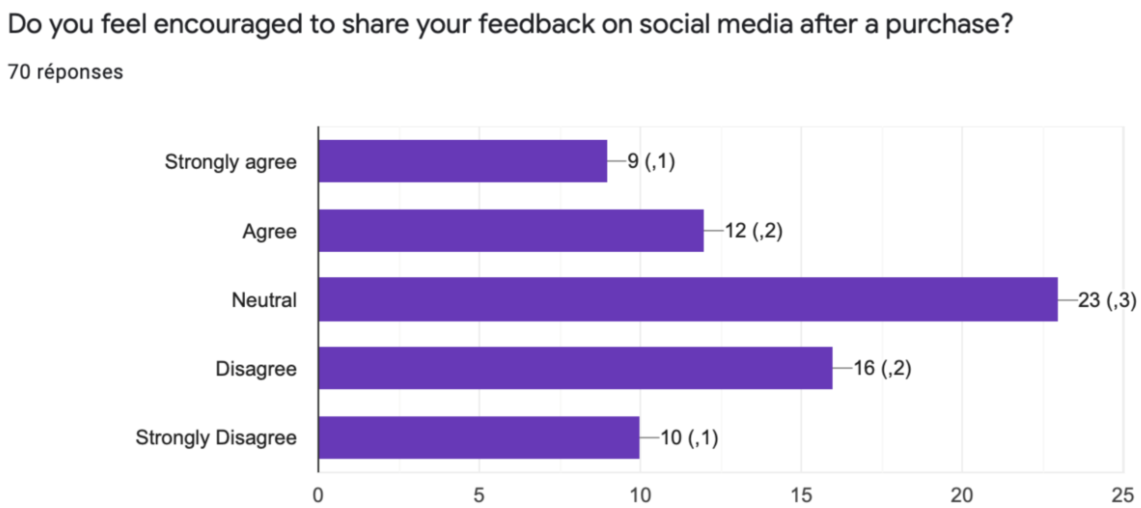


Figure 19: Sharing feedback on social media

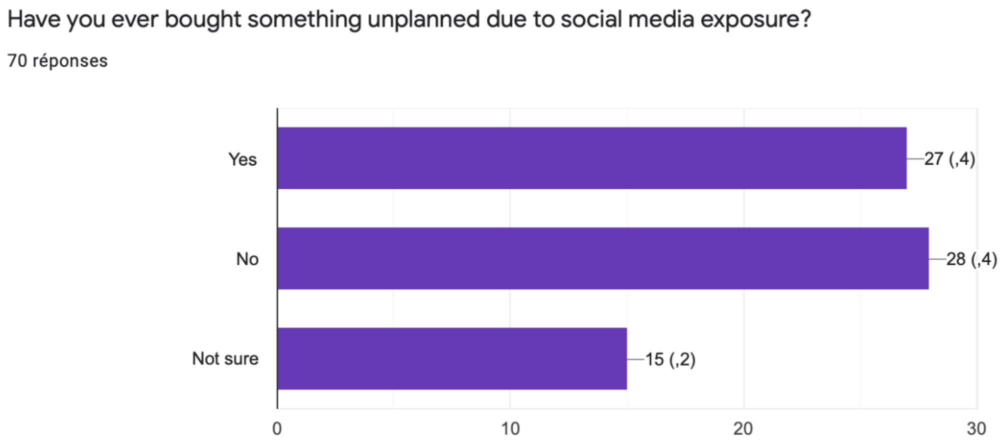


Figure 20: Unplanned purchase due to social media exposure

From the findings of our study, we can say that social media has a big impact on consumer behaviour, just like it was stated in the literature of this study. The consumer is more influenced at the stages of information search, evaluation of alternatives and purchase decision but less influenced on the need recognition and the post purchase evaluation stages. The findings of the secondary data perfectly align with the findings of our primary quantitative data analysis, which gives more information about the topic and enlightens some unstudied aspects of social media and consumer behaviour.

Influence of social media on consumer loyalty

Participants were asked if they felt loyal towards a brand just because they follow it on social media. More than 64% responded in the negative (Figure 20), and thus agrees with the literature, that a brand doesn't only have to be on social media in order to gain consumers loyalty, but also have to put in efforts to engage the consumers and to win their loyalty.

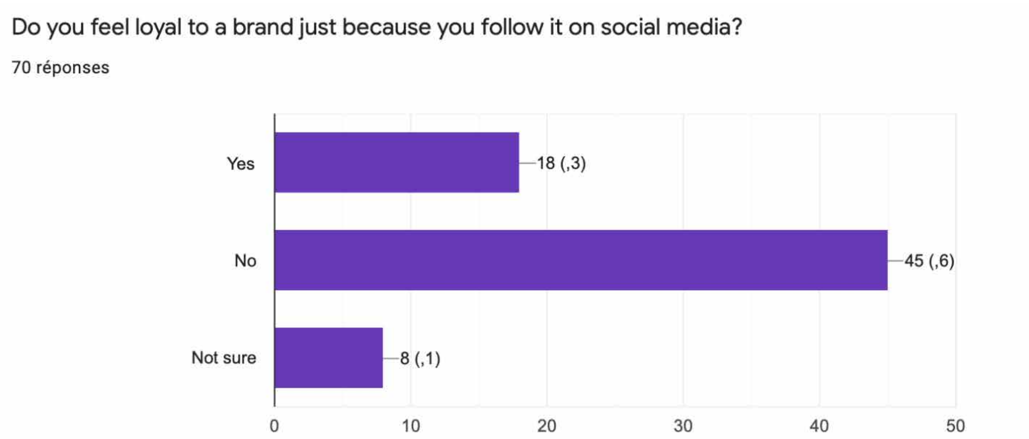


Figure 21: Loyalty in regard to following a brand on social media

Over 50% of our respondents agree that the communication of a brand on social media makes them feel closer to the brand and consolidates a relationship with it (Figure 21). This agrees with the literature that found that brands and organizations mainly use social media as a communication strategy in order to retain customers, build a constant trust and improve engagement rate in order to obtain continuous feedback from customers.

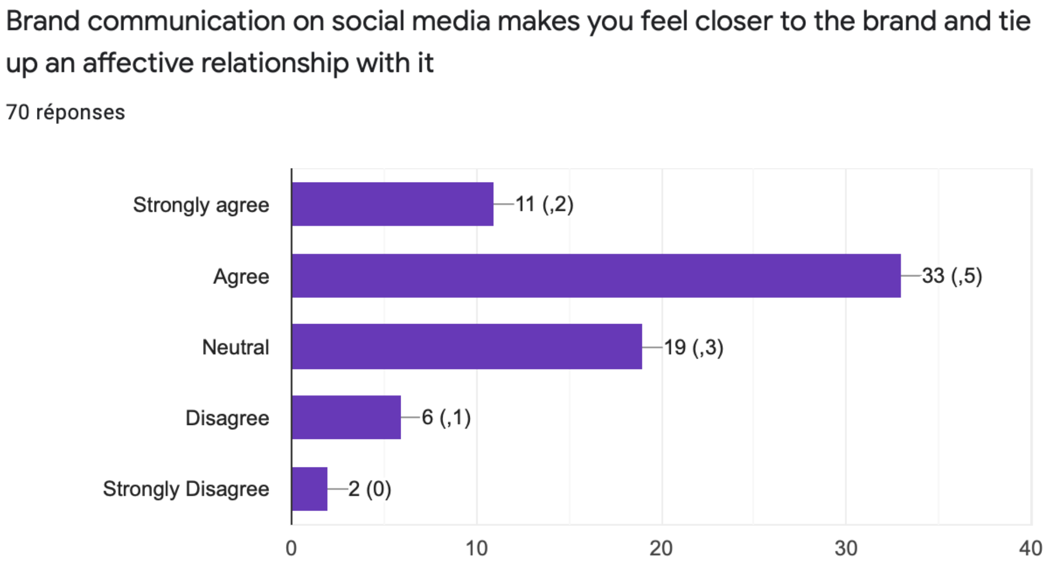


Figure 22: Building relationship with the brand

While it is important to be available on social media and responsive to both followers and other users of social media, 54% of the participants stated that they feel loyal to a brand which they follow on social media and which is constantly responsive with them.

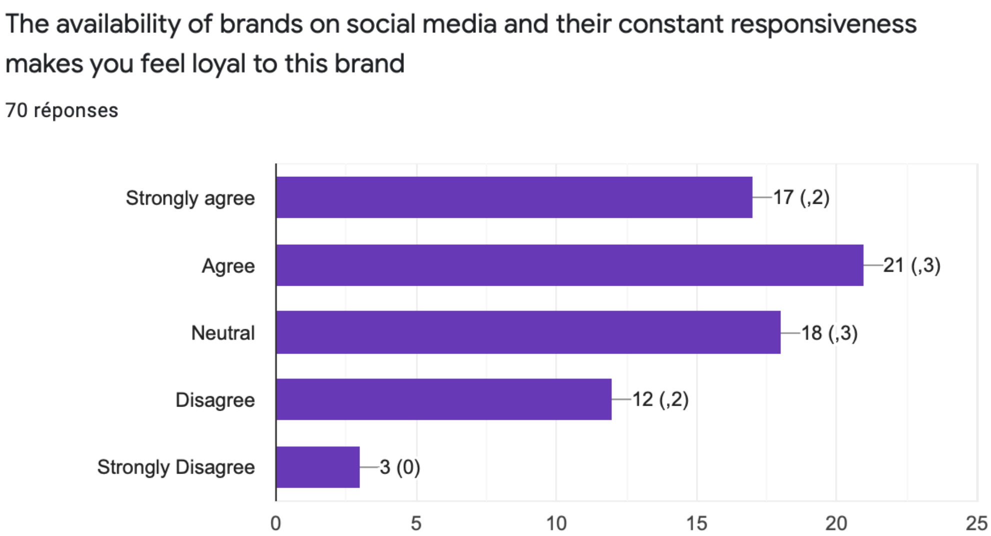


Figure 23: The relationship between availability of brands and brand loyalty

People tend to spend more and more time on social media these days. The interactions on these platforms can influence the behaviour of consumers and also their purchase decisions. Brands need to do more than just being present on social media. Our respondents showed us, in agreement with the literature, that brands need to constantly develop an efficient communication strategy in order to retain consumers and attract prospects, thereby achieving brand loyalty.

QUALITATIVE FINDINGS

Social Media Use

The four people we chose to interview are constant social media users. They all spend between 1 hour, 30 minutes and 4 hours on social media daily. They all stated various reasons for using it and are active on social media daily, following brands and their communication. We can summarize their reasons as follows:

1. keeping in touch for information and what is going on in the market,
2. staying informed about various deals and promotions going on,
3. reviewing feedbacks when wanting to take a decision,
4. using the internet's word of mouth in order to build a vision about the brand, or get more information about the brand operations such as its locations, opening times, shipment, etc.

Our interviewees stated that they get to follow brands on social media based on the degree of their interaction with their fan base, the quality of content they provide, while other respondents stated that they follow brands if they shared the same values and visions.

"...Also, I tend to follow a brand if it has the same values as me, for example I refuse to be a fan of a brand that is not sustainable or ecologically responsible".

The participants also noted their most used social media platform. The most popular ones are Facebook, Instagram, YouTube, Twitter, Wikis, while one of the interviewees stated that she also uses blogs on a daily basis.

IMPACT OF SOCIAL MEDIA ON CONSUMER BEHAVIOUR

Our interviewees noted that the online presence of a brand on social media might trigger a need recognition.

"*Getting to see the product everywhere online, and even hearing influencers talk about it, makes me feel like I actually need this product, even if I don't. I cannot not have it if everyone is going to have it."*

The availability of information about the brand and the ease of access to those information makes it easier for the brand to become an alternative that a potential customer could choose from. Majority of our interviewees agree that a good coverage on social media is very important for users to be aware of the products and also be able to compare it to other similar goods or services.

"Social media brings significant advantages to us, consumers. We can look for specific information about different brands, compare and get to make a decision in the comfort of our homes."

The fact that users can reach out to brands and to ask questions or express their opinions online, is as important as the availability of information online. Consumers or prospects can reach out to the advertisers for information or prompt feedback. The feedback from brands and from other users or consumers is considered as a big asset for prospects in making buying decision. Online word-of-mouth is considered very important by our interviewees as it helps them leverage real experiences for their purchase decision.

"Consulting feedbacks and reviews of a product online makes me feel more secure when making a decision to buy that product."

"Good ratings and reviews always make me feel encouraged to take the step and buy the product."

All four interviewees stated that they did not always feel encouraged to express their feedback and experiences on social media, except in cases where the brand could initiate such engagements in order to stimulate feedbacks. That is why a good communication strategy from the brand needs to be implemented in order to keep the consumer more engaged in the decision-making process, especially when it comes to the post-purchase evaluation stage.

"I love when brands make us feel, as consumers, the centre of the whole business…I love when we as consumers feel important."

IMPACT OF SOCIAL MEDIA ON BRAND LOYALTY

All of the interviewees indicated that in order for them to build a certain degree of brand loyalty, they need a brand that constantly engages with them and with which they will in turn engage with. One of the respondents stated that in order for him to be loyal to a brand, he needs to constantly feel that he is being understood and listened to by the brand, on social media. He added that a certain feeling of being a part of the brand's "family" is important for him to be ultimately loyal to this brand.

"I have to have a real connection with the brand through social media so that I can build a good relationship with it... Maybe with the time, I will get to trust it and become loyal."

Two of our interviewees stated that it is crucial for them that the brand shares authentic content and is very clear about its consumer base and prospects. Such authenticity and clarity constitutes a very important aspect of trusting the brand and being loyal to it. Another interviewee added that the constant development of the brand and what it offers to its consumers are very important to users as that shows that the brand is listening to its consumers and responding accordingly.

"A brand that listens to its consumers' needs and wants is a brand that is worth being loyal to."

CONCLUSION OF FINDINGS

This research highlighted various aspects of consumer behaviour and brand loyalty, in respect to social media. The qualitative research was carried out to understand broadly and in a big picture, the consumers' behaviour towards brand on social media. It also helped to understand the most important points that makes a consumer or prospect follow a brand and become loyal to it. With the questionnaire, this study found that social media is now a big part of the consumer's buying decision process and that it is important for a brand to be active on social media in order to generate consumers' interest. The findings of the quantitative research perfectly align with the reviewed literature as other researchers had previously stated that social media is a very a powerful influencing tool for brands. As a second step in the data collection process, the quantitative research provided a clearer insight into our research questions. It considered in more details, the underlying reasons behind the behaviour and attitudes of the consumer. The results of this research were practically similar to the findings in the literature review, more so, providing more detail of every stage of the decision-making process.

CONCLUSION

Social media is a medium of communication that plays an essential role in bringing customers to the product and stimulating sales. It is also a means of communicating the brand to the consumer in such a way to influence his purchase. Through this research, it was possible to identify the impact of social networks on consumer purchasing behaviour and the impact it has on gaining their loyalty. The main goal of this research paper was to understand the influence of social media on the behaviour of the consumer as well as the impact of this new and vital technology on creating brand loyalty.

The results of this study show that social media has a big and direct influence on all five stages of the decision-making model reviewed in the literature. All of the need recognition, information search, evaluation of alternatives, decision-making, and post-purchase evaluation were found to be directly influenced by the use of social media. The study further showed that even if social media influences all five stages of the decision-making model, the degree of influence varies from one stage to another. The stage of strongest influence was found to be the information search, evaluation of alternatives and the purchase decision. Consumers showed to be very careful in selecting information or evaluating alternatives before making any purchase decision. The selection of information was found to be the most influenced by social media. The consumers and prospects tend to be at the highest point of their selectivity when choosing the information source to leverage in making their purchase decision. At the stage of evaluation of alternatives, unbiased experiences and customer feedbacks influence the consumer and prospect from choosing a certain brand over another.

The consumer takes advantage of all the available information online, from websites to comments, feedback, and experiences of other consumers. For consumers, social media means has empowered them to take advantages of the benefits of platforms and networks to make suitable decisions. Consumers checking on feedback, pieces of advice and other users' experiences, gives them a sense of trust in the brand or product, as they seem to trust more friends, peers, and family than brands. The level of influence of social media on the behaviour of the consumer seems to be lower at the stage of need recognition and post-purchase. Although consumers and users of social media confirm that they are able to express their opinions to brands and other users, the vast majority still do not feel encouraged or comfortable enough to share their experiences and their reviews on social media networks and platforms. These findings clearly answer the research question, "to what extent does social media influence consumers' behaviour?" This study enlightens and details, reasons and underlying motives that influence consumers' behaviour.

In terms of consumer loyalty and social media, the findings are clear that the consumers are looking to have a sense of belonging and some relationship, built on trust and transparency. This helps them to make successive purchases and eventually develop loyalty and favourable behaviour towards the company, brand or product. The findings also show that the consumers need to feel some attention from the brand, as it made them to feel valued, wanted and welcomed into the brand's 'virtual family". Initiating the consumers to stay engaged with the brand and taking steps towards understanding the consumer's needs, make the consumers feel important and thus loyal to the brand. However, it is important to emphasize the importance of brands' marketing practices on social networks which have a big effect on the behaviour of the consumer. From a managerial point of view this study will be useful for organizations' managers, marketers and other decision makers, as it will enable them to further understand their consumer behaviours, expectations and needs, so as to attract them, influence their purchase, satisfy them and ultimately win their loyalty.

The number of respondents to the questionnaire and the interviewees are relatively low. This may be a concern as per potential of its general application, as other factors and a larger sample size need to be explored, in order to have more details and for the research to be generalized. Another limitation is the data collection methodology. Therefore, this study only gives an approximate view of the impact of social networks on consumer behaviour and on brand loyalty.

Based on the outcome of this study, marketers and organizations' supervisors need to focus on giving more attention to customers, putting them at the centre of the business as well as the centre of the organization' social media marketing strategy. They should focus more on electronic word of mouth as well as pay close attention to consumers' complaints, messages and comments.

Future Areas of Research

The findings of the research opens up future research paths for other researchers to look at specific characteristics (age, demographic features, background, social levels, education levels etc.) that might in one way or another affect the decision making of the consumers.

The continuation of the research can be envisaged along two points. The first would be to broaden the framework in its various dimensions, in order to make the established findings more robust and generalizable. The second would be to integrate the points of view and data from companies.

BIBLIOGRAPHY

1. Armstrong, A. & Hagel, J. (2000) The real value of online communities. *Knowledge and Communities*, 74(3), pp.85-95.
2. Barnes, J. A. (1954) Class and committees in a Norwegian Island Parish. *Human Relations*, 7(1), pp.39-58.
3. Boyd, D. M. & Ellison, N. B. (2007) Social network sites: Definition, history, and scholarship. *Journal of computer-mediated Communication*, *13*(1), pp.210-230.
4. Brown, G. (1952) Brand Loyalty: Fact or Fiction, *Advertising Age*, Vol. 26, January, pp. 75-76.
5. Belch, G., & Belch, M. (2003) *Advertising and promotion: an integrated marketing communications perspective*. 6th edition. Berkshire, England: McGraw-Hill.
6. Belch, G. E. & Belch, M. A. (2004) *Advertising and Promotion: An Integrated Marketing Communications Perspective.* New York: McGraw-Hill.
7. Bray, J.P. (2008) *Consumer behaviour theory: approaches and models.*
8. Bryman, A. & Cramer, D. (1992) Quantitative data analysis for social scientists. *Estudios Geográficos*, 53(207), p.347.
9. Blaxter, L., Hughes, C. & Tight, M. (2006) *How to Research*, 3rd Ed. New York: McGraw-Hill Education.
10. Calder, B.J., Malthouse, E.C. & Schaedel, U. (2009) An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of interactive marketing*, 23(4), pp.321-331.
11. Dessart, L., Veloutsou, C. & Morgan-Thomas, A. (2015) Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management.*

12. Dörnyei, Z. (2007) *Research Methods in Applied Linguistics: Quantitative Qualitative, and Mixed Methodologies.* Oxford: Oxford University Press.
13. Engel, J. F., Blackwell, R. D., & Kollat, D. T. (1978) *Consumer Behaviour*, Dryden Press, Hinsdale, IL.
14. East, R., Wright, M. & Vanhuele, M. (2013) *Consumer Behaviour: Applications in Marketing.* 2nd edition, SAGE.
15. Gibbs, G. R. (2018). *Analyzing qualitative data*, Vol. 6, Sage.
16. Hoyer, W. D. & MacInnis, D. J. (2010) *Consumer behaviour*, 5th ed. London: South-Western Cengage Learning.
17. Hancock, M. E., Amankwaa, L., Revell, M. A. & Mueller, D. (2016) Focus group data saturation: A new approach to data analysis. *The qualitative report*, 21(11), p.2124.
18. Jacoby, J., Kyner, B. D. (1973) Brand Loyalty vs. Repeat Purchasing Behaviour, *Journal of Marketing*, Vol. 10, pp. 1-9.
19. Kaplan A. M. & Haenlein, M. (2010) Users of the world, unite! The challenges and opportunities of Social Media, *Business Horizons*, Vol. 53, No. 1, p. 59-68.
20. Khatib, F. (2016) The impact of social media characteristics on purchase decision empirical study of Saudi customers in Aseer Region. *International Journal of Business and Social Science*, 7(4), pp.41-50.
21. Kent, R (2007) *Marketing Research: Approaches, Methods and Applications in Europe*. London: Thomson Learning
22. Lub, V. (2015) Validity in qualitative evaluation: Linking purposes, paradigms, and perspectives. *International journal of qualitative methods,* 14(5), p.1609406915621406.
23. Maslow, A. H. (1943) A theory of human motivation. *Psychological review*, 50(4), p.370.
24. MacInnis, D .J. & Folkes, V. S. (2009) The disciplinary status of consumer behaviour: a sociology of science perspective on key controversies. *Journal of Consumer Research*. (Online) Vol. 36 April, pp. 899- 914.
25. McLeod, S. (2007) Psychodynamic Approach, *Simply Psychology*, Available at: http://www.simplypsychology.org/psychodynamic.html
26. O'reilly, T. (2005) *What is web 2.0.*
27. Patton, M. Q. (1990) *Qualitative Evaluation and Research Methods,* 2nd edition, Newbury Park, California: SAGE
28. Sternthal, B. & Craig, C. S. (1982) *Consumer behaviour: An information processing perspective.*
29. Silverman, B. G., Bachann, M., Akharas, K. A. (2001) *Implications of Buyer Decision Theory*
30. Solomon, M., et al. (2006) *Consumer Behaviour: A European Perspective*. 3rd ed. Harlow: Prentice Hall.
31. Schlosser A. E. (2005) Posting versus Lurking: Communicating in a Multiple Audience Context, *Journal of Consumer Research,* 32(2), 260 – 5.
32. Schmitt, B. H. (2003) *Customer Experience Management: A Revolutionary Approach to Connecting with Your Customers*, John Wiley & Sons
33. Saunders, M., Lewis, P., & Thornhill, A. (2007) *Research Methods for Business Students*, 4th edition, Prentice Hall.
34. Saunders, M., Lewis, P. & Thornhill, A. (2012) *Research Methods for Business Students*, 6th edition, Pearson Education Limited.
35. Singer, P. (2021) Ethics: Definition, History, Examples, Types, Philosophy, & Facts. *Encyclopaedia*

Britannica, Available at: <https://www.britannica.com/topic/ethics-philosophy>
36. Van Zyl, A.S. (2009) The impact of Social Networking 2.0 on organisations, *The Electronic Library*, Vol. 27 Issue: 6, pp.906-918.
37. Weinberg, B. D. & Pehlivan, E. (2011) Social spending: Managing the social media mix, *Business Horizons*, Vol. 54 No. 3, pp. 275-282.

Kenza El Fati is Brand Ambassador with Deloitte.
Konstantinos Biginas, FSHEA, FDTA, CMgr, FCMI, is a PhD candidate in Strategic Management, University of Hertfordshire, and a lecturer at EU Business School, Online Campus.

HOW STORYTELLING PROMOTE LUXURY BRANDS: A CASE STUDY OF HUBLOT COMPANY

Peter Mutiso Maundu

ABSTRACT: *It is now 43 years since Hublot was founded, and the strength of the brand has continued to grow (Abrams, 2020; Stone & Pulvirent, 2018). The brand is best known for its art of fusion, reminiscent of the original idea of the company's founder, Mr. Carlo Crocco, whose creativity, innovation and entrepreneurial spirit combined gold and rubber to produce a watch that has retained its uniqueness to this day (Lindberg & Backlund, 2014). Although there is little information on the growth of the company between 1980 and 2003, its dramatic turnaround and explosive growth is quite evident since 2004 (LVMH, 2023). This study examined the contribution of storytelling in promoting Hublot as a luxury brand. Based on the theory of narrative transportation, the study used critical discourse analysis to evaluate a sample of the brand's stories based on 11 linguistic tools. The study found extensive use of storytelling in the brand's promotional campaigns, although this was not evident in the company's annual reports.*

KEYWORDS: luxury brand, narrative transportation, rhetorical triangle, storytelling

Under the leadership of its founder, Carlo Crocco, Hublot launched its first product in 1980 (Fondation de la Haute Horlogerie, 2022). The product was a gold and rubber watch. Since Jean-Claude Biver became the CEO of the company, Hublot increased its sales by 2,504.17% from approximately 24 million Swiss francs (CHF) in 2004 to 625 million CHF in 2018 (Abrams, 2020). This growth may be partially attributed to the effectiveness of the company's marketing strategy. According to Lu (2021), a luxury brand must communicate effectively when marketing its products in order to connect with the target audience. For Hublot to do this, the recipients of the information it provides through its various channels have to grasp the essential points on which their judgements and reactions are based. Otherwise, if the information is not well codified to convey the value of the Hublot watches when marketing, the marketing communications would neither have a positive effect on the brand nor increase its sales (Lu, 2021). This article investigates how Hublot uses storytelling in marketing to drive sales.

To begin with, understanding what storytelling means is important. Storytelling, according to Gardetti (2019) is one of the ways that luxury brands use in raising awareness. It involves the use of narratives that consist of branded content, which enables the brand and consumers to connect (Nikitina, 2020; Bennett, 2022). Storytelling not only highlights the brand's value but also entertains in such a way that resonates on an emotional level. This is important in that a luxury brand should stand for some values as well as intangible characteristics that may include creativity, emotions, dreams, and exclusivity. Such values are easier passed from one customer to another if they are transparent and clearly embedded on customers' emotions. In their study, Andrade (2021) found out that "luxury brands aim to have an emotional connection with their followers and through storytelling they are able to give meaning to their brand" (p. 34). This does not mean that storytelling is flawless. For instance, it takes a long time for a story to attract a significant audience. In addition, it is costly to create and reinforce brand messages through storytelling. Furthermore, managing storytelling is difficult because human behavior, tastes and preferences change over time. Moreover, it is difficult to account for the contribution of storytelling to brand growth and company sales.

LITERATURE REVIEW

There are a number of theories that explain what constitutes compelling storytelling. These theories have been used as the basis for empirical studies on storytelling. Some of these studies are very important in understanding how storytelling, celebrity endorsement and financial reports play a key role in shaping a brand. As this section shows, the theories and empirical studies explain why most of the negative information about the Hublot brand on the internet are in fact a confirmation of the strength of the brand in the luxury industry.

QUALITIES OF PERSUASIVE STORYTELLING

The growth of brands depends on the company's ability to persuade prospects to become customers and clients. This goal can be achieved through storytelling. According to Gabriel (1995), the incidents described in stories have nothing to do with information but rather act as signs as well as symbols. When the context is not captured in the story as in the case of offering information, the communication becomes meaningless and irrelevant. The reason is that information alone lacks quality since it only transforms what could have been a text into linear sequence. According to Gabriel (1995), storytelling " serves as a vehicle through which the subject is constructed in four principal modes; "as hero, as survivor, as victim and as object of love" (p. 498).

The analogy of persuasive brand story with a vehicle is further captured in the narrative transportation theory. According to this theory, people become so immersed in a story that they shift their thoughts to an imaginary world. This happens when their cognition, mental images, as well as their emotions capture their attention to focus on that specific story (Green, 2021). According to Lal (2022), narrative transportation theory posits that when people are 'swept up in the story', they emerge with altered attitudes and new intentions that reflect the perceived reality told in the story. They become empathetic to a character in the story for whom they develop an emotional attachment that keeps them in this imaginary world. This explains why Campbell (2003) argued that a compelling story is a hero's journey that should describe an adventurous expedition in the knowable world that has significant impact. In this case, a hero embarks on a journey of self-awareness by trying to understand a scenario. This results in resolution to act and overcome a challenge. In pursuit of the target, the hero has to pass through tests that enhance his or her worthiness through victory. At last, the hero must return home full of worldly wisdom.

Storytelling and Celebrity Endorsement

As a luxury brand, the use of storytelling to transport people to the Hublot universe created from the big bang require careful choice of the narrator. While a company can easily choose a celebrity to endorse its brand, the challenge, according to Mukherjee (2009), is to create a strong connection between the celebrity and the product. According to Krishna Kumar (2021), the alignment of the celebrity's personal characteristics such as gender, credibility, type and attractiveness with the expectations of the target population has a positive effect on people's intention to buy the product. Consumers' connection to a brand is high if the celebrity endorser is their idol. However, the image of the celebrity and the image of the brand must match. These images must have a brand symbolism on a positive aspect of the brand users. This means that consumers' personal needs strengthen their association with a brand if the celebrity endorser recreates an image that elevates their self-identity (Mukherjee, 2009). In this case, gender identity should also be considered in storytelling. If a celebrity's gender is similar to that of the target consumers, the connection between them is strengthened and they absorb the information more easily (Sliburyte (2009). Concerning whether a brand should have one or more celebrity endorsers, Vigneron (2016) revealed that having multiple celebrity endorsements for a brand is beneficial.

Storytelling in Financial Reports

The fact that annual reports are published periodically presents a great opportunity for companies to tell their stories. The annual report is supposed to identify perceptions of audiences and embrace them. This implies that annual reports should engage those who read them as much as possible if the company is to boost its brand strength (The Marketing Mane, 2020). The content of an annual report that captures the attention of all stakeholders and inspires them to act in favor of the brand must be crisp and imagery captivating and not just numbers. This is achieved using stories that elicit readers interest and educate them in a way that enhances their connection and confidence with the brand. Proper application of the rhetorical triangle determines how persuading an annual report is. According to Lawrence (2022), "almost any advertisement or intentional messaging uses the appeal of ethos, pathos, or logos, or some combination of the three, to attempt to persuade its audience" (p. 15). This helps in serving five goals, according to French (2023). The first is utilization of logos to increase trust through financial disclosure using facts as well as statistics. Secondly, it should apply ethos that highlights the company's shared values in justifying arguments in the report. Thirdly, it should appeal to ethics by honoring the expert employees behind the brand to show that the report is the result of their joint contribution. The fourth is inclusion of pathos that result in narrative transportation using "a strong brand voice, compelling copy, exciting visuals, and a well-crafted narrative" (French, 2023). Finally, it should use pathos to inspire hope and confidence in the future of the brand.

Is it about Hate, Frustration or Misclassification?

Some people have launched scathing online attacks against the Hublot brand, claiming that it is widely hated. However, hating a brand, according to Henry (2011), should not be confused with frustration caused by one's inability to afford a product. Is there a misunderstanding about the Hublot luxury brand, with some people misclassifying it as a premium or fashion brand? If people really hate the brand, how do someone explain the fact that Hublot recorded impressive sales growth of 30% from 2004 to 2007, while sales in the Swiss watch industry as a whole fell by 15% over the same period? It seems that the word "hate" is used to express the feelings of people who would like to own a Hublot watch but are frustrated by its exclusive nature as a luxury brand. As Kapferer (2016) argues, high premium does not make a brand luxury. The reason is that while price increases for premium brands have to be justified, prices are not part of the discussion and do not have to be justified when it comes to luxury brands like Hublot. As Mr. Biver once stated, "you only desire what you cannot get, …people want exclusivity, so you must always keep the customer hungry and frustrated" (Henry, 2011, p. 212). Indeed, luxury is a matter of art. Luxury products have an aspect of elitism that automatically increases the price, rather than the material composition. In this case, product performance is not the only factor influencing price. In addition, intangible elements such as heritage and brand history play a more important role in defining luxury brands. Such intangible elements are not found in premium brands. While fashion brands may cease to be fashionable after a certain period of time, luxury brands are based on the long term. In other words, Hublot luxury brand differs greatly from other fashion and premium products, as Kapferer (2016) demonstrated in the diagram below.

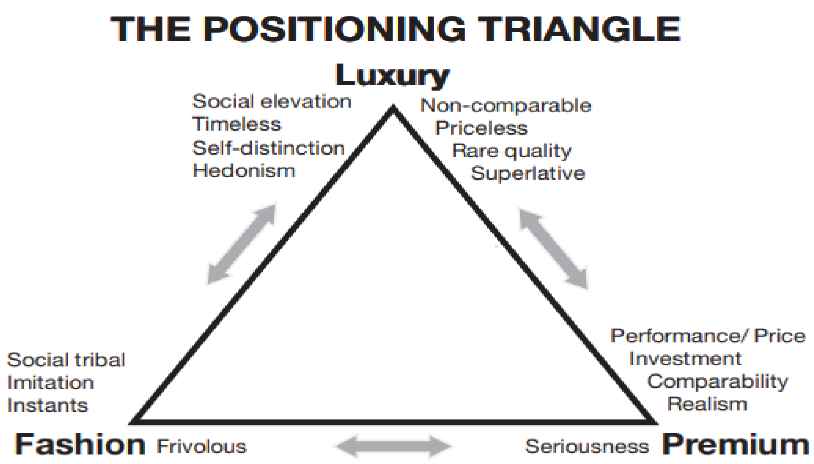


Image 1: Differences between luxury, fashion, and premium brands (Source: Kapferer, 2016, p. 486)

METHODOLOGY

Case study research design was used. This involved investigating a sample of storytelling cases of Hublot that were subjected to in-depth analysis using the critical discourse analysis (Gaya & Smith, 2016; Fairclough, 2001). In this case, qualitative and interpretive methods of analyzing the messages the company uses to drive sales and their underlying meanings were examined. Critical discourse analysis is backed by Delve and Limpaecher (2021) who argued that the method involves examining verbal and non-verbal messages from people regardless of the channel that they use to communicate. Such information, according to Andrade (2021), justify the company's ethical behaviors towards consumers. More so, Hublot's brand values determine the choice of words when communicating with customers and this is also expected to be consistent with the company's subsequent actions. Based on recommendations by Daymon and Holloway (2010) concerning data sources for discourse analysis, storytelling cases that were analyzed in this study were sourced from online newspaper articles, official company websites, press releases, social media content, and company reports. The analysis of the persuasiveness of the stories sampled was based on 11 linguistic tools: absence of dilution effect, consideration of audience needs, use of the rhetorical triangle (ethos, pathos and logos), rule of three, repetition for emphasis, balanced sentences, metaphors, exaggeration and rhyme.

DISCUSSION

Hublot History from the View of the CEO

The story about Hublot history in the Fondation de la Haute Horlogerie (FHH) website is brief, concise, and to the point (FHH, 2022). It minimizes the arguments involved, thereby reducing dilution effect. Precise years in numbers arranged chronologically and the milestones in the brand development shows effective use of logos. This is quite convincing since it presents facts as evidence to the brand's impressive growth as the people's best choice; a demonstration of Lal (2022) narrative transportation theory. The needs of Hublot customers are taken care of through expression of the exclusive nature of the Hublot watches. As Carcano and Ceppi (2011) state, people purchase luxury products to communicate about their economic as well as social status. In regard to Hublot, this need is hinged on the brands legacy, fusion technology, rare materials and the price of the watches. For example, the story emphasizes on the price of the Big Bang "One Million $ watches" by stating; "they cost exactly that." The watch becomes the object of love according to Gabriel (1995). The story also uses the rule of three as a rhetorical tool when the narrator mentions how Hublot continues to invest in the sport industry. By assuming the human role of a timekeeper in 2010, the brand "became the Official Watch of FIFA, Official Timekeeper for the next two football World Cups, and the Official Watchmaker of Formula 1." This statement captures the imagination of the reader besides creating a strong bond between the brand and sport fanatics. The use of the phrase 'Big Bang' in the story is a metaphor. This is important because it helps in visualizing Hublot's brand technology, spontaneous growth, strength, as well as legacy in a compact, precise, and impressive manner (Mueller & Rajaram, 2022). The metaphor is combined with the exaggerative description of Mr. Biver who is presented in the story as a "larger-than-life figure" just to show how experienced, professional, and influential he was in the watch industry. In fact, his description is a clever use of ethos to demonstrate the brand's credibility by showcasing the level of honest, trust, and authority of the brand based on its skilled and brilliant employees. This also explains why chief executive officers (CEOs) such as Carlo Crocco and Ricardo Guadalupe feature in the story as heroes, according to Gabriel (1995), for being the brains behind the brand transformation since its inception up-to-date. As a reader, such disclosure of a team with impeccable technical skills and immaculate managerial track record leaves no room for doubting the quality of the product. While the story about Hublot's history is convincing, it offers little information about motivations of the founder (Carlo Crocco) and the current CEO (Ricardo Guadalupe). Mentioning what inspired Carlo Crocco to invent the watch and what Ricardo Guadalupe is doing to make the brand better would have left a larger impact in the minds of readers.

Mr. Bivers Story of Hublot's Legacy

In his story on YouTube, Mr. Biver talks about the legacy of Hublot, which can be equated to the hero's journey by Campbell (2003). In this case, legacy means that the brand has been around for more than 25 years, has historical stories, famous products and undisputed success (Staten, 2019). The fact that Mr. Biver, the company CEO at the time, tells the story amounts to the use of ethos because he is not only the CEO but a highly experienced person in the watch industry. Listeners are less likely to question the credibility of what he says which makes the story very persuasive. There is no dilution effect because the video clip takes less than seven minutes. Besides, it is quite interesting to watch. In his narration, he used balanced sentences that captured the need of the customers. For example, he mentioned that "rubber is never wet, rubber always is dry" (Atvictorinox, 2008). This justifies the choice of materials for products that are suited for people who like yachting like Mr. Crocco. As he mentioned, such people need a luxury watch that is light and waterproof. In fact, demonstrating the reasoning behind the waterproof idea and that of fusing different materials with clear examples amounts to the use of logos. Developing a waterproof watch is equated to pass through tests in Campbell (2003) theory of heroes' journey. He used a metaphor to explain the origin of the brand name. When he stated that "Hublot means port hole," he linked the watch with that circular window on a yacht (Atvictorinox, 2008). The explanations about the port hole and the beautiful views that one may see while seated in a luxury yacht evokes emotions of comfort, relaxation, and class befitting economic and social status of consumers of luxury products (see Image 1 and 2 below). This is a great way of using pathos in storytelling to create a stronger bond between the brand and customers.

Image 1: View from porthole (Source: CharterWorld LLP, 2023) **Image 2:** The Hublot Big Bang Watch (Source: Nudds, 2015)

Moreover, the repetitive use of the word genius in the story is an exaggeration that emphasizes on the uniqueness of Hublot watches. In telling the story, Mr. Biver mentions "…the concept was genius, …genius idea of the genius man, Mr. Carlo Crocco" (Atvictorinox, 2008). Repetition is used to show how Mr. Crocco's original idea was modernized to suit the needs of consumers of luxury watches. For example, Mr. Biver says, "…we took the design of 1980, the Porthole of Mr. Cocoa, the Hulot, and we said 1980, okay, now let's move it 1984, 1988, 1995, 2000, 2005, don't stop, 2006, 2010, and we stopped at 2010, and we had a design of 2010" (Atvictorinox, 2008). In fact, the Big Bang metaphor captures how 'the universe of Hublot' emerged from Carlo Crocco's original idea of fusion and port-hole shape. This 'universe' has grown to produce many luxury watch varieties that continue to be part of the dominant products in the watch industry today. Rule of three is used to emphasize how Hublot watch has been successfully accepted and loved as a luxury product globally when Mr. Biver says, "… in English you say Big Bang, in French you say Big Bang, in Chinese you say Big Bang" (Atvictorinox, 2008).

Hublot as a Home of the Football Family

The art of fusion and big bang is also reflected in another story; the story of 'Hublot and football' as a family story (Hublot, 2016). This video contains very few words but features 18 key figures or famous people or heroes from the world of football according to Campbell (2003). It is a story about heroes returning home, the home being Hublot. These are renowned players, managers, coaches, referees, pundits and owners of football clubs who have had outstanding careers. They competed, played together, participated in a similar matches while representing different teams, but Hublot has become a family or a team where everyone fits. Team and family are metaphors that create a sense of belonging among Hublot customers. Being a member of the team gives one an identity as a consumer of Hublot luxury watches. Needs of the audience are captured by what the profession each individual represents. In addition, they are all among the five billion football fans across the world according to the *Federation Internationale de Football Association* (FIFA) statistics (FIFA, 2022). In other words, every football fan in the world knows at least one of them. The unverbalized statistics behind their successful careers shows good use of ethos and pathos in storytelling. In other words, their mention or appearance reminds people about football statistics such as number of goals scored, position in world ranking, number of games won, number of awards received and so on. They are known for their success in the profession of football sport and their joined power to convince people to buy Hublot watch is immense. As Vigneron (2016) argued, Hublot brand presents itself as the choice of all celebrities rather than just one.

The Story of Hublot Referee Board

In recounting the important role of the Hublot referee board in the sport of football, Nicola Rizzoli presents himself as an experienced international referee. Based on the ethos perspective, his view can be considered credible as he has been actively involved in this field for at least 28 years in the best football tournaments in the world (Lawrence, 2022). He uses the rule of three to explain the success of his career, mentioning three memorable finals he has refereed: "…Europa League final, Champions League final, and finally World Cup final" (Hublot, 2016). Using logos as a rhetorical devise, he explains how referee board is used to communicate during matches. As he explains about the extra time and how players put a lot of efforts to score even when they are very tired, he evokes people's emotions using pathos rhetoric device. This is directly connected to the need of high levels of precision in making decisions as a referee thereby showing how important the Hublot referee board is. He uses the phrase "I am a referee" repeatedly to demonstrate the connection between his career and Hublot brand through the Hublot referee board.

The Story of Materials, Movements, and Manufacture

The theme of Hublot's story about '*Our World: The Art of Fusion*' is crafted under the rule of three. In this case, the company outlines three factors that drive its agenda; materials, movements, and manufacture (Hublot, 2023). The brands 'art of fusion' has been likened to the big bang theory metaphorically explaining the origin of Hublot. While the big bang is not mentioned in the story, the introductory video clip is all about it with the final result being a unique Hublot watch rather than the earth as we know it. Using a balanced sentence, the story has expressed how important the passion of innovation is to the success of the company when it states: "innovation is in our DNA, passion is our driving force" (Hublot, 2023). This, according to the company, has been the case, thanks to the highly talented, skillful, and motivated team of employees. The story combines video clips and texts. However, failure to integrate the text with the videoclips creates a dilution effect with people unsure whether to watch the video or read the text. While both make sense on their own, the video clip would be meaningless to someone who has neither read the text nor heard about the brand's art of fusion. Nonetheless, the images and video clips support the arguments that the company puts across. This demonstrates good use of logos to persuade people to trust the brand and its products. The needs of the customers are clearly captured in one statement that states: "Hublot carries out a perfect symbiosis between functionality, architecture and design" (Hublot, 2023). With such symbiosis, it is unlikely that the needs of Hublot customers, employees, and even investors will not be met. In fact, the story uses the rule of three to remind people about the brains behind the company's innovation as a team of "physicists, chemists and engineers"(Hublot, 2023). This sends a clear message about the progressive nature of the company's innovativeness as captured in the phrase "emerging the innovation and tradition" that also includes rhyme. This sends a message that the original idea of Hublot has been carried forward to create watches that meet the needs of the modern and future generations. The story appears in the company's website, which enhances the credibility of the information. This is a good example of using ethos by bringing in the company, a reputable organization, as the author of the information.

The Story of Hublot's Social Responsibility

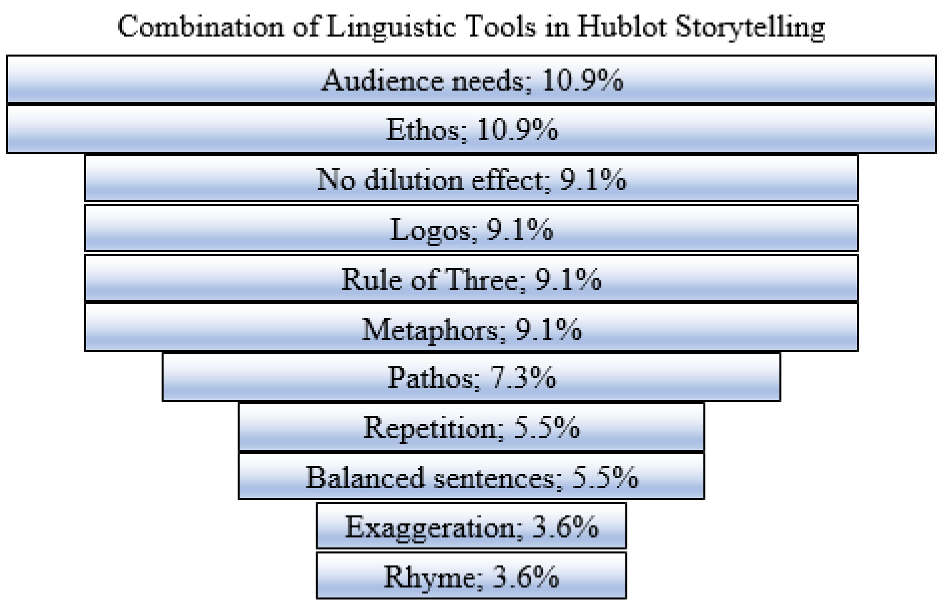
The story about Hublot's protection of rhinoceros at the Sorai Conservancy is brief with no dilution effect. Beautiful scenes introduce the story at the beginning of the video clip thereby sweeping up audience in the story (Lal, 2022). In addition, the argument about the irreversible decimation of rhinoceros is well-canvased. This is a call to people to rally behind Hublot to make their contribution by purchasing Hublot watches. This method of using logos suits the brand's goal of social responsibility. The statement that "two-thirds of rhinoceros species may disappear in our lifetime" as stated in the story appeals to the emotions of the audience (pathos) (Hublot, 2023). The reason is that no one would want the extinction of rhinoceros to become another 'mythical' story like that of the dinosaurs. The question that comes into the mind of the audience is what can be done to prevent this from happening by cubbing poaching. Hublot provides the solution by entering into a partnership dubbed "Big Bang Unico Sorai" that is intended to be financed using part of the money generated from selling its watches. This makes customers feel that buying a Hublot watch is like donating some money for a worthy cause. This makes the brand responsive to the need of protecting wildlife. In fact, the metaphor that Sorai is the "voice of the voiceless" sends a message that failure to support the conservancy may mean silencing the protectors and encouraging poaching. It makes one wonder what would happen if the conservancy ceased to exist. In what Kevin Pietersen (Sorai's founder) termed as urgent need in "reducing the time it takes to act," he is indirectly calling upon more people to buy Hublot watches so that poaching menace can be stopped as fast as possible. A customer of luxury watches would be persuaded by this call and would choose to buy the Hublot brand. In the video clip, Kevin Pietersen uses his status as well as authority as Sorai's founder to pass the message, which is an effective application of ethos. By referring to brands like Hublot that protect wild life, the storyteller uses a mixture of rule of three and repetition to emphasize how important Hublot's intervention measure is to the endangered animals when he says: "they went straight to the market, they went straight to the target, and they delivered" (Hublot, 2023). The storyteller concludes with a balanced sentence by stating that: "they donated and they are making a difference" (Hublot, 2023). It's important to note how inclusion of the rhyming words 'target' and 'market' persuades people to believe that Hublot's pursuant of financial success in the watch industry does not happen at the expense of the wild life. As the video ends, a close-up image of Hublot green watch is displayed, which is a message to the audience that owning such a watch is like saving rhinos and wild life in general.

Annual Reports

Since its acquisition by Moët Hennessy Louis Vuitton (LVMH) in 2008, Hublot has received little mention in the annual financial reports of LVMH. LVMH has reserved a single paragraph of the report for all information about Hublot. This, according to The Marketing Mane (2020), limits Hublot's use of storytelling. Key statistics are conspicuous by their absence in the Hublot section of the LVMH annual report (LVMH, 2023). In fact, Hublot's growth has been extensively described, but there are no statistics to back up the statements made. Other information in the Hublot section of the report includes new product launches, partnerships and the signing of new brand ambassadors. The five persuasive objectives of storytelling in financial reporting that French (2023) describes are largely missing in Hublot's annual report. In this case, it can be concluded that Hublot's section of the LVMH annual report lacks storytelling.

SUMMARY AND CONCLUSION

In summary, Hublot uses all 11 linguistic tools examined in this study, but the frequency of their use varies considerably. Based on the analysis of Hublot's stories using the attributes of persuasive storytelling, prioritization of audience needs and use of ethos were the most common. The rule of three, metaphors, logos and avoidance of dilution are the second most used. Repetition and balanced sentences are the third most used, while exaggeration and rhyme are the least used. This approach is summarized in the figure below, which gives a clear picture of Hublot's storytelling style. The percentages represent how frequent the persuasive device is used in each case of Hublot's brand storytelling on average. The percentages are based on the analysis report generated from the critical discourse analysis (see a table 1 in the annex section).



Although Hublot has been successful in its use of storytelling, the brand needs to improve, especially in its annual reporting. Its storytelling style is undoubtedly a contributing factor to its growth.

BIBLIOGRAPHY

1. Abrams, M. (2020) *Hublot at 40, The New York Times*. The New York Times. Available at: https://www.nytimes.com/2020/04/30/fashion/watches-hublot-40th-anniversary.html (Accessed: February 27, 2023).
2. Andrade, A.C.F.R.D., 2021. *The power of stories: luxury brand communication on social media* (Doctoral dissertation).
3. AtVictorinox, S. (Jan 5, 2008) *Hublot Geneve - history of the brand by JC Biver CEO* (2008) *YouTube*. Available at: https://youtu.be/PMybtNnyNs8 (Accessed: February 27, 2023).
4. Bennett, J. (January 2022) *Storytelling for luxury brands Dialogue*. Available at: https://www.dialogue.agency/blog/storytelling-for-luxury-brands (Accessed: February 27, 2023).
5. Campbell, J., 2003. *The hero's journey: Joseph Campbell on his life and work* (Vol. 7). New World Library.
6. Carcano, L. and Ceppi, C., 2011. *Time to change: Contemporary challenges for haute horlogerie*. EGEA spa.
7. Delve, Ho, L., & Limpaecher, A. (2021). *The Practical Guide to Grounded Theory*. Practical Guide to Grounded Theory Research. https://delvetool.com/groundedtheory
8. Fairclough, N., 2001. Critical discourse analysis as a method in social scientific research. *Methods of critical discourse analysis*, *5*(11), pp.121-138.
9. FIFA. (2022) *The football landscape – the vision 2020-2023* (no date) *FIFA Publications*. Available at: https://publications.fifa.com/en/vision-report-2021/the-football-landscape/ (Accessed: February 27, 2023).
10. Fondation de la Haute Horlogerie. (2022) *History - fondation de la Haute Horlogerie*. Available at: https://www.hautehorlogerie.org/en/watches-and-culture/partner-brands/history/h/hublot/ (Accessed: February 27, 2023).
11. French, K. (2022) *5 ways storytelling can transform your annual report, Column Five*. Available at: https://www.columnfivemedia.com/why-your-annual-report-needs-storytelling/ (Accessed: February 28, 2023).
12. Gabriel, Y., 1995. The unmanaged organization: Stories, fantasies and subjectivity. *Organization studies*, *16*(3), pp.477-501.
13. Gardetti, M.Á., 2019. *Sustainability: Is it Redefining the Notion of Luxury?*. Springer Nature.
14. Gaya, H.J. and Smith, E.E., 2016. Developing a qualitative single case study in the strategic management realm: An appropriate research design. *International Journal of Business Management and Economic Research*, *7*(2), pp.529-538.
15. Green, M.C., 2021. Transportation into Narrative Worlds. In: Frank, L.B., Falzone, P. (eds) Entertainment-Education Behind the Scenes. Palgrave Macmillan, Cham, pp.87-101.
16. Henry, A.E., 2011. Understanding Strategic Management, US: Oxford University Press. *Inc., New York*.

17. Daymon, C. and Holloway, I., 2010. *Qualitative research methods in public relations and marketing communications*. Routledge.
18. Hublot. (June 2016) *Hublot match of friendship with football legends Pele and Maradona YouTube*. Available at: https://youtu.be/Xml-1hBl1v0 (Accessed: February 28, 2023).
19. Hublot. (June 2016) *Hublot and football: A family story YouTube*. Available at: https://youtu.be/zV5abOl5bUw (Accessed: February 28, 2023).
20. Hublot. (June 2016) *Nicola Rizzoli International Referee talks about the UEFA euro 2016™ Referee Board. YouTube*. Available at: https://youtu.be/jLbju1mOryI (Accessed: February 28, 2023).
21. Hublot. (2023) *Responsible jewellery council policy Hublot*. Available at: https://www.hublot.com/en-ch/rjc-certification (Accessed: February 28, 2023).
22. Kapferer, J.N., 2016. The challenges of luxury branding. In *The Routledge companion to contemporary brand management* (pp. 505-523). Routledge.
23. Krishna Kumar, R., 2021. Marketing Intelligence Practices on Consumer Preferences by the Influence of Celebrity Endorsement: A Conceptual Approach.
24. Lal, K., 2022. The Power of Story Selling: How Great Storytellers Influence People How You Can Too. Pendown Press.
25. Lawrence, D., 2022. *Digital writing: a guide to writing for social media and the web*. Broadview Press.
26. Lindberg, J. and Backlund, K., 2014. *Luxury Branding-A tale without a history*. Lund University
27. Lu, P.X., 2021. *International luxury brand strategy*. Routledge.
28. LVMH. (2023) *Investors LVMH*. Available at: https://www.lvmh.com/investors/ (Accessed: February 28, 2023).
29. Mueller, M.E. and Rajaram, D., 2022. *Social Media Storytelling*. Taylor & Francis.
30. Mukherjee, D., 2009. Impact of celebrity endorsements on brand image. *Available at SSRN 1444814*.
31. Nikitina, V. (October 2020) *Luxury brands embracing the rise of digital to remain a disruptive player on the market, LinkedIn*. Available at: https://www.linkedin.com/pulse/luxury-brands-embracing-rise-digital-remain-player-market-nikitina/ (Accessed: February 28, 2023).
32. Sliburyte, L., 2009. How celebrities can be used in advertising to the best advantage?. *International Journal of Humanities and Social Sciences*, *3*(10), pp.2010-2015.
33. Staten, K.R. (2019) *Elements of a legacy brand's success, Hourglass Media*. Hourglass Media. Available at: https://www.hourglassomnimedia.com/behindthehourglassblog/elements-of-a-legacy-brands-success#:~:text=A%20legacy%20brand%20is%20usually,their%20customers%20desire%20and%20need (Accessed: February 28, 2023).
34. Stone, G & Pulvirent, S, 2018. *The Watch, Thoroughly Revised*. Abrams
35. The_Marketing_Mane (2020) *The art of storytelling in an annual report, Medium*. Medium. Available at: https://medium.com/@marketingmanegoa/the-art-of-storytelling-in-an-annual-report-fed12441a171 (Accessed: February 28, 2023).
36. Vigneron, F. and Nazarian, D., 2016. The Seven Habits of Luxury Brands. *Journal of International Marketing Strategy*, *5*(1), pp.1-16.

APPENDIX

Story Titles	No dilution effect	The needs of audience were addressed	Ethos	Pathos	Logos	Rule of Three	Use of repetition for emphasis	Balanced sentences	Metaphor	Exaggeration	Rhyme
1) History - fondation de la Haute Horlogerie	✓	✓	✓	×	✓	✓	×	×	✓	✓	×
2) Hublot Geneve - history of the brand by JC Biver CEO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×
3) Hublot. (Jun 20, 2016).	✓	✓	✓	✓	×	×	×	×	✓	×	×
4) International Referee talks about the UEFA euro 2016™ Referee Board.	✓	✓	✓	✓	✓	✓	✓	×	×	×	×
5) HUBLOT. (2023). Our world: the art of fusion	×	✓	✓	×	✓	✓	×	✓	✓	×	✓
6) Hublot. (2023). Social Responsibility - Sorai	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	✓
Total Count	5	6	6	5	5	5	3	3	5	2	2

Table 1: Frequency of use of the 11 language tools analyzed.

Peter Mutiso Maundu is a current student of Master in Digital Business at the EU Business School, Switzerland. In addition, he is a socio-economic researcher with 14 years of experience in various sectors, including education and banking.

INCENTIVIZING THE NEGATIVITY OF TECHNOSTRESS WITH TRANSFORMATIONAL LEADERSHIP AND ITS APPLICATION TO COVID-19: EMPIRICAL STUDY ON CAMBODIAN ACADEMIC INSTRUCTORS

Romny Ly & Bora Ly

ABSTRACT: *The Covid-19 pandemic has triggered the interruption of educational institutions, requiring students and faculty to take classes online due to safety precautions implemented to reduce infection spread, which has consequently raised technostress. This study aims to determine the role of a transformational leader in the emergence of technostress negativity among instructors in Cambodian academic institutions. It was conducted using a quantitative approach and the development of an instrument to investigate (370 participants) the association between transformational leadership and perceived attributes of technostress among instructors in Cambodian educational institutions, during the Covid-19 outbreak. Data were analysed using a structural equation model (SEM). The findings revealed that transformational leadership has a significant impact on technostress. Given the rapid progression of technology trends, transformational leaders may play a role in shaping the views of instructors. Leaders should grasp how to cultivate transformational leadership traits in the workplace for a favourable work environment. Therefore, leaders should decide to apply a sound leadership style to change mind-sets and lower the resistance of instructors.*

KEYWORDS: Covid-19, inspirational motivation, technostress, idealized influence, intellectual, stimulation, transformative leadership, individual consideration

---

Since it emerged in late 2019, Covid-19 has rapidly spread worldwide, resulting in the death of nearly five million people (World Health Organization, 2021). There have been numerous closures of academic institutions. Through the new online course format, students have been able to complete their courses and continue to progress academically. However, lecturers had received little notice before moving their in-person online courses. As a result, educators experienced physical and psychological issues related to their use of technology, which contributed to their anxiety and stress (Joo et al., 2016). This has resulted in the current prevalence of technostress in the educational system.

Additionally, instructors are under pressure to integrate technology due to institutional and social pressures. The term "technostress" refers to one's inability to deal with technology-related problems.

Therefore, an organization should have a leadership style that inspires positive workplace behaviour in order to remain competitive. Understanding this dynamic, involves knowledge about the characteristics of the leader, behaviour's, and connections with subordinates. Leadership is critical for employee integration and engagement since leadership catalyses job satisfaction and establishes a healthy work environment (Bakker et al., 2011). Understanding how different leadership styles affect employee commitment, is crucial for organizational success. Transformational leadership is one among them because the potential of leaders to increase workforce performance is a characteristic of transformative leadership (Mohiuddin, 2017). Also, it empowers followers and harnesses their abilities, shortcomings, and interests to work toward achieving the vision and mission of their organization (Eliophotou-Menon & Ioannou, 2016; Tabassi et al., 2017). According to McCarley et al. (2016), transformative leadership impacts the academic culture of innovation. Equally, educators' impressions of educational climate and culture are influenced by transformational leaders (Tabassi et al., 2017). This study explored how transformative leadership may be used to alleviate the effects of technological stress among academic instructors in the context of Covid-19 in Cambodia.

Technostress and Covid-19

Technostress describes an individual's inability to handle technology problems (Tarafdar et al., 2007). There is rarely an abrupt onset of symptoms. Technostress can be caused by various factors, including the inability to use computers effectively, concerns about limited performance, a lack of understanding of information overload, and a heavy workload (Okebaram & Moses, 2013). Various higher education domains have examined ICT usage stress (Bondanini et al., 2020; Penado Abilleira et al., 2020; Wang et al., 2020b). Globally, technostress is a severe problem (Bozionelos, 1996; Khan et al., 2016; Lee et al., 2016; Tu et al., 2005). Approximately $300 billion is lost annually to lost productivity, workplace accidents, turnover, and absenteeism in the United States (Smith, 2016). Several symptoms can be observed in techno-stressed teachers, including anxiety, frustration, fatigue, difficulty concentrating, and depression (Cox et al., 2000; Mahalakshmi & Sornam, 2012; Wang et al., 2008).

Covid-19 was declared a public health emergency on January 30, 2020, triggering a global lockdown (Wang et al., 2020a). Many initiatives were put in place to curb the spread of this disease, including the virtual workplace (Coccia, 2020; Molino et al., 2020). However, the pandemic-induced intensification of ICT diffusion may lead to technostress due to its adverse effects on all aspects of society (Ly & Ly, 2022).

The adoption of ICTs, on the other hand, presents organizations and individuals with substantial negative consequences. For example, ICT-induced changes in operations, activities, and roles have contributed significantly to organizational stress (Rowden, 2005). Furthermore, increasing numbers of individuals fear that technology will invade their privacy (Bright & Logan, 2018; Salo et al., 2018).

Leadership

Techno-stressed individuals may experience job burnout due to excessive workload (Shropshire & Kadlec, 2012). Job burnout manifests as low energy, exhaustion, fatigue, disinterest, or disillusionment with competency and value, eroding motivation and hampering performance (Moore, 2000; Muir, 2008). As a result of their exhaustion, employees are more likely to experience poor job performance, difficulty concentrating, consider changing careers, and have interpersonal problems at home and work (Simmons et al., 2009). Correspondingly, Andersen (1995) argues that leaders are so persuasive that they play a crucial role in establishing successful organizations. Due to their behaviour and attitude toward influencing others and dealing with stakeholders (DuBrin, 2015). Also, most leaders exhibit conduct that identifies and predicts their leadership style. Leadership style determines the tone of the organizational environment and affects the performance and attitudes of employees. Leaders exert significant influence on the effectiveness of an organization, but the relationship between them changes over time (Larsson & Vinberg, 2010). Practically, leadership style influences almost every facet of an organization. Various factors could be affected, including productivity, job satisfaction, employee morale, organizational commitment, and retention (Lyons & Schneider, 2009; Offermann & Hellmann, 1996; Sosik & Godshalk, 2000; Yukl, 1981). In addition, scholars argue that leadership style affects workplace stress (Lyons & Schneider, 2009; Syrek et al., 2013). Consequently, leaders may be a significant source of stress due to their leadership style (Lyons & Schneider, 2009).

Organizational structures began to change significantly due to the experiences. Transformational leadership happens in organizational transition when these circumstances coincide. The leadership focuses on areas where the leader can make a significant impact. The leader drives change with committed employees in the organization (Campbell, 2018a). Integrated thinking, creativity, transformation, and shared actions to common difficulties have all been related to transformational leadership outcomes (Campbell, 2018b; Eisenbeiss et al., 2008; Sun & Anderson, 2012), and it involves interpersonal communication that is promising (Campbell et al., 2016; Podsakoff et al., 1990).

Although leadership is an established practice, it is paradoxically viewed by followers within the context of the policies of their respective organizations (Osborn et al., 2002). Furthermore, the effects of transformative leadership are understood to depend on a variety of contextual factors as well (Bass & Avolio, 1993; Campbell, 2017; Jansen et al., 2009; Peterson et al., 2009). These factors significantly impact transformational leadership's initiation, functioning, and efficacy (Avolio & Bass, 1988; Bass & Avolio, 1993; Bryman, 1992). Therefore, orientation to organizational performance is vital in determining how individuals feel about engagement. The transformational leadership paradigm proposed in this work is conceptualized and empirically evaluated using the model's 4Is (individual consideration, idealized influence, inspirational motivation, and intellectual stimulation) elements (Bass, 1990, 1997; Bass & Avolio, 1990, 1993). The core notion is that leaders should focus on individuals rather than transactions and rewards.

Leaders with idealized influence (charisma) make others feel good about being connected with them, make others delighted to be associated with them, and gain faith from their followers (Bass, 1990, 1997; Bass & Avolio, 1990, 1993). Furthermore, they further argue that having a high level of inspirational motivation helps employees see opportunities and be inspired to modify organizational objectives as their discovery and development. Similarly, when individuals are stimulated intellectually, they become more self-aware and confident in their capabilities, which leads to better job performance. Lastly, individual consideration motivates employees by emphasizing their growth and expanding their skills and knowledge (Bass, 1990, 1997; Bass & Avolio, 1990, 1993).

Pseudo-transformational leadership is another term for transformational leadership. In pseudo-transformational leadership, a leader employs his ability to persuade and manage personnel to accomplish goals deemed undesirable by others and inconsistent with the organizational objectives (Bass et al., 1996). These leaders are frequently challenged to identify and exemplify the perverse aspect of transformational leadership (Bass, 1990; Bass et al., 1996).

Technostress and educators

As a result of the rapid pace of technological progress, technostress is a term used to describe stress associated with the use of ICTs, which may be detrimental to both individuals and organizations (Fuglseth & Sørebø, 2014; Hsiao, 2017; Ly & Ly, 2022; Şahin & Çoklar, 2009; Tarafdar et al., 2015). Technology-related stress results in this adverse psychological experience (Ly & Ly, 2022; Salanova et al., 2013). This can lead to anxiety, depression, and fatigue, resulting in decreased job satisfaction and productivity and characterized by negative feelings regarding the ability of the individual to use technology effectively (Wang et al., 2020b). Furthermore, although many institutions have adopted these technologies, integrating ICTs, flipped classrooms, open learning systems, and coupled novice technologies may devastate instructors (Li & Wang, 2021; Ly & Ly, 2022). According to Ly and Ly (2022), educators often experience technostress because of several contributing factors such as, acquiring new techniques, terminology, and tools, adjusting to technology, and feeling obligated to use it. The impact of technostress on educators has been studied in several studies. For example, Female teachers reported higher levels of anxiety when dealing with problems like technical support, malfunctioning equipment, and lost connections (Ly & Ly, 2022; Syvänen et al., 2016), and there is a greater significance to self-efficacy among educators than resources supported by institutional (Dong et al., 2020). Similarly, technostress occurs when instructors are unable to meet their subjective and objective technological needs (Al-Fudail & Mellar, 2008). Furthermore, work conditions, workloads, quality of responsibilities, academic roles, professional growth, and social contacts are all psychological elements connected to stress (Alvites-Huamaní, 2019). Based on these claims, the following hypotheses were suggested considering these research conclusions:

H1: Idealized influence is negatively associated with techno-anxiety
H2: Idealized influence is negatively associated with techno-fatigue
H3: Idealized influence is negatively associated with techno-scepticism

H4: Idealized influence is negatively associated with techno-inefficacy
H5: Inspirational motivation is negatively associated with techno-anxiety
H6: Inspirational motivation is negatively associated with techno-fatigue
H7: Inspirational motivation is negatively associated with techno-scepticism
H8: Inspirational motivation is negatively associated with techno-inefficacy
H9: Intellectual stimulation is negatively associated with techno-anxiety
H10: Intellectual stimulation is negatively associated with techno-fatigue
H11: Intellectual stimulation is negatively associated with techno-scepticism
H12: Intellectual stimulation is negatively associated with techno-inefficacy
H13: Individual consideration is negatively associated with techno-anxiety
H14: Individual consideration is negatively associated with techno-fatigue
H15: Individual consideration is negatively associated with techno-scepticism
H16: Individual consideration is negatively associated with techno-inefficacy

METHODS AND MATERIALS

This study aimed to develop research instruments and explore the relationship between attributes related to transformational leadership and technostress perceptions among lecturers in Cambodian higher education. Based on a theoretical review, measurement instruments and questionnaires were proposed. The sample of lecturers at higher education institutions in Cambodia was selected through purposive and convenience sampling techniques using self-administered questionnaires. A sample size of five to ten times the number of survey items is also recommended by Byrne (2010), and in this study, there were 28 items, so a sample size of 280 was considered adequate. According to the study model, SEM-AMOS (Structural Equation Modelling – Analysis of Moment Structures) was best suited for multivariate analysis based on the study model. It is a robust software package for performing multivariate analysis and functionalities (Arbuckle, 2011; Collier, 2020; Hair et al., 2019). Also, to meet multivariate analysis requirements, data screening and descriptive analysis were conducted using the SPSS version 26.

Technostress measurements were adopted from existing studies (e.g. Dong et al., 2020; Penado Abilleira et al., 2020; Salanova et al., 2013; Wang et al., 2020b). The scale consists of four constructs (Anxiety, Fatigue, Inefficacy, and Scepticism) and sixteen items. Equally, the transformational leadership measurement was adopted from existing literature using 4Is dimensions (idealized influence, individual consideration, inspirational motivation, and intellectual stimulation) by Bass (1990, 1997) and Bass and Avolio (1990, 1993) with twelve items. Ratings are based on a Likert scale of 5 (1 = strongly disagree to 5 = strongly agree). All constructed items were subjected to a principal components analysis (PCA) using the procedure outlined (Pallant, 2020). Thus, the data were first evaluated for their suitability for PCA (see Table 1). Additionally, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.74, above the recommendation of 0.60 (Pallant, 2020), and Bartlett's sphericity test was significant at $p < .001$.

Participants and Sampling

Convenience sampling techniques were employed to obtain a sample of 400 participants during the COVID-19 epidemic in Cambodia based on self-administered questionnaires. The report indicates that 370 questionnaires were returned, exceeding the threshold of 280. Based on the profiles of respondents, 76.5% were males, and 23.5% were females. Approximately 75.1% of the respondents worked in public institutions, while 24.9% worked in private institutions. Also, 91.9% were graduates (Master), 23.0% were undergraduates (Bachelor), and 5.1% were post-graduates (Doctorate). Most lecturers, 85.7%, worked full-time, while 14.3% worked part-time. Additionally, 43.2% of participants have teaching experience ranging from 5-10 years, 39.5% have experience exceeding 10 years, and only 16.8% have teaching experience of fewer than 5 years. Similarly, 47.6% were between the ages of 36 and 52, 47.3% were younger than 35, 3.0% were between the ages of 53 and 64, and 2.2% were older than 65.

Model Assessment

Three aspects of a measuring model—internal consistency, convergent validity, and discriminant validity — were considered when assessing its validity (Hair et al., 2016; Hair et al., 2011; Henseler et al., 2009). Composite reliability and Cronbach's alpha value were used to assess the internal consistency of the constructs. Additionally, it was essential to calculate the convergent validity based on the average variance extracted (AVE). **Table** 1 summarizes the detail of the measurement model assessment (CR, AVE, and Cronbach's alpha).

Table 1. Results of Confirmatory Factor Analysis (*n* = 370)

Constructs	Loadings	CA	CR	AVE
TA1	0.99			
TA2	0.75			
TA3	0.99			
TA4	0.96	0.961	0.961	0.862
TF1	0.94			
TF2	0.64			
TF3	0.67			
TF4	0.68	0.814	0.827	0.552
TI1	0.84			
TI2	0.62			
TI3	0.67			
TI4	0.61	0.797	0.821	0.537
TS1	0.64			
TS2	0.71			
TS3	0.67			
TS4	0.88	0.804	0.795	0.495
II1	0.99			

II2	0.96			
II3	0.77	0.929	0.935	0.829
IM1	0.71			
IM2	0.62			
IM3	0.81	0.757	0.762	0.519
IS1	0.90			
IS2	0.81			
IS3	0.82	0.881	0.881	0.712
IC1	0.80			
IC2	0.78			
IC3	0.85	0.849	0.852	0.657
Cronbach's alpha (CA), Composite Reliability (CR), Average Variance Extracted (AVE)				
Techno-Anxiety (TA), Techno-Fatigue (TF), Techno-Inefficacy (TI), Techno-Skepticism (TS)				
Idealized influence (II), Inspirational motivation (IM), Intellectual stimulation (IS), Individual consideration (IC)				

One point is that the factor loading size and the standardized loading estimations should be 0.5 or higher (Hair et al., 2019). The evidence suggests that all constructions have reliable composite reliability, with Cronbach's alpha values greater than 0.70 (see Table 1) (Hair et al., 2011). According to Fornell and Larcker (1981), if the AVE < 0.5 but the CR > 0.6, the convergent validity of the construct is acceptable. Equally, each construct has an AVE above 0.50 (Hair et al., 2010), demonstrating satisfactory convergent validity.

Assessment of structural model

The structural model was established to test the hypotheses (see **Table 2**). A bootstrapping approach was used in this study to examine the significance of the path coefficients for this structural model, with 5.000 iterations (Streukens & Leroi-Werelds, 2016). Ensuring that the measurement model fits the data is crucial before implementing the SEM (Awang, 2015; Kline, 2016; Schumacker & Lomax, 2004)2015; Kline, 2016; Schumacker & Lomax, 2004. Also, various conformity index values should be employed to more precisely determine the model's compatibility, as fit indices differ in their ability to evaluate the harmony between the theoretical model and the actual data (Büyüköztürk et al., 2004).

Table 2. Structural Model Test Results (n = 370)

Hypotheses	Standardized Estimates	t-value	p-value	Decision
H1: II -> TA	0.036	0.680	0.497	Reject
H2: II -> TF	0.008	0.154	0.877	Reject
H3: II -> TS	-0.012	-0.211	0.833	Reject
H4: II -> TI	0.011	0.181	0.856	Reject
H5: IM -> TA	0.135	2.252	0.024	Accept
H6: IM -> TF	-0.069	-1.110	0.267	Reject

H7: IM -> TS	-0.090	-1.411	0.158	Reject
H8: IM -> TI	-0.069	-1.032	0.302	Reject
H9: IS -> TA	-0.150	-1.770	0.077	Reject
H10: IS -> TF	-0.115	-1.304	0.192	Reject
H11: IS -> TS	-0.029	-0.320	0.749	Reject
H12: IS -> TI	-0.002	-0.023	0.981	Reject
H13: IC -> TA	0.117	1.358	0.175	Reject
H14: IC -> TF	0.008	0.089	0.929	Reject
H15: IC -> TS	-0.011	-0.115	0.908	Reject
H16: IC -> TI	-0.014	-0.144	0.885	Reject
Squared Multiple Correlation (R^2):				
TA = 0.031, TF = 0.018, TS = 0.011, TI = 0.005				
Model Fit Statistics:				
$\chi2$ = 940.65, df = 324, p < .001, $\chi2$/df = 2.90, CFI = .92, TLI = .90, IFI = .92, RMSEA = .07				

Hair et al. (2009) suggest that current research does not need to disclose all fit indices because a standard set is appropriate in many settings. They recommend that Incremental fit index (IFI) > 0.90, Comparative Fit Index (CFI) > 0.90, Tucker Lewis Index (TLI) > 0.90, and Root Mean Square Error of Approximation (RMSEA) < 0.07 are respectively acceptable (Hair et al., 2009; Hair et al., 2013, 2019). It is also important to note that the hypothesis models are congruent with the data when $\chi2$/df is less than 5.0 (Marsh & Hocevar, 1985). These criteria were used as a basis for the observations. As a result of the findings discovered that the structural model was well-fitted.

As illustrated in Table 2, all hypotheses were non-significant except H5 failed to reject. Thus, it indicated that no useful information is conveyed concerning the validity of the assumptions, principally due to an extremely high probability of committing a Type II error. Similarly, a p = .02 of H5 suggests that this extreme sample outcome occurs just 2% of the time if the proposition is true. Therefore, the findings indicated that transformational leadership significantly impacts technostress.

DISCUSSION

Despite the apparent advantages of the extensive adoption of technologies, it is also known that it would pose problems for organizations to a certain degree (Gonzales et al., 2020). According to Petrakova et al. (2021), instructors had a greater prevalence of mental health problems than members of other professions before the outbreak of Covid-19. Furthermore, excessive work, interpersonal communication issues, inadequate training, unsupportive administration, and job insecurity contribute to increased stress in the teaching profession (Ozamiz-Etxebarria et al., 2021). Within Covid-19, adaptability is essential in the world-changing climate and can entail a significant shift in organizational practices. This circumstance constitutes technostress under certain factors that affect individual productivity. Because effective leadership can reduce stress-related impacts such as poor performance and depression (Lyons et al., 2003), this study suggests that transformational leadership may be beneficial in addressing the adverse effects of technostress on academic institutions. As a result, transformative leadership has significantly impacted the perceptions of technostress among Cambodian higher education instructors. This is the central connection in this investigation and underlines the need to study transformative leadership and technostress. According to these findings, practically all characteristics of transformative leadership impact on technostress attributes. These results align with the existing literature, which indicates the implications of transformational leadership on technostress is substantial (Çiçek & Kılınç, 2021).

Based on different technostress attributes, this study has contributed to the existing knowledge regarding the relationship between transformative leadership and technostress. Thus, leadership styles impact organizations and individuals, both directly and indirectly. In this context, transformational leaders anticipate and embrace the necessity of constant changes (Brown, 1994). They are willing to take a risk to help their organization reach its goals. As such, transformative leaders could thrive in a constantly shifting landscape. These leaders foster a collaborative environment and encourage their employees to assume responsibility for their actions (Bass & Riggio, 2006). Similarly, the goal of transformational leadership is to motivate and inspire employees to perform to their best ability, develop their talents, exceed their expectations, and achieve high levels of intellectual achievement (Alqatawenh, 2018). Likewise, it significantly impacts how individuals see their job and is a significant factor in perceived psychological well-being (Schyns & Van Veldhoven, 2010; Tuckey et al., 2012).

CONCLUSION

This study aimed to determine whether transformational leadership might considerably mitigate the negative impacts of technostress on higher education teachers in Cambodia during the Covid-19 pandemic. Based on a quantitative analysis of the technostress and leadership attributes relationship in response to the epidemic situation, it can be concluded that the adoption of technology in online education is still in its infancy. Also, it may be possible to enhance instruction and evaluation by incorporating ICT into teaching and learning. Furthermore, organizations should encourage their employees to be creative and committed. Therefore, the use of transformational leadership can assist in improving performance by getting others on board with a shared vision and mission.

Additionally, organizations need to adapt and evolve more to the changing work environment and volatility. Instead of relying on technology, organizations in this setting, need to foster creativity and commitment among their employees. Leadership can help improve by getting others on board with a shared vision and mission. It is achievable through transformational leadership (Avolio et al., 1991). Significantly, a transformational leader might be a driver in shaping instructors' perspectives. However, lecturers with a growth attitude are always enthusiastic and eager to take on new challenges (Dweck, 2015; Meierdirk, 2016). Similarly, understanding how leaders cultivate transformational leadership facets in the workplace is vital for creating a positive work environment and reducing turnover. Therefore, educational leaders should decide to apply sound leadership approaches to change mind-sets and lower the resistance of instructors.

LIMITATIONS AND FUTURE WORK

The results of this study should be interpreted considering some shortcomings. First, the initial focus on Cambodian education institutions hinders generalizability due to the diversity of employment and organizational cultures. Further research should be conducted on other leadership styles of educational institutions to alleviate this problem. It might also focus on the other transformational leadership constructs and/or technostress attributes.

BIBLIOGRAPHY

1. Al-Fudail, M., & Mellar, H. (2008) Investigating teacher stress when using technology. *Computers & Education*, *51*(3), 1103-1110.
2. Alqatawenh, A. S. (2018) Transformational leadership style and its relationship with change management. *Verslas: teorija ir praktika*, *19*(1), 17-24.
3. Alvites-Huamaní, C. G. (2019) Estrés docente y factores psicosociales en docentes de Latinoamérica, Norteamérica y Europa. *Propósitos y representaciones*, *7*(3), 141-159.
4. Andersen, J. (1995) Leadership and leadership theories–about what answers the leadership research can give. *Oslo: Bedriftsøkonomens Forlag A/S*.
5. Arbuckle, J. L. (2011) IBM SPSS Amos 20 user's guide. *Amos Development Corporation, SPSS Inc*.
6. Avolio, B. J., & Bass, B. M. (1988) Transformational leadership, charisma, and beyond.
7. Avolio, B. J., Waldman, D. A., & Yammarino, F. J. (1991) Leading in the 1990s: The four I s of transformational leadership. *Journal of European industrial training*.
8. Awang, Z. (2015) *SEM made simple: A gentle approach to learning Structural Equation Modeling*. MPWS Rich Publication.
9. Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011) Key questions regarding work engagement. *European journal of work and organizational psychology*, *20*(1), 4-28.
10. Bass, B. M. (1990) From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics*, *18*(3), 19-31.
11. Bass, B. M. (1997) Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American psychologist*, *52*(2), 130.
12. Bass, B. M., & Avolio, B. J. (1990) The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in organizational change and development*, *4*(1), 231-272.
13. Bass, B. M., & Avolio, B. J. (1993) Transformational leadership and organizational culture. *Public administration quarterly*, 112-121.
14. Bass, B. M., Avolio, B. J., & Atwater, L. (1996) The transformational and transactional leadership of men and women. *Applied psychology*, *45*(1), 5-34.
15. Bass, B. M., & Riggio, R. E. (2006) Transformational leadership.
16. Bondanini, G., Giorgi, G., Ariza-Montes, A., Vega-Muñoz, A., & Andreucci-Annunziata,

P. (2020). Technostress dark side of technology in the workplace: A scientometric analysis. *International Journal of Environmental Research and Public Health*, *17*(21), 8013.
17. Bozionelos, N. (1996) Psychology of computer use: XXXIX. Prevalence of computer anxiety in British managers and professionals. *Psychological reports*, *78*(3), 995-1002.
18. Bright, L. F., & Logan, K. (2018) Is my fear of missing out (FOMO) causing fatigue? Advertising, social media fatigue, and the implications for consumers and brands. *Internet Research*.
19. Brown, A. D. (1994) Transformational leadership in tackling technical change. *Journal of General Management*, *19*(4), 1-12.
20. Bryman, A. (1992) *Charisma and leadership in organizations*. Newbury Park, CA: Sage.
21. Büyüköztürk, S., Akgün, Ö. E., Özkahveci, Ö., & Demirel, F. (2004) The validity and reliability study of the Turkish version of the motivated strategies for learning questionnaire. *Educational Sciences: Theory & Practice*, *4*(2).
22. Byrne, B. M. (2010) Multivariate applications series. *Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd ed.). Routledge/Taylor & Francis Group*.
23. Campbell, J. W. (2017) Red tape and transformational leadership: an organizational echelons perspective. *Journal of Organizational Change Management*.
24. Campbell, J. W. (2018a) Efficiency, incentives, and transformational leadership: Understanding collaboration preferences in the public sector. *Public Performance & Management Review*, *41*(2), 277-299.
25. Campbell, J. W. (2018b) Felt responsibility for change in public organizations: General and sector-specific paths. *Public Management Review*, *20*(2), 232-253.
26. Campbell, J. W., Lee, H., & Im, T. (2016) At the expense of others: Altruistic helping behaviour, performance management and transformational leadership. *Public Management Review*, *18*(6), 795-818.
27. Çiçek, B., & Kılınç, E. (2021) Can transformational leadership eliminate the negativity of technostress? Insights from the logistic industry. *Business & Management Studies: An International Journal*, *9*(1), 372-384.
28. Coccia, M. (2020) An index to quantify environmental risk of exposure to future epidemics of the COVID-19 and similar viral agents: Theory and practice. *Environmental Research*, *191*, 110155.
29. Collier, J. E. (2020) *Applied Structural Equation Modeling Using AMOS: Basic to Advanced Techniques* (1 ed.). Routledge.
30. Cox, T., Griffiths, A., & Rial-González, E. (2000) *Research on work-related stress*. European Communities.
31. Dong, Y., Xu, C., Chai, C. S., & Zhai, X. (2020) Exploring the structural relationship among teachers' technostress, technological pedagogical content knowledge (TPACK), computer self-efficacy and school support. *The Asia-Pacific Education Researcher*, *29*(2), 147-157.
32. DuBrin, A. J. (2015) *Leadership: Research findings, practice, and skills*. Cengage Learning.
33. Dweck, C. S. (2015) Growth. *British Journal of Educational Psychology*, *85*(2), 242-245.
34. Eisenbeiss, S. A., Van Knippenberg, D., & Boerner, S. (2008) Transformational leadership and team innovation: integrating team climate principles. *Journal of applied psychology*, *93*(6), 1438.
35. Eliophotou-Menon, M., & Ioannou, A. (2016) The link between transformational leadership

and teachers' job Satisfaction, commitment, motivation to learn, and trust in the leader. *Academy of Educational Leadership Journal*, *20*(3), 12.

36. Fornell, C., & Larcker, D. F. (1981) Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, *18*(3), 382-388.
37. Fuglseth, A. M., & Sørebø, Ø. (2014) The effects of technostress within the context of employee use of ICT. *Computers in human behavior*, *40*, 161-170.
38. Gonzales, A. L., McCrory Calarco, J., & Lynch, T. (2020) Technology problems and student achievement gaps: A validation and extension of the technology maintenance construct. *Communication research*, *47*(5), 750-770.
39. Hair, J. F., Black, W. C., & Babin, B. J. (2009) *Multivariate data analysis* (7th ed ed.). Englewood Cliffs, Prentice-Hall.
40. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013) *Multivariate Data Analysis* (7 ed.). Pearson Education Limited.
41. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019) *Multivariate Data Analysis* (8 ed.). Cengage Learning.
42. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016) *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
43. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011) PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139-152.
44. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009) *The use of partial least squares path modeling in international marketing*. In *New challenges to international marketing*. Emerald Group Publishing Limited.
45. Hsiao, K.-L. (2017) Compulsive mobile application usage and technostress: the role of personality traits. *Online Information Review*.
46. Jansen, J. J., Vera, D., & Crossan, M. (2009) Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *The Leadership Quarterly*, *20*(1), 5-18.
47. Joo, Y. J., Lim, K. Y., & Kim, N. H. (2016) The effects of secondary teachers' technostress on the intention to use technology in South Korea. *Computers & Education*, *95*, 114-122.
48. Khan, A., Rehman, H., & Rehman, D. S.-u. (2016) An empirical analysis of correlation between technostress and job satisfaction: A case of KPK, Pakistan. *Pakistan Journal of Information Management and Libraries*, *14*.
49. Kline, R. (2016) *Principles and Practices of Structural Equation Modeling,* The Guilford Press. 4th Edn, New York. *NY [Google Scholar].*
50. Lee, S. B., Lee, S. C., & Suh, Y. H. (2016) Technostress from mobile communication and its impact on quality of life and productivity. *Total Quality Management & Business Excellence*, *27*(7-8), 775-790.
51. Li, L., & Wang, X. (2021) Technostress inhibitors and creators and their impacts on university teachers' work performance in higher education. *Cognition, Technology & Work*, *23*(2), 315-330.
52. Ly, R., & Ly, B. (2022) Technostress and Telecommuting in the Context of Covid-19: Evidence from Cambodia's Higher Education Institutes. *SEISENSE Journal of Management*, *5*(1), 60-71. https://doi.org/10.33215/sjom.v5i1.790
53. Lyons, J. B., & Schneider, T. R. (2009) The effects of leadership style on stress outcomes. *The Leadership Quarterly*, *20*(5), 737-748.
54. Lyons, K. J., Lapin, J., & Young, B. (2003) A study of job satisfaction of nursing and allied health

graduates from a mid-Atlantic university. *Journal of Allied Health*, *32*(1), 10-17.
55. Mahalakshmi, K., & Sornam, S. A. (2012) Impact of technology on physical and mental health of library professionals in engineering colleges of Anna University, Tamilnadu. 4th International Conference on Computer Research and Development,
56. Marsh, H. W., & Hocevar, D. (1985) Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological bulletin*, *97*(3), 562.
57. McCarley, T. A., Peters, M. L., & Decman, J. M. (2016) Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership*, *44*(2), 322-342.
58. Meierdirk, C. (2016) Developing a growth mindset. *Teaching Business & Economics*, *20*(1), 25.
59. Mohiuddin, Z. A. (2017) Influence of Leadership Style on Employees performance: Evidence from Literatures. *Journal of Marketing & Management*, *8*(1).
60. Molino, M., Ingusci, E., Signore, F., Manuti, A., Giancaspro, M. L., Russo, V., Zito, M., & Cortese, C. G. (2020) Wellbeing costs of technology use during Covid-19 remote working: An investigation using the Italian translation of the technostress creators scale. *Sustainability*, *12*(15), 5911.
61. Moore, J. E. (2000) One road to turnover: An examination of work exhaustion in technology professionals. *MIS quarterly*, 141-168.
62. Muir, J. L. (2008) Surviving burnout: when stress starts to replace your old passion for work, make a change. *Journal of Property Management*, *73*(1), 16-17.
63. Offermann, L. R., & Hellmann, P. S. (1996) Leadership behavior and subordinate stress: A 360" view. *Journal of occupational health psychology*, *1*(4), 382.
64. Okebaram, & Moses, S. (2013) Minimizing the effects of technostress in today's organization. *International Journal of Emerging Technology and Advanced Engineering*, *3*(11), 649-658.
65. Osborn, R. N., Hunt, J. G., & Jauch, L. R. (2002) Toward a contextual theory of leadership. *The Leadership Quarterly*, *13*(6), 797-837.
66. Ozamiz-Etxebarria, N., Berasategi Santxo, N., Idoiaga Mondragon, N., & Dosil Santamaría, M. (2021) The psychological state of teachers during the COVID-19 crisis: The challenge of returning to face-to-face teaching. *Frontiers in psychology*, *11*, 3861.
67. Pallant, J. (2020) *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.
68. Penado Abilleira, M., Rodicio-García, M. L., Ríos-de-Deus, M. P., & Mosquera-González, M. J. (2020) Technostress in Spanish university students: validation of a measurement scale. *Frontiers in psychology*, *11*, 2602.
69. Peterson, S. J., Walumbwa, F. O., Byron, K., & Myrowitz, J. (2009) CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms. *Journal of management*, *35*(2), 348-368.
70. Petrakova, A., Kanonire, T., Kulikova, A., & Orel, E. (2021) Characteristics of Teacher Stress during Distance Learning Imposed by the COVID-19 Pandemic. Вопросы образования(1 (eng)).
71. Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990) Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, *1*(2), 107-142.
72. Rowden, R. W. (2005) The impact of workplace learning on job satisfaction in small US

commercial banks. *The Journal of Workplace Learning, 17*(4), 215-230.

73. Şahin, Y. L., & Çoklar, A. N. (2009) Social networking users' views on technology and the determination of technostress levels. *Procedia-Social and Behavioral Sciences*, *1*(1), 1437-1442.
74. Salanova, M., Llorens, S., & Cifre, E. (2013) The dark side of technologies: Technostress among users of information and communication technologies. *International journal of psychology*, *48*(3), 422-436.
75. Salo, J., Mäntymäki, M., & Islam, A. N. (2018) The dark side of social media–and Fifty Shades of Grey introduction to the special issue: the dark side of social media. *Internet Research*.
76. Schumacker, R. E., & Lomax, R. G. (2004) *A beginner's guide to structural equation modeling*. psychology press.
77. Schyns, B., & Van Veldhoven, M. J. (2010) Group leadership climate and individual organizational commitment. *Journal of Personnel Psychology*.
78. Shropshire, J., & Kadlec, C. (2012) I'm leaving the IT field: The impact of stress, job insecurity, and burnout on IT professionals. *International Journal of Information and Communication Technology Research*, *2*(1).
79. Simmons, B. L., Gooty, J., Nelson, D. L., & Little, L. M. (2009) Secure attachment: Implications for hope, trust, burnout, and performance. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *30*(2), 233-247.
80. Smith, J. (2016) *Here's why workplace stress is costing employers $300 billion a year*. Businessinsider. Retrieved September 01, 2021 from https://www.businessinsider.com/how-stress-at-work-is-costing-employers-300-billion-a-year-2016-6
81. Sosik, J. J., & Godshalk, V. M. (2000) Leadership Styles, Mentoring Functions Received, and Job-Related Stress: A Conceptual Model and Preliminary Study. *Journal of Organizational Behavior*, *21*(4), 365-390.
82. Streukens, S., & Leroi-Werelds, S. (2016) Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. *European Management Journal*, *34*(6), 618-632.
83. Sun, P. Y., & Anderson, M. H. (2012) Civic capacity: Building on transformational leadership to explain successful integrative public leadership. *The Leadership Quarterly*, *23*(3), 309-323.
84. Syrek, C. J., Apostel, E., & Antoni, C. H. (2013) Stress in highly demanding IT jobs: Transformational leadership moderates the impact of time pressure on exhaustion and work–life balance. *Journal of occupational health psychology*, *18*(3), 252.
85. Syvänen, A., Mäkiniemi, J.-P., Syrjä, S., Heikkilä-Tammi, K., & Viteli, J. (2016) When does the educational use of ICT become a source of technostress for Finnish teachers? Seminar. net,
86. Tabassi, A. A., Roufechaei, K. M., Bakar, A. H. A., & Yusof, N. A. (2017) Linking team condition and team performance: A transformational leadership approach. *Project Management Journal*, *48*(2), 22-38.
87. Tarafdar, M., Pullins, E. B., & Ragu-Nathan, T. (2015) Technostress: negative effect on performance and possible mitigations. *Information Systems Journal*, *25*(2), 103-132.
88. Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. (2007) The impact of technostress on role stress and productivity. *Journal of management information systems*, *24*(1), 301-328.
89. Tu, Q., Wang, K., & Shu, Q. (2005) Computer-related technostress in China. *Communications*

of the ACM, *48*(4), 77-81.
90. Tuckey, M. R., Bakker, A. B., & Dollard, M. F. (2012) Empowering leaders optimize working conditions for engagement: a multilevel study. *Journal of occupational health psychology*, *17*(1), 15.
91. Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020a) Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, *17*(5), 1729.
92. Wang, K., Shu, Q., & Tu, Q. (2008) Technostress under different organizational environments: An empirical investigation. *Computers in human behavior*, *24*(6), 3002-3013.
93. Wang, X., Tan, S. C., & Li, L. (2020b) Measuring university students' technostress in technology-enhanced learning: Scale development and validation. *Australasian Journal of Educational Technology*, *36*(4), 96-112.
94. World Health Organization. (2021) *WHO Coronavirus (COVID-19) Dashboard*. Retrieved October 20, 2021 from https://covid19.who.int/?gclid=CjwKCAiArIH_BRB2EiwALfbH1KspWn5No8D8gIHawC
95. Yukl, G. (1981) *Leadership in Organizations,* Pearson Education, *9/e*, India.

Bora Ly, DBA, is Senior lecturer in Business Administration at Paññāsāstra University of Cambodia, Cambodia.
Romny Ly, MBA, is a Senior lecturer in Business Administration at Cambodian Mekong University, Cambodia

GDPR AFFECTING THE PROCUREMENT FUNCTION: FOLLOWING THE CONFIRMED SHIFT IN THE ROLES AND RESPONSIBILITIES, WHAT IMPLICATIONS ON THE SKILLS-SET OF THE PRACTITIONERS?

Taoufik Samaka

ABSTRACT: *The procurement function is becoming increasingly strategic in business organizations. A recent study suggests that the procurement role has become more strategic within the privacy framework, following the introduction of the GDPR. This article addresses the skills gap of procurement personnel, following the confirmed shift in their role and responsibilities within the privacy framework. This research has been conducted based on a mixed-methods research design. The sampling strategy was a combination of the convenience and snowball methods, with a sample of 276 participants. IBM SPSS V.25 and thematic analysis assisted by NVivo R1.0 were used to analyse the respective quantitative and qualitative data which were collected using online self-completion questionnaire. The study suggests a skills gap due to the recent shift in the roles and responsibilities of procurement practitioners. As such the ideal skills sets required for procurement professionals, depend largely on the practitioners' profile, with certain skills being found to be more important than others. The findings from this study aim to assist in the understanding of the skills development needs of procurement personnel following the recent changes in the European privacy law, so that appropriate trainings could be planned. The sampling strategy may raise concerns of sample bias due to a lack of generalizability. Moreover the participants are predominantly working in large firms operating in the private sector.*

KEYWORDS: Procurement, purchasing, supply chain management, outsourcing, GDPR, privacy.

According to Samaka (2021) there is a consensus among scholars regarding the increasingly strategic role that procurement plays inside business organizations. A recent study suggests that the role became more strategic within the privacy framework, following the introduction of the GDPR (Samaka, 2021). According to the same study, privacy stakeholders expect procurement to take the ownership and lead some specific privacy critical processes.

Within the procurement new scope, there is an increased emphasis on the role that procurement plays in identifying and mitigating the privacy risks, such as contributing to the Data Protection Impact Assessment (DPIA), which is often confused with Privacy Impact Assessment (PIA);

performance of thorough screening and selection of the suppliers; setting proper governance and controls in place; and proper monitoring of the performance of the contract by the suppliers.

Procurement is also required to make considerable contribution to the contractual process by reviewing and updating existing agreements, putting in place the data protection agreement (DPA) that is expected to be an integral part of any future agreement with the suppliers, and detailing the responsibilities of each contracting party clearly in the DPA.

Research Question

This study explores the eventual skills gap of procurement practitioners following the confirmed shift in their roles and responsibilities within the privacy framework. To guide this study, the following research question was established:

Following the confirmed shift in the functional role and responsibilities of procurement (within the privacy framework) after GDPR introduction, what are the implications of this shift on the skills set of procurement practitioners?

Research Hypotheses

The change in procurement and the impact on the practitioners' skills

Previous research suggest that the evolution procurement function follows the evolution of the business environment in which it operates (Samaka, 2021). There is also a consensus in the literature that the skills and competencies required by professionals evolve over time, and that changes in the function and in its business environment, affect the ideal skills set required for procurement practitioners to perform their tasks. Additionally, scholars suggested that the procurement role (within GDPR framework) embraces a broader set of objectives, thus requiring the practitioners to update their skills and develop a richer and a deeper set of skills to keep up with the new demands (Samaka, 2021). This leads to the first hypothesis

H1: Procurement practitioners need to update their skills as a result of the shift in their role and responsibilities.

THE SKILLS DEVELOPMENTAL NEEDS AND THE PROCUREMENT PRACTITIONERS' PROFILE

Procurement practitioners' skills and Maister's PSF model

Tassabehji and Moorhouse (2008) reviewed the literature on the issue of procurement skills development. They identified an obvious need for consolidation of different taxonomies and nomenclatures and introduced new taxonomy that classifies procurement required skills into five grouping: (1) Technical skills relative to fundamental and basic administrative skills necessary for any procurement professional in our era. This category includes among others, product knowledge, computer literacy, total quality management, government legislation and advanced procurement process skills (APP) (2) Interpersonal skills including conflict resolution, problem solving, communication, influencing and persuasion (3) Internal enterprise skills relating to the overall business and how the different functions interact (4) External enterprise skills relative to external relationships management (supply chain) and stakeholders management (5) Strategic business skills relative to broader strategic issues and how procurement can impact the value chain, this group includes among other skills: managing strategic partnerships and risk management among others. Fig. 1 represents the authors' mapping of the required procurement skills using the proposed taxonomy. In this mapping, the procurement specific skills are a core requirement for the practitioner in addition to a range of general managerial skills that are applicable to other functions as well.

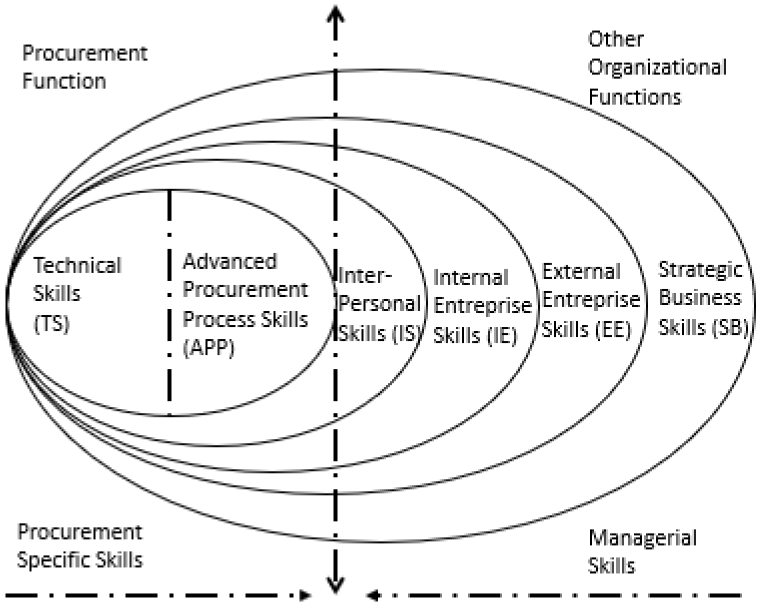


Figure 1: Categorization of skill types required for procurement. Source: Tassabehji and Moorhouse (2008; p.60)

Kolchin and Giunipero (1993) regarded three main skills to be key to procurement function: business skills, interpersonal skills and technical skills. They further emphasized that changes in the general business environment also impact the procurement function, citing the example of government legislation and the need to increase awareness of such changes.

With the aim of having a better understanding of the training and developmental needs inside the procurement function, Humphreys et al. (2000) used Maister's organizational model called Professional Service Firms (PSF). Maister's model suggests:

1. The consideration of three procurement practitioner profiles (Executive, Manager and Buyer)
2. A distinct profile for each developmental needs based on the different tasks and responsibilities they are in charge of.

Humphreys et al. (2000) built on Maister's 'PSF' organizational model that was used by academics to investigate procurement personnel developmental needs, which also suggested a distinct tasks and responsibilities for three practitioners' profiles (Executives, Managers and Buyers). Building on this theory the author suggests the second hypothesis.

H2: The skills to be developed further depend on the procurement practitioners' profile.

RESEARCH HYPOTHESES AND THE VALIDATION METHOD USED

Table 1 presents the research hypotheses and the validation method used.

N° Hypothesis	Hypothesis	Validation method
H1	Procurement practitioners need to update their skills as a result of the shift in their role and responsibilities	Descriptive + inferential statistics
H2	The skills to be developed further depend on the procurement practitioners' profile	Descriptive + inferential statistics

Table 1: Research hypotheses

RESEARCH METHODOLOGY

This research has been conducted using a mixed-methods research design. This design was chosen to assist in data triangulation (concurrent triangulation) and balance the eventual shortcoming of the quantitative and qualitative methods when used separately. With the use of a structured questionnaire, the study adopted a quantitative methodology, which was selected over other triangulation methods. The results from the qualitative data (responses to open-ended questions) were analysed and used to test the hypothesis.

The sampling strategy consisted of a combination of the convenience and snowball methods with a sample of 276 participants. IBM SPSS V.25 and thematic analysis, assisted by NVivo R1.0 were used to analyse the respective quantitative and qualitative data which were collected using online self-completion questionnaire.

Theoretical model and conceptual framework

The study aims to investigate the impact that the GDPR had on the procurement practitioners (Fig. 2).

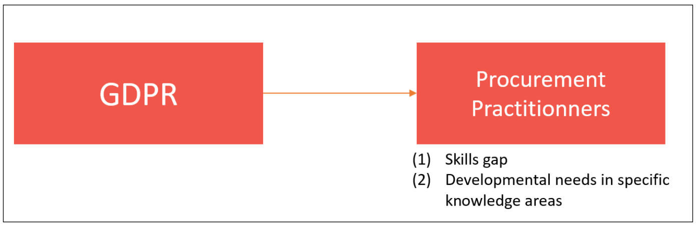


Figure 2: Research Theoretical Model

The study is particularly concerned with the implications of the confirmed shifting procurement roles and responsibilities (Samaka, 2021) on the skills set of procurement practitioners, particularly (1) the emergence of skills gap due to the shift in the practitioners' roles and responsibilities, and (2) the developmental needs per practitioners profile if the skills gap is confirmed.

Figure 3 represents the study's conceptual framework.

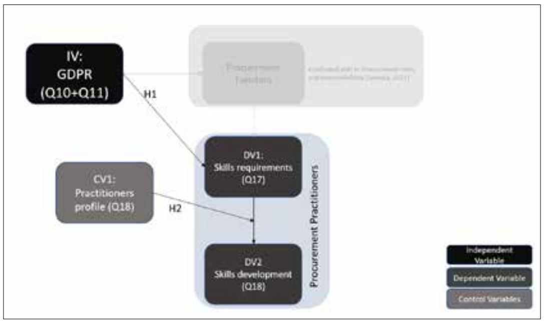


Figure 3: The GDPR impact on procurement practitioners' conceptual framework

While investigating these questions, the author considers the different practitioners' profile based on Maister's model (Control Variable 1).

Figure 4 represents the research problem in a tree-view nature.

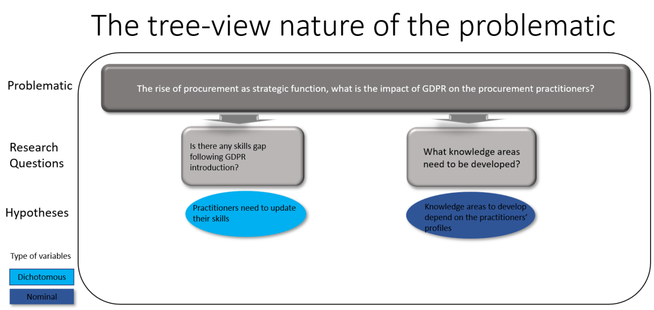


Figure 4: The tree-view nature of the problematic.Source: Adapted from Digout, Senechal & Salloum (2019, p. 126)

THE RESEARCH VARIABLES

Dependent variables
DV1: Skills requirements
DV2: Developmental needs

Independent variables
IV1: GDPR

Control variables
CV1: Practitioners' profiles

OPERATIONALIZATION OF THE VARIABLES AND STATISTICAL APPROACH

Operationalization of the concepts

The aim of the study is to investigate the skill set required of procurement practitioners, and whether this has been affected by the shift in procurement inside the organizations following GDPR enforcement (Samaka, 2021). Specifically the aim is to measure (1) if the shift has created a knowledge gap and if yes (2) what the knowledge development requirements are? To measure, firstly, using the questionnaire, business stakeholders were asked if they thought that procurement practitioners' skills are up to date or need to be updated. Secondly, the respondents were provided with a matrix comprising of three procurement professionals' profiles (building on Maister's PSF model: Executive, Middle Manager and Buyer/sourcing manager), and six knowledge areas/ skills as relayed in the literature (privacy law, IT security, risk management, contract and vendor management, governance and controls and Negotiation). Since practitioners have different development needs and should have different skill set based on the performed tasks (Humphreys et al., 2000), the respondents were required to select the knowledge area/skill which they believed needed further development for each proposed procurement practitioner's profile.

Figure 5 visually summarizes the operationalization of the study's variables.

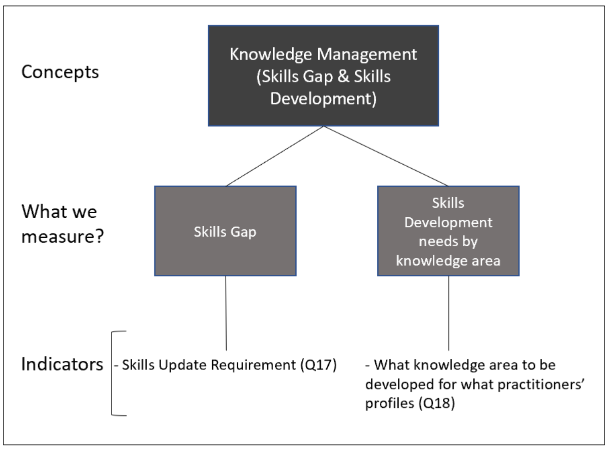


Figure 5: Operationalization of Skills Gap and Skills Development Needs variables to measure the impact GDPR has on Procurement Practitioners.Source: Adapted from Digout, Senechal and Charbel (2019, p.184)

Table 2 presents the Quantitative data coding protocol

* 17. In your view, do Procurement professionals have today all the necessary competencies (abilities, skills, knowledge) to be able to fulfil their expected role and responsibilities within the data protection framework?	Dichotomous/Dependent
PS. Last Question 18 will follow, if your answer to Question 17 is "No"	
Yes, their competencies(abilities, skills, knowledge) are upto date	1
No, they need to develop further their competencies(abilities, skills, knowledge), due to the recent data protection laws changes	2
*18. Which of the below knowledge areas, is the most critical for the procurement professionals to improve, to be able to fulfil their expected role and responsibilities in the data protection framework	Dichotomous/Dependent
(select as many as you feel appropriate)	
	Knowledge area
Procurement profile	1=required, 0=not required

Table 2: Quantitative Data Coding Protocol

MEASURING THE SKILLS DEVELOPMENT NEED

Tassabehji and Moorhouse (2008) reviewed the literature on the issue of procurement skills development and recognized among others, the following skills which are considered important for the procurement practitioners:

1. Government legislation (privacy Law in our context, considered as technical skills); conflict resolution & problem solving (to be more specific, this concerns contract & vendor management, negotiation, these skills are considered as interpersonal skills); external enterprise skills relating to external relationships management; vendor management, risk management (considered as strategic business skills).

On the other hand, Williamson (2017) and Ross (2017) indicated the new requirements and demands set by the GDPR, among other they mentioned:

1. Ensuring that appropriate contract terms are in place (negotiation, contract management)
2. Availability of a vendor control and monitoring system to ensure compliance with the law and terms set in the agreement (vendor management, governance and controls, contract management)
3. Data processing in accordance to the applicable data protection regulations and the terms set in the agreement (contract management).
4. Availability of negotiating liability terms (negotiation)

Moreso, Karyda et al. (2006) suggested that security and privacy risks are commonly cited among the most important outsourcing concerns. To ensure a proper management of these risks, the practitioners should have certain literacy and a sufficient knowledge around these areas.
Now let's prospect the skills required for procurement practitioners from a theory perspective. The central assumption of transaction cost economics is that parties entering in an economic transaction must have a mutual interest to organize this transaction in an economically effective

way, with the aim of generating more value for both parties to (Ketokivi & Mahoney, 2020). On the other hand, the theory supports that effective management of transactions entails efficient governance. This latter was defined by Williamson (1996b, p12) as *the means by which order is accomplished in a relation, in which potential conflict threatens to undo or upset opportunities, to realize mutual gains*. He further explained that the study of governance *is concerned with the identification, explication, and mitigation of all forms of contractual hazards* (Williamson, 1996b, p.5). TCE also proposed considering contractual safeguards (governance arrangement) to mitigate the eventual risks that might arise from the buyer-supplier relationship. According to the theory, the more the risk level in the relationship increases, the more complex governance arrangement should be. Contractual safeguards proposed by TCE include: stipulating in the contract the required actions and conditions, in case of contractual breach; a dispute-resolution mechanism which should be referred to; a clause that allows third-party auditing, in case of difficulties to measure the supplier performance; contract specific clauses and procedures that allow for (re) negotiation in case of unexpected changes due to uncertainties (McIvor, 2005).

Barney and Hesterly (1996) claimed the agency theory suggests that problems that might arise from the relationship between the principal and its agent, might be addressed through the reinforcement of the principal-agent relationship and the use of continuous monitoring (Perunovic & Pedersen, 2007; Vaxevanou & Konstantopoulos, 2014).

This theoretical background suggests that governance and control, as well as risk management are important knowledge areas, if the procurement professionals are to ensure the effective management of the transaction between the firm and its suppliers. On the other hand, the same TCE theory has two key (behavioural) assumptions – bounded rationality and opportunism. The latter (opportunism) could be mitigated by setting a proper governance in the relationship, through the establishment of proper contractual agreement with monitoring and control terms; so as to ensure performance of the contract by the vendor.

Meanwhile, privacy specialists suggest that in case of breach and litigation, parties and privacy stakeholders (including the regulator) would refer to the contract governing the supplier – buyer relationship. Hence, the contract language is very important, a reason why procurement contract should ensure that it scrupulously defines each party's responsibilities and obligations. This means that the knowledge of the privacy law and the requirements set through it, as well as the contract management and negotiations skills required to reach an agreement between the contracting parties, are critical skills for the performance of procurement tasks, within the privacy framework.

THREE PROCUREMENT PRACTITIONERS' PROFILES

In order to better understand the training and developmental needs within the procurement function, Humphreys et al (2000) used Maister's organizational model (which suggests three types of PSF: Brains, Grey hair and procedure). They explained that Brains is largely the concern of procurement managers (or professional heads). In this study, the author used ''procurement executives" to define this category. This category focuses on mentoring, coaching and facilitating the concerned personnel, while managing the relationship with the stakeholders. Grey hair – largely the concern of procurement executives. In this study ''middle manager" was used to define this category. Their primary focus was the operationalization of the policies developed by the managers /professional heads. Finally, Procedure – largely the concerns of the buyers/planners. ''Sourcing manager/buyer" was used in this study to define this category as an administrative and supporting role.

Humphreys et al. (2000) builds on the findings from research of using Maister's organization model 'PSF', to organize the practitioners in three different categories/profiles. Various scholars suggest that the training needs differ fundamentally between the three procurement profiles due to the fundamental differences in the tasks and responsibilities they execute as well as the skills set in their possession. This is in addition to the knowledge they would have developed throughout their experience.

The three categories used in this study are the procurement executives located on the top of the hierarchy (equivalent to Maister's professional heads); followed by the procurement middle managers (equivalent to Maister's purchasing executives); and finally the sourcing managers (Buyers) who are at the lowest in the hierarchy (equivalent to Maister's buyer/planner profile).

Statistical Approach

Chi-square tests of goodness-of-fit were performed to determine whether there are significantly more participants who believe that roles and responsibilities of the procurement have changed (practitioners need to update their skills) than participants who do not believe (practitioners need to update their skills, Hypothesis 1).

To test whether some skills are considered to be more important to improve than others, Cochran's *Q* tests were conducted (Hypothesis 2). Cochran's *Q* tests are suitable for paired variables with only two possible outcomes (0 and 1). If significant results emerged, findings were followed up using Bonferroni corrected post-hoc tests to identify skills that are significantly different from the other.

The statistical approach of this study is presented in Table 3.

Hypothesis testing	Variable category	Descriptive Statistics	Inferential Statistics
H1- Skills Gap	One nominal variable	Frequency distribution	Chi-square test of goodness-of-fit
H2- Skills development Vs practitioners' profile	Seven variables(all nominal)	Frequency distribution	Cochran's Q test, post-hoc test(pairwise comparisons), + Bonferoni Correction

Table 3: Statistical approach

In addition to considering whether results were significant or not, effect-size measures were considered to determine the magnitude of effects.

To determine necessary sample sizes that would detect medium effects for the performed tests, a priori power analyses was conducted using G*Power (Version 3.1; Faul, Erdfelder, Lang & Buchner, 2007). The sample size of the current study (*N* = 276) exceeded the minimum sample sizes for all tests.

Finally, and as presented earlier, to test for non-response bias responses, all dependent variables from wave 1 (2019-02-06 to 2019-06-26) were compared to responses from wave 2 (2019-12-07 to 2020-03-02). Differences in dichotomous variables were tested using chi-square tests of independence. Differences in continuous variables were tested using independent sample *t*-tests. To adjust for multiple testing, Bonferroni correction was applied.

To address whether the current sample is representative of the population, and as mentioned earlier, the first wave of data collection (2019-02-06 to 2019-06-26) was compared to the second wave of data collection (2019-12-07 to 2020-03-02) regarding sample characteristics. Mann-Whitney-U tests were conducted to compare ordinal variables. Chi-square tests of independence were conducted to compare nominal variables between wave 1 and wave 2.

Quantitative Data Tests Schedule

Hypotheses 5: Procurement practitioners need to update their skills as a result of the shift in their role and responsibilities

- Q17, nominal (dichotomous):
  - Competencies need no update (1)
  - Competencies need to be updated (2)
- Descriptive Statistics:
  - Frequency distribution
- Inferential Statistics:
  - H0: equal distribution of 1 / 2 answers
  - H1: more “2” answers than “1” answers → this is a directional hypothesis → one sided-test required (rather than two sided) → empirical p-value can be divided by 2
  - significance level alpha is usually set to 5% (.05)
  - chi-square test of goodness-of-fit: compares observed frequencies against expected frequencies (default is that all categories contain the same proportion of values = H0)

Hypothesis 6: The skills to be developed further depend on the procurement practitioner’s profile

- Q18: 3 (seniority) x 6 (knowledge area) variables, all nominal (dichotomous)
- Descriptive Statistics:
  - Frequency distribution
- Inferential statistics:
  - Comparing e.g. Executives for the different knowledge areas (ProcurementExecutives(ChiefProcurementanddirectreports)PrivacyLaws & ProcurementExecutives(ChiefProcurementanddirectreports)ITSecurity & ProcurementExecutives(ChiefProcurementanddirectreports)RiskManagem

& ProcurementExecutives(ChiefProcurementanddirectreports)Contract & ProcurementExecutives(ChiefProcurementanddirectreports)Governance & ProcurementExecutives(ChiefProcurementanddirectreports)Negotiation)

- Cochran's Q test for each level of seniority (3 tests, all two sided, because hypotheses are non-directional)
- if Cochrane's Q test yields a significant result, post hoc tests (pairwise comparisons) need to be performed, to identify which knowledge areas are perceived to be more important to improve than others (using Bonferroni Correction to adjust for multiple testing)

RESULTS AND DISCUSSION

Demographics

Two-thirds of the participants worked in Europe (177, 64.1%) or America (56, 20.3%), see Table 4

Geography

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Europe	177	64,1	64,1	64,1
	America	56	20,3	20,3	84,4
	Asia	17	6,2	6,2	90,6
	Africa	12	4,3	4,3	94,9
	Oceania	6	2,2	2,2	97,1
	Several or Global	8	2,9	2,9	100,0
	Total	276	100,0	100,0	

Table 4: Respondents' work locations

The vast majority of the participants worked in large businesses (227, 82.2%), see Table 5.

Business_Size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	micro	13	4,7	4,7	4,7
	small	16	5,8	5,8	10,5
	medium	20	7,2	7,2	17,8
	large	227	82,2	82,2	100,0
	Total	276	100,0	100,0	

Table 5: Distribution of respondents by size of business (following OECD's definition)

In most companies, procurement was centralized (207, 75.0%), see Table 6.

Procurement_operating_model

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	centralized	207	75,0	75,0	75,0
	decentralized	49	17,8	17,8	92,8
	hybrid	20	7,2	7,2	100,0
	Total	276	100,0	100,0	

Table 6: Distribution of respondents by procurement operation model in their respective companies

Descriptive Statistics

As can be seen in Table 7, 82.2% of the participants stated that procurement professionals need to update their competences. According to most study participants, the skills that procurement executives need to update include risk management skills (62.3%), governance and control skills (54.3%), and privacy law skills (53.6%). Skills that procurement middle management needs to update the most include privacy law skills (59.8%), risk management skills (55.1%) and IT security skills (50.4%). Skills that sourcing managers/buyers need to update the most are privacy laws skills (51.8%).

	M	*SD*	*min*	*max*
procurement professionals are up to date [0=no; 1=yes]	49	17.8	227	82.2
knowledge areas that need to be improved among procurement executives [0=no; 1=yes]	*n* (yes)	% (yes)	*n* (no)	% (no)
privacy laws	148	53.6	128	46.4
IT security	97	35.1	179	64.9
risk management	172	62.3	104	37.7
contract and vendor management	86	31.2	190	68.8
governance and controls	150	54.3	126	45.7
Negotiation	52	18.8	224	81.2
knowledge areas that need to be improved among procurement middle management [0=no; 1=yes]	*n* (yes)	% (yes)	*n* (no)	% (no)
privacy laws	165	59.8	111	40.2
IT security	139	50.4	137	49.6
risk management	152	55.1	124	44.9
contract and vendor management	134	48.6	142	51.4
governance and controls	133	48.2	143	51.8
Negotiation	77	27.9	199	72.1
knowledge areas that need to be improved among sourcing managers/buyers [0=no; 1=yes]	*n* (yes)	% (yes)	*n* (no)	% (no)
privacy laws	143	51.8	133	48.2
IT security	125	45.3	151	54.7
risk management	109	39.5	167	60.5
contract and vendor management	136	49.3	140	50.7
governance and controls	87	31.5	189	68.5
Negotiation	120	43.5	156	56.5

Table 7: Univariate descriptive statistics for the main study variables. Note. N = 276, 1 N = 273

Inferential Statistics and Hypotheses Testing

H1: Procurement practitioners need to update their skills as a result of the shift in their role and responsibilities.

Participants were asked whether they believe that professionals need to update their skills after GDPR law introduction. 49 participants (17.8%) believe that professionals do not need to update their skills, whereas 227 participants (82.2%) believe that professionals should update their skills (Fig. 41). A chi-square test of goodness-of-fit indicated that there were significantly more participants who believe that procurement professionals need to update their skills than participants who believe that procurement professionals are up to date $\chi2$ (1, N = 276) = 114.80, $p_{exact} < .001$ (one-sided). The effect-size ω = 0.64 indicates a large effect (Cohen, 1988).

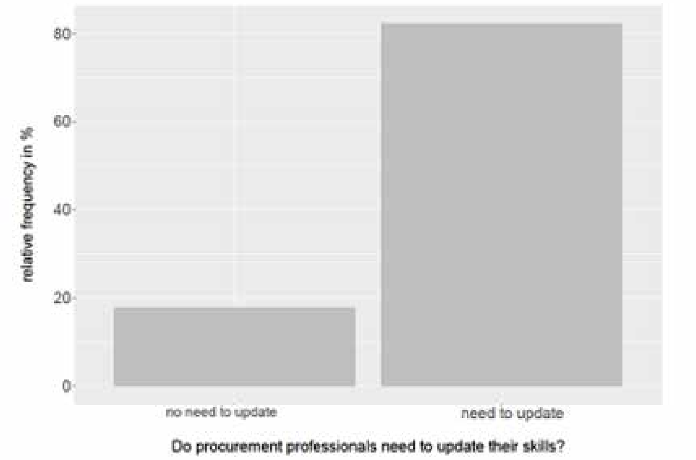


Figure 6: Percentage of participants who believe that professionals need to update their skills

H2: The skills to be developed further depend on the procurement practitioner's profile.

Procurement Executives

Participants were asked whether executives need to update different skills. They noted the highest need for improvement among executives as follows: risk management skills (62.3%), governance and control skills (54.3%) and privacy law skills (53.6%). In contrast, participants perceived less need for improvement among executives as follows: IT security skills (35.1%) contract and vendor management skills (31.2%) as well as negotiation skills (18.8%) (Fig. 7).

According to Tate & Brown (1970), the sample size for Cochran's Q test is sufficiently large when the number of subjects, multiplied by the number of levels are greater than or equal to 24 (276*6 = 1656). Cochran's Q test determined that there was a statistically significant difference in the knowledge areas that executives need to improve $\chi2$ (5, N = 276) = 208.33, $p_{asymptotic} < .001$. To follow up this finding, Bonferroni post-hoc tests were carried out. The tests indicated that participants believe that risk management skills, governance and control skills as well as privacy law skills are significantly more important to improve than all other skills (all $p_s < .001$). All three skills were perceived as equally important to improve, as no significant difference between these three skills were found (all $p_s > .27$). Moreover, negotiation skills were perceived as less important to improve than IT security and contract management skills (all $p_s < .05$). IT security skills and contract management skills were perceived as equally important ($p = .99$)

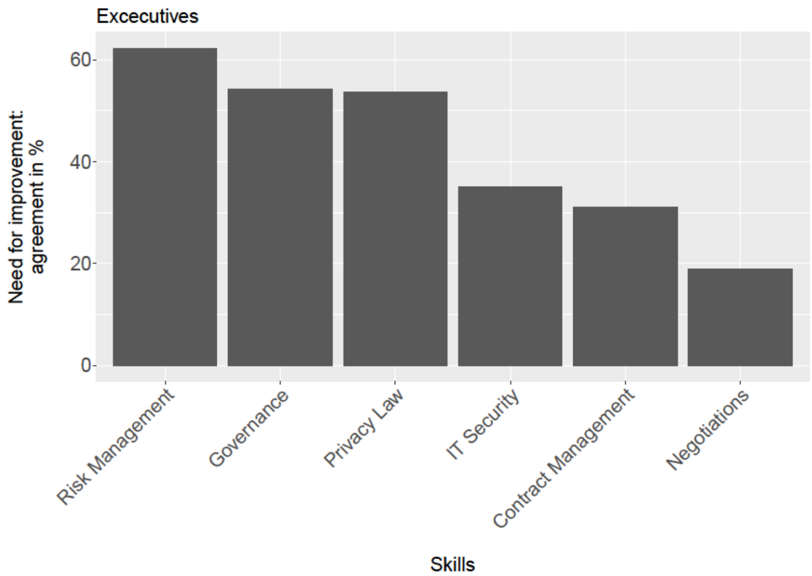


Figure 7: Perception of need for improvement of different skills for executives

Middle Management

Participants were asked whether the middle management need to update different skills. More than half of the participants perceived that privacy law skills (59.8%), risk management skills (55.1%), and IT security skills (50.4%) need to be updated among the middle management. In contrast, less than half of the participants perceived that contract and vendor management skills (48.6%), governance and control skills (48.2%), as well as negotiation skills (27.9%) need to be updated among the middle management (Fig. 8).

Cochran's *Q* test determined that there was also a statistically significant difference in the knowledge areas that the middle management needed to improve $\chi 2$ (5, $N = 276$) = 93.01, $p_{asymptotic} < .001$. To follow up the finding, Bonferroni post-hoc tests were carried out. The tests indicated that participants believe that negotiation skills are less important to improve for the middle management than any other skills (all $p_s < .001$). Moreover, privacy law skills were perceived as more important to improve than contract and vendor management skills as well as governance and control skills (all $p_s < .05$). There were no significant differences in any other knowledge areas (all $p_s > .13$).

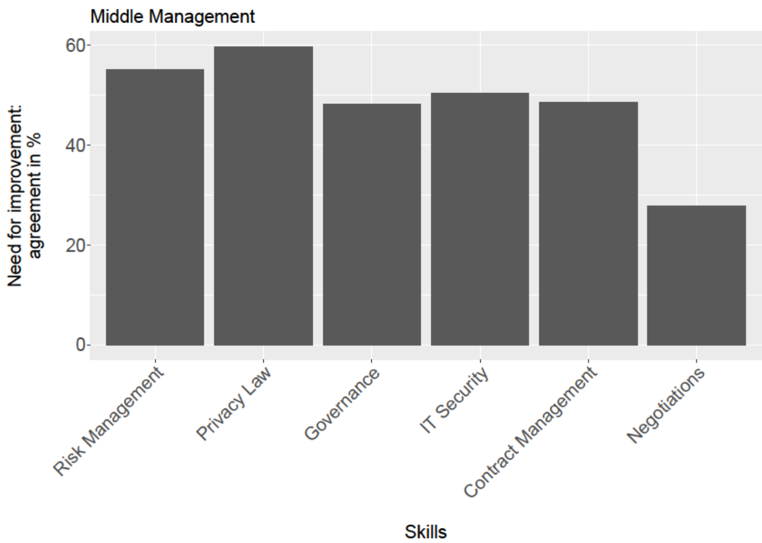


Figure 8: Perception of need for improvement of different skills for middle management

Sourcing Managers/ Buyers

Participants were asked whether sourcing managers needed to update different skills. Participants noted the highest need for improvement among sourcing managers as follows: privacy law skills (51.8%), followed by contract and vendor management skills (49.3%), IT security skills (45.3%), negotiation skills (43.5%), and risk management skills (39.5%). In contrast, participants perceived less need for improvement among sourcing managers for governance and control skills (31.5%) (Fig. 9).

Cochran's *Q* test determined that there was also a statistically significant difference in the knowledge areas that the sourcing managers needed to improve $\chi 2$ (5, N = 276) = 39.82, $p_{asymptotic} <$ .001. To follow up this finding, Bonferroni post-hoc tests were carried out. The tests indicated that participants believe that governance and control skills are less important to improve for sourcing managers than privacy law skills, contract and vendor management skills, IT security skills and negotiation skills (all $p_s < .05$). Moreover, privacy law skills were perceived as more important to improve than risk management skills ($p < .05$). There were no significant differences in any other knowledge areas (all $p_s > .11$).

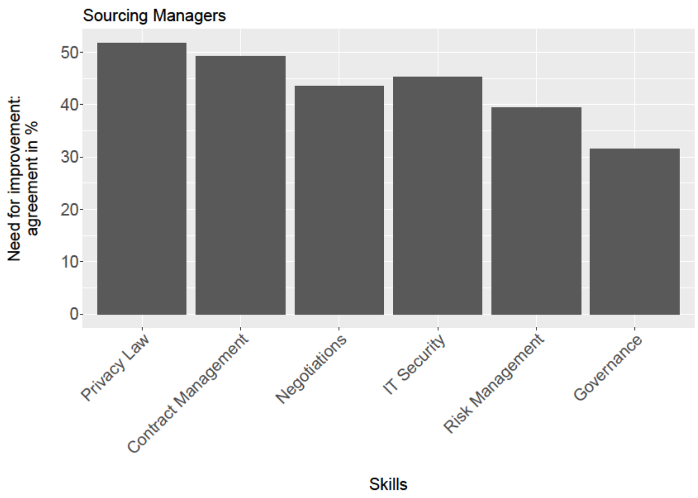


Figure 9: Perception of need for improvement of different skills for sourcing managers

DISCUSSION

H1: Procurement practitioners need to update their skills as a result of the shift in their role and responsibilities

1. 49 respondents (17.8%) believe that professionals do not need to update their skills, whereas 227 participants (82.2%) believe that professionals should update their skills. This was confirmed by a chi-square goodness-of-fit test that indicated that there were significantly more participants who believe that procurement professionals needed to update their skills than participants who believe that procurement professionals' skills were up to date date $\chi 2$ (1, N = 276) = 114.80, $p_{exact} < .001$ (one-sided).
2. This confirms the Hypothesis 1 (Procurement practitioners need to update their skills as a result of the shift in their roles and responsibilities following GDPR introduction).

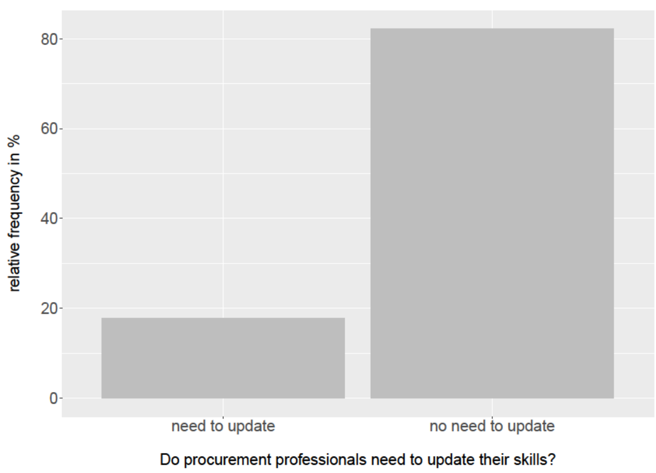


Figure 10: Percentage of participants who believe that professionals need to update their skills

Weele and Rezemeijer (1996) suggested that the ongoing change in business environment has caused significant shift in the role and position of procurement in several large organizations leading to primary tasks of procurement, responsibilities and competences to be redefined. As a result, firms will invest more in the education of procurement personnel, in order to ensure the professionalism of their workforce, if procurement is to bring increased skills and value to their business organizations.

Cox from Rosslyn Analytics (cited in Jacobs, 2017), found that “GDPR is an opportunity for procurement to step up their game on data knowledge” even if data “has never been an area of expertise for procurement”. He further predicted the eventual emergence of a new role for “data procurement managers”. Three respondents mentioned having developed internal competencies inside the procurement organization or created a new role focusing on the compliance toward the regulation, thus confirming the findings from the quantitative study that indicated existence of skills gap, consequently requiring further skills development – #66: “We have developed Data Privacy related competencies in the sourcing team”, #42: “New roles in GDPR project, also new GDPR related responsibilities for Sourcing Managers”, #118: “We created a GDPR role, data protection manager, in procurement org helping DPO”.

H2: The skills to be developed depend on the procurement practitioner’s profile.

1. Results of Cochran’s Q tests, followed up by Bonferroni post-hoc tests, indicate that the knowledge areas to be improved are dependent on the procurement professional profile:

   Executives: $\chi2\ (5, N = 276) = 208.33, p_{asymptotic} < .001$
   Middle Management: $\chi2\ (5, N = 276) = 93.01, p_{asymptotic} < .001$
   Sourcing Managers: $\chi2\ (5, N = 276) = 39.82, p_{asymptotic} < .001$

2. This confirms the Hypothesis 2 (Depending on the practitioners’ profile, the knowledge areas to improve vary).

The findings from the study (Tab. 8) suggest that depending on the procurement practitioner’s profile, some skills can be more important than others. Participants perceived the highest need for improvement among executives for skills were those of risk management (62.3%), governance and control (54.3%), and privacy law (53.6%); among middle management for skills were privacy law (59.8%), risk management (55.1%), and IT security skills (50.4%); and among sourcing managers for skills were privacy law (51.8%) and contract and vendor management (49.3%). Hence, there is a consensus among participants that the most important skills for procurement within the privacy framework are risk management, privacy law, and governance and control (Fig. 11).

Procurement Personnel Profile	Privacy Law	IT Security	Risk Management	Contract & Vendor Management	Governance & Controls	Negotiation
Executives	53.6%	35.1%	62.3%	31.2%	54.3%	18.8%
Middle Managers	59.8%	50.4%	55.1%	48.6%	48.2%	27.9%
Sourcing Managers	51.8%	45.3%	39.5%	49.3%	31.5%	43.5%

Table 8: Respondents' perception on development needs of procurement practitioners

Figure 11: Radar chart representing the significance of development needs for procurement practitioners by knowledge area

Contrasting the Findings with the Literature

Academics suggested that the continuous change in organizations' business internal and external environment have had an impact on the function and the practitioner (Zheng et al. 2007). Giunipero and Pearcy (2000) considered that these changes are importantly affecting the ideal skill set of procurement practitioners. Several researches suggest that the procurement role is embracing a broader set of objectives, requiring the development of a "richer, deeper set of skills" (Zheng et al., 2007).

Giunipero and Pearcy (2000) emphasized the importance for purchasing skills in defining the required skills needed to achieve "professionalism, growth and influence within the organization". Previously, Farmer (1981) cited in Ellram and Carr (1994) has suggested that purchasing skills, are one of the four barriers to the development of the procurement function which plays a strategic role in organizations.

This study supports the consensus in the literature which considered that procurement professionals need to refocus their skills and widen their knowledge. Zheng et al. (2007) claimed that procurement has become more focused on stakeholders' management and deepening of the relationships with suppliers. This is as a result of the ongoing changes in the business environment. This broadening scope and objectives requires continuous development of the practitioners, especially if they are to engage even more with other organizations, and if the procurement function is to remain on the top of the value chain (Kresevljakovic, 2018).

The findings from this research agrees also with Humphreys et al. (2000) which indicated that purchasing function has undergone a major transformation due to its shift from "arms-length contractual relations to obligational contractual relations" (Humphreys et al., 2000). The authors further explained that this shift has direct implications on the knowledge base required by the procurement professionals. They noted three main skills areas that Kolchin and Giunipero (1993) perceived as key to the procurement function: Business skills, interpersonal skills and technical skills. They further emphasized that changes in the general business environment are also impacting the procurement function, citing the example of government legislation and the need to increase awareness of such changes.

The results from the current study (Tab. 27 and Fig. 79) corroborate the findings from Humphreys et al. (2000), who used the Maister's 'PSF' model to better understand the training and developmental needs within the procurement function. Maister's model considers three types of profiles within the function which are Brains (mainly the concern of procurement managers or professional heads), Grey hair (mainly the concern of procurement executives) and Procedure (mainly the concern of the buyers/planners). The authors emphasized that the developmental needs were different for the three categories of practitioners, depending on the activities falling within their scope.

Individual feedbacks from respondents support the direction of the skills development. The most frequent words used to describe the change in procurement roles and responsibilities are: stronger control over suppliers (vendor management and control); ensuring proper process governance regarding selection and the management of third parties (governance, vendor management, contract management); leading the vendor risk management process (risk management, vendor management); increased awareness on privacy regulations (privacy law); contract management, DPA and liabilities negotiation and ensuring compliance of the existing and new agreements (negotiation, contract management) and closely managing and monitoring the supplier base.

The study, over all, points out the specific development needs for the different procurement practitioners' profiles. Our findings are supported by scholars like Giunipero and Pearcy (2000), who considered that negotiation is among the value-added activities that procurement, in its new strategic role, should focus on, just as Kresevljakovic (2018) suggested that procurement professionals of the future need, besides other areas, to educate themselves in internal control, corporate governance, and risk management. This is supported by the qualitative data from participants' answers to a follow-up and open-ended question regarding the new expectations of the privacy stakeholders on procurement professionals (Samaka, 2021) – #274: "Expectation to understand impact of data processing more and consider it in our day to day work", #241: "Further IT Security and specific training om GDPR awareness", #360: "Every procurement professional must possess the basic understanding of privacy (definitions, parties roles, contracting)", #260: "Expect expertise on contract management and risk management/ mitigation", #187: "Basic understanding of services is required to understand data flow and to trigger additional questions", #185: "Sensitivity of the data, and how it's being stored/protected", #174: "The Procurement teams need to know when personal data is being processed", #112: "The Procurement Function is expected to accurately identify a Data Processor, Joint Controller and independent Controller and to issue the relevant contract".

Answering the research questions

The results of this study (Tab. 9) confirms a skills gap that emerged as a result of the shift in procurement tasks and responsibilities. The practitioners are required to develop specific skills and competences to cover this gap. The study equally pointed out that the development needs differ depending on the practitioner's profile.

Hypothesis testing	Variable category	Descriptive Statistics	Inferential Statistics	Quantitative result	Qualitative result	Final Result	Remark
H1- Skills Gap	One nominal variable	Frequency distribution	Chi-square test of goodness-of-fit	Validated	Quali supports Quanti	Validated	Qualitative results not very significant
H2- Skills development Vs practitioners' profile	Seven variables(all nominal)	Frequency distribution	Cochran's Q test, post-hoc test(pairwise comparisons), + Bonferoni Correction	Validated	Not possible	Validated	Qualitative results not very significant

Table 9: Study results (hypotheses validation)

LIMITATIONS, CONTRIBUTION, DIRECTIONS FOR FUTURE RESEARCH

The sampling strategy may raise concerns of bias due to a lack of generalizability and sample bias.

The author strove to address this risk through testing whether the sample was representative of the population, by comparing the sample characteristics of the first wave of data collection (2019-02-06 to 2019-06-26), with the second wave (2019-12-07 to 2020-03-02). Chi-square tests of independence revealed that there was no difference between Wave 1 and Wave 2 with respect to all the cited characteristics. Moreover, triangulation was used as a research strategy to increase the reliability and validity of the study. Another possible limitation is that the participants predominantly work in large firms operating in the private sector. Future research could investigate the impact of GDPR on the function of procurement and its practitioners in SMEs and public sector organizations.

Contribution**:** The findings from this study aim to assist in the understanding of the skills development needs of procurement personnel following the confirmed shift in procurement roles and responsibilities as a consequence of the recent enforcement of the GDPR, so that appropriate trainings could be planned accordingly.

CONCLUSION

There is a consensus among respondents around the developmental needs and acquisition of a new set of skills needed to keep up with these changes. This supports the findings of Kresevljakovic (2018) that procurement professionals will have to use new skills and knowledge outside of the traditional procurement toolbox.

The study suggests that the ideal skills set required for procurement professionals, depend largely on the practitioners' profile, corroborating with the findings from Humphreys et al. (2000) who applied the Maister's 'PSF' model to understand the developmental need inside the procurement function. Some skills were considered to be more important than others.

Among executives' profiles, risk management, governance and control and privacy law were considered by the participants to be the top knowledge areas to be further developed. This could be explained by the role of procurement executives within the privacy governance framework and specifically their contribution in setting up policies and governance in accordance with the new regulation. For middle management profiles, the knowledge areas recognized to be more important were privacy law, risk management and IT security skills. Within sourcing managers' community, these were skills in privacy law and contract and vendor management, due probably to the fact that sourcing managers are directly responsible for drafting and managing suppliers' contract as well as managing the supplier relationship on daily basis. The qualitative data supported this developmental direction as participants described the change in procurement roles and responsibilities to be: stronger control over suppliers (vendor management and control); ensuring proper process governance regarding selection and the management of third parties (governance, vendor management, contract management); leading the vendor risk management process (risk management, vendor management); increasing awareness on privacy regulations (privacy law); negotiation of DPAs and liabilities; ensuring compliance of existing and new agreements (negotiation, contract management) and closely managing and monitoring the supplier base (contact management, vendor management). These findings agree with Pearson and Gritzmacher's study (in Ellram & Carr, 1994), which suggested that the strategic role of procurement is to monitor the supply environment and develop in parallel, the practitioners' skills, to enable them transform from technicians to strategic decision makers that influence the company's bottom line.

This study aims to help procurement managers understand how the GDPR has impacted the practitioners. The results of the research should guide managers and increase their awareness of the new development needs, resulting from the recent shift in the procurement roles and responsibilities. This shift, being a result of evolving expectations of procurement role by business stakeholders, following GDPR enforcement, thus suggesting developmental directions that could serve to build a training agenda accordingly. Purchasing skills were considered by scholars as one of the four barriers to the strategic role of purchasing in organizations. This study asserts that managers should periodically evaluate and revise the skills necessary, if procurement is to fulfil the new demands, stay on top of the value chain, and ultimately contribute to the competitive position of the business.

BIBLIOGRAPHY

1. Cohen, J. (1988) *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum Associates, 2nd ed, *NJ.*
2. Digout, J., Senechal, S. & Salloum, C. (2019) *Methods and Tools for Completing Doctor of Business Administration (DBA) Theses.* s.l.:Cambridge Scholars Publishing.
3. Ellram, L. M. & Carr, A. (1994) Strategic Purchasing: A History and Review of Literature. *International Journal of Purchasing and Materials Management,* 30(2), pp. 9-16.
4. Humphreys, P., McIvor, R. & McAleer, E. (2000) Re-engineering the purchasing function. *European Journal of Purchasing & Supply Management,* 6(2), pp. 85-93.
5. Jacobs, K. (2017) *How procurement can turn GDPR into an opportunity.* [Online] Available at: https://www.cips.org/en/supply-management/analysis/2017/december/when-data-is-breached-the-cpo-will-be-fired-first/ [Accessed 27 October 2019].
6. Karyda, M., Mitrou, E. & Quirchmayr, G. (2006) A framework for outsourcing IS/IT security services. *Information Management & Computer Security,* 14(5), pp. pp. 403-416..
7. Ketokivi, M. & Mahoney, J. T. (2020) Transaction Cost Economics As a Theory of Supply Chain Efficiency. *Production and Operations Management.*
8. Kolchin, M. & Giunipero, L. (1993) Purchasing Education and Training. *Center for Advanced Purchasing Studies.*
9. Kresevljakovic, B. (2018) Wake up. New era of Procurement is already here! *Association of Internal Control Practitioners.*
10. McIvor, R. (2005) *The Outsourcing Process: Strategies for Evaluation and Management.* Cambridge University Press, Technology & Engineering.
11. Perunovic, Z. & Pedersen, J. L. (2007) *Outsourcing Process and Theories.* s.l., Proceedings of the 18th annual conference of the Production and Operations Management Society 2007.
12. Ross, A. (2017) *A strategic approach to vendor-management under the GDPR.* [Online] Available at: https://iapp.org/news/a/a-strategic-approach-to-vendor-management-under-the-gdpr/ [Accessed 27 October 2019].
13. Samaka, T. (2021) Procurement Becoming Increasingly Strategic: How has the General Data Protection Regulation Further Affected the Function and Its Practitioners. *ON Research,* Issue Seventh.
14. Tassabehji, R. & Moorhouse, A. (2008) The changing role of procurement: Developing professional effectiveness. *Journal of Purchasing & Supply Management,* 14(1), pp. 55-68.
15. Vaxevanou, A. Z. & Konstantopoulos, N. (2014) Outsourcing Economic Perspective Wholeness: The Multiplicative Contribution of the Economic Variables to the Outsourcing Procedure. *Procedia - Social and Behavioral Sciences.*
16. Weele, A. V. J. & Rozemeijer, F. A. (1996) Revolution in Purchasing: Building competitive power through proactive purchasing. *European Journal of Purchasing & Supply Management,* 2(4), pp. 153-160.
17. Williamson, O. E. (1996b) *The mechanisms of governance.* Oxford University Press. NewYork.

18. Williamson, S. (2017) *Six steps to prepare for GDPR.* [Online] Available at: https://www.cips.org/supply-management/opinion/2017/august/six-steps-for-procurement-to-prepare-for-gdpr/ [Accessed 27 October 2019].
19. Zheng, J., Knight, L., Harland, C. & James, K. (2007) An analysis of research into the future of purchasing and supply management. *Journal of Purchasing & Supply Management,* 13(1), pp. 69-83.

Taoufik Samaka, DBA holds an international procurement certification (CAPP; IFPSM), PMP-PMI certification and is CIPP/EU and CIPM certified (International Association of Privacy Professionals).

OPPORTUNITIES AND THREATS OF BUSINESS AND MANAGEMENT EDUCATION IN THE POST COVID ERA.

MICROSOFT TEAMS AS A TEACHING DELIVERY TOOL: EXPERIENCES AND PERSPECTIVES. DESIGNING THE FUTURE - EVIDENCE FROM TWO UK HE INSTITUTIONS

Konstantinos Biginas, Gratien JJ Pillai & Antonia Koumproglou

ABSTRACT: *Mandatory societal lockdowns and social distancing measures necessitated by a global health pandemic in 2020 rapidly transformed how people worked and learned. Individuals instinctively turned to synchronous online video communication technologies in unprecedented numbers as a substitute for face-to-face interactions. Videoconferencing platforms, such as Zoom and Microsoft Teams, quickly became a considerable part of many people's everyday activities. The massive pivot to online instruction and exponential growth of videoconferencing in higher education quickly presented new challenges for its users (Quintana 2020). About 80% of faculty members used videoconferencing tools in their courses during spring 2020 (Ralf et al, 2020); however, early into the transition to online learning, both faculty and students described them as exhausting, with the majority of faculty being unprepared to meet the challenge of online teaching. The intended purpose of this paper seeks to address the required essentialities of online teaching-learning in higher education amid the COVID-19 pandemic and beyond and to emphasize the necessity of online teaching staff onboarding and training. We critically analyse the preparedness and management of two UK HEIs and how they integrated Microsoft Teams into their pedagogical strategy. The value of this paper is to draw a holistic picture of ongoing online teaching-learning activities, using Microsoft Teams as the main platform of online delivery, including establishing the linkage between change management process and onboarding and training teaching staff, in a coordinated effort to overcome the persisting academic disturbance and consequently ensure the resumption of educational activities and discourses as a normal course of procedure in the education system. Our approach has been tested in online learning environments, and evidence so far suggests that it can be applied successfully. Students do have very similar learning needs and the element of engagement and involvement can be seen as an essential one. More data and evidence will allow us to generalise findings and come up with practical suggestions and observed outcome. This will inform further our research on the development of an ideal teaching and learning approach and utilization of Microsoft Teams in online education. Covid 19 has changed the way that students learn across the world. Online education is the new normal in many cases in Higher Education. The common objective is to maximize students' learning experience in the contemporary virtual learning environments.*

KEYWORDS: online business education, student engagement, video conferencing technologies, staff onboarding and training.

Mandatory societal lockdowns and social distancing measures necessitated by a global health pandemic in 2020 rapidly transformed how people worked and learned. Individuals instinctively turned to synchronous online video communication technologies in unprecedented numbers as a substitute for face-to-face interactions. Videoconferencing platforms, such as Zoom and Microsoft Teams, quickly became a considerable part of many people's everyday activities (Garad et al, 2021). The massive pivot to online instruction and exponential growth of videoconferencing in higher education quickly presented new challenges for its users (Quintana 2020). About 80% of faculty members used videoconferencing tools in their courses during spring 2020 (Ralph et al, 2020); however, early into the transition to online learning, both faculty and students described them as exhausting, with the majority of faculty being unprepared to meet the challenge of online teaching. The intended purpose of this paper seeks to address the required essentialities of online teaching-learning in higher education amid the COVID-19 pandemic and beyond and to emphasize the necessity of online teaching staff onboarding and training. We critically analyse the preparedness and management of two UK HEIs and how they integrated Microsoft Teams into their pedagogical strategy. The value of this paper is to draw a holistic picture of ongoing online teaching-learning activities, using Microsoft Teams as the main platform of online delivery, including establishing the linkage between change management process and onboarding and training teaching staff, in a coordinated effort to overcome the persisting academic disturbance and consequently ensure the resumption of educational activities and discourses as a normal course of procedure in the education system.

INSTITUTION 1

Introduction

The COVID19 pandemic had a significant impact on Higher Education (HE) intuitions around the world. Majority of the HE institutions in the UK also had to deal with the impact of the pandemic and had to adopt and make changes to their teaching and learning strategy overnight in order to cope with the emerging situation in March 2020. Figure 1 provides a snap shot on how HE institutions in the UK managed the transition to remote learning during the pandemic.

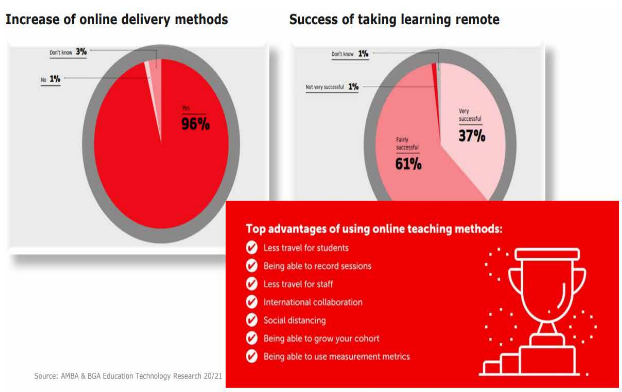


Figure 1

Seven lecturers were interviewed from institution 2, with four broad themes emerging – work intensity, communication, training and investment in technology.

Work Intensity

All the participants were of the view that the pandemic had a huge impact on their workload. They were expected to record their lectures overnight and upload them on the Virtual Learning Network (VLN). Participant 'B' mentioned that "*I had to work late most of the evenings and also during weekends to record the lectures*" Participant 'D' said that "*no consideration was given to our mental health and wellbeing and we were expected to record our lectures at short notice*". Participant 'G' was also of the same view and commented that "*we were expected to just deliver and no one cared about our wellbeing and the challenges we were experiencing at home as we had to also help our own children with their schooling*".

All the participants were of the view that remote working impacted on their work-life balance (WLB). Colleagues were getting in touch with them after working hours and were expected to respond to their messages or calls on MS Teams. As participant 'A' mentioned, "*I was expected to be online 24/7 and respond to any messages from colleagues and students*". Participant 'E' said that "*even students were expecting us to respond to their queries 24/7 as they had moved to live in different time zones*".

As colleagues were working from home they felt that they were required to work even if they were ill and were not allowed to take sick leave. Participant 'F' commented "*we were reluctant to take sick leave as we were worried that we would lose our jobs*".

Communication

Most of the participants mentioned that the communication at the beginning of the pandemic was so confusing. Colleagues were using multiple platforms to deliver the online classes and this was causing a lot of confusion to academics and students. There was no clear guidance or strategy from senior management on the preferred platform to be used to conduct the online classes. Participant 'A' said that "*there were multiple platforms for us to deliver our online classes. Some were using MS Teams, a few were using the Big Blue Button and the rest were using Zoom. This was causing a lot of confusion to both academics and students*".

The communication sent to students were also confusing. The students were not given clear guidance on which platforms to use in order to attend online classes and they were not familiar with the platforms. As participant 'C' pointed out that "*students were not familiar with the technology and were not sure how to join the online classes and as they were in different time zones, they were confused with the timetable*". Participant 'G' mentioned that "*as colleagues were using different platforms to conduct their online classes, this was causing a lot of confusion among students and* *this was impacting on their experience, learning and performance*". Participant B also said that "*the internet speeds across different countries varied and this had an impact on our students being able to access materials and join online classes*".

Participant 'B' mentioned that "*at the beginning of the pandemic, the institution began to conduct TLSE (Teaching, Learning and Student Experience) meetings every week. To start with, these meetings were confusing, unstructured and was a waste of time*". Participant 'F' said that "*we didn't learn anything from these meetings and I feel they were conducted just to demonstrate that we were being guided and helped*".

Training

All the participants mentioned that they were not trained or given the correct equipment to record the lectures and conduct online classes. Participant 'E' said that "*we did not have any formal training and academic colleagues were sharing their own experiences and were guiding us on how to record the lectures*". Participant 'A' mentioned that "*academics were expected to do it yourselves*". Participant 'D' mentioned that "*colleagues who were good at technology were able to learn faster and record their lectures whereas, colleagues who were not good with technology struggled during this transition from face to face classes to virtual classes*".

A few respondents were of the view that colleagues who had been in the industry for a longer period of time found it challenging to make the transition from face to face to teaching to online teaching. As participant 'G' mentioned that "*colleagues who struggled to design content which were interactive, found it challenging to get the students to engage during online classes and they would have benefited from training sessions which could have positively impacted on the learning environment*".

Investment in Technology

This institution is one of the leading teaching universities which had embraced and embedded technology within its teaching and learning strategy prior to the pandemic. Due to certain strategic reasons, some of the larger courses embedded flipped lectures, were students were required to listen to the lectures on their own before attending the seminars. As participant 'C' mentioned, "*colleagues who were given the opportunity to develop flipped lectures in the past benefited greatly as they were able to make this transition much faster than those who did not have the opportunity*".

This institution also invested in a new VLN and academics worked closely with a range of Learning Technologists to design and develop content and module pages which were easier to navigate and find information. Participant 'A' mentioned that "*this was a brilliant exercise as this provided the academics the opportunity to learn new skills and gave them the confidence to create content which were interactive, informative and interesting*". Participant 'E' said that "*the community pages provided the opportunity for academics to share the links for the online classes and address any concerns with the students*". Participant 'D' further added that "*students were able to engage with the content and share their views on the community page*".

Most of the participants were of the view that the new VLN is interactive and addressed some of the issues which colleagues experienced at the beginning of the pandemic. The developers of the new VLN were able to add new features based on the feedback from academics to make this platform more effective in order to enhance the learning experience of the students.

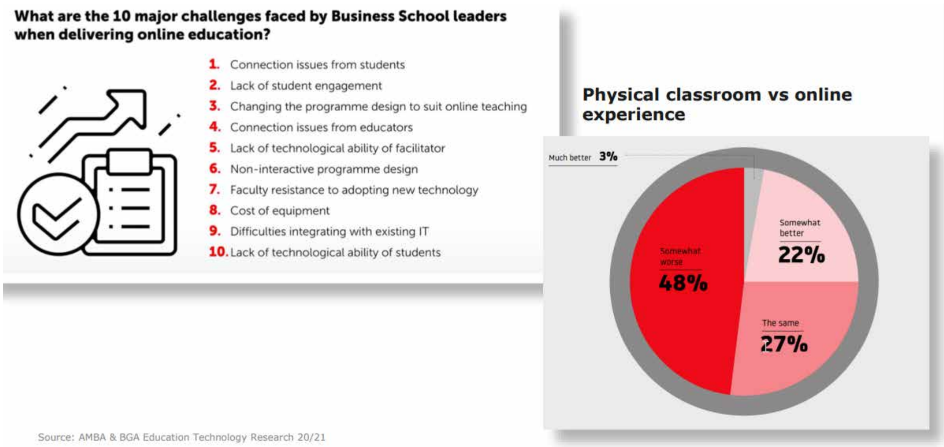


Figure 2

Figure 2 captures some of the challenges experienced by academic colleagues at institution 2 and this view is shared by most of the colleagues across the HE sector as confirmed by a study undertaken by AMBA and BGA Educational Technology Research (2020/21). Increasing number of HE institutions are investing in new technology and training their academics to use technology effectively in order to enhance the learning experience of their students.

RESPONDING TO THE PANDEMIC CRISIS - INSTITUTION 2

The main objective was to create a virtual platform for students to engage more and come out of isolation. There have been various sessions for academic staff to…" Making the most of Engagement this term…."

The Engagement Team have worked throughout the terms to seek for feedback from lecturers and co-explore ways to enhance student engagement through bringing in some new ideas. There was ongoing support and encouragement from the Engagement Team towards all Lecturers so they can adapt and develop their teaching practice to enhance student engagement. 'high-impact - low tech' resources that specifically directed to enhancing student engagement were explored.

Staff Development Week with a focus on student engagement strategies and full utilisation of online learning environments and platforms was certainly an important part of University's strategy.

Large numbers of students were certainly a challenge.

Students were coming from diverse backgrounds – most of them were not familiar with the concept of online education. Lecturers certainly played a crucial role in engaging students and explaining the features of Microsoft Teams and moodle.

Common issue was the difficulty among students to locate the right session link and respective room.
Majority of students were international. Apart from the traditional orientation week there was the need to create the so – called "feeling of belongingness". Students needed more than ever to feel that they are a part of something bigger and become more confident with their online experience.

There has been an ongoing communication between academic staff and module team - especially for large modules with various seminar groups. It was certainly more challenging with newly appointed staff and associate lecturers.
Overall, academic staff felt that there was assistance and support available. However, the main issue was the lack of time and the relatively quick transition as the University needed to comply with government covid - regulations.

INSTITUTION 2 - MICROSOFT TEAMS AS AN ENGAGEMENT TOOL

There has been a quite extensive use of Break Out rooms and engaging seminar activities. Effective diversity management by mixing and matching students and randomising allocation of students to each room.

Encouragement of students to turn on their cameras and microphones and make the class as dynamic and interactive as possible was also a part of the engagement process.

There were also regular updates / announcements to all students so they keep up with pace and schedule of each module.

The encouragement of students and implementation of "virtual open door policy" with flexible ability of students to contact module leaders / seminar tutors when felt they needed assistance worked well and students considered it to be a very supportive initiative.

Researcher (Institution 2) implemented his own Teaching and Learning Strategy. The online version of "Classroom Culture" approach.A teaching approach that aims to enhance students' learning experience and make students feel equal partners in their education.

CONCLUSION

It is obvious that Covid 19 has changed the way that students learn across the world. Online education became the new normal in many cases in Higher Education. The common objective remains. HE Institutions still put as a top priority to maximize students' learning experience in the contemporary virtual learning environments. Microsoft Teams can be certainly a powerful tool to do this.

Findings among the two different HE institutions are quite similar. Evidence suggests that, overall, academics find the transition to online education and learning environments interesting but challenging. Effective communication, ongoing training, interaction, diversity management, empowerment of academics, strong leadership and university support are all vital components in the era of online and blended education in HE.

BIBLIOGRAPHY

1. Biginas, K. (2021) Working with Students on Establishing A Student-Oriented Classroom Culture. A Teaching Initiative Designed to Build an Inclusive and Highly Engaging Learning Environment in Online and Face to Face Environments, 2021.
2. Bloom, B. S. (1956) Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain, David McKay Co Inc, New York.
3. Fredricks, J.A., Blumenfeld, P.C. & Paris, A.H. (2004) School Engagement: Potential of the Concept, State of the Evidence. Review of Educational Research, 74 (1).
4. Garad, A., M. Al-Ansi, A., & I. N. Qamari (2021) The role of e-learning infrastructure and cognitive competence in distance learning effectiveness during the COVID-19 pandemic, Jurnal Cakrawala Pendidikan, vol. 40, no. 1, pp. 81–91.
5. Harper, S.R. & Quaye, S. J. (2009) Beyond Sameness, with Engagement and Outcomes for All. Student Engagement in Higher Education, S.R. Harper & S.J. Quaye (eds.), Routledge, New York & London.
6. Jeffrey, N. (2009) Stakeholder Engagement: A roadmap to meaningful engagement. Dougherty Centre, Cranfield School of Management, Cranfield. Available from:http://www.som.cranfield.ac.uk/som/dinamiccontent/media/CR%20Stakeholder.pdf
7. Quintana, C. (2020) Students are weary of online classes, but colleges can't say whether they'll open in fall 2020 [Internet]. USA
8. Today. https://www.usatoday.com/story/news/education/2020/04/19/coronavirus-college-universities-canceling-fall-semester/5157756002/
9. Ralph, N. (2020) Perspectives: COVID-19, and the future of higher education [Internet]. Bay View Analytics. http://onlinelearningsurvey.com/covid.html

Konstantinos Biginas, FSHEA, FDTA, CMgr, FCMI, is a PhD candidate in Strategic Management, University of Hertfordshire, and a lecturer at EU Business School, Online Campus.
Gratien J.J. Pillai is a senior lecturer at Coventry University.
Antonia Koumproglou, FHEA, MCMI is a PhD Candidate in Education, University of East Anglia, and a lecturer in management at EU Business School, Online campus.

CHATGPT MEETS INSTAGRAM: FUTURE OPPORTUNITIES, QUESTIONS AND CONSIDERATIONS FOR GENERATIVE AI'S IMPACT ON SOCIAL MEDIA

David Friedman

ABSTRACT: *Generative AI, particularly as manifested by ChatGPT, is poised to become a disruptor across multiple industries. The opportunities and considerations it poses for social media - from platforms and creators to advertisers and consumers - and the pragmatic questions stakeholders should ask themselves to seize this opportunity, are discussed based on the latest knowledge in generative AI, as well as a brief summary of the various emerging generative AI systems.*

KEYWORDS: generative AI, ChatGPT, social media, platforms

Generative AI is not new. The first chatbot, Eliza, dates back to 1966 (Shum, He, & Li, 2018). But it was the public launch of ChatGPT in November 2022 that brought generative AI to the masses, attracting an unprecedented 100 million users within two months of its launch. By comparison, it took Instagram two and a half years and TikTok nine months to reach the same user threshold (Hu, 2023)

The rise in user numbers has been accompanied by an increase in media coverage, with an abundance of editorial and social media content highlighting the challenges and opportunities offered by generative AI. Twitter alone, for example, reported a 200% spike in influencer discussions through early 2023 (GlobalData UK Ltd, 2023). And although only a few months have passed since ChatGPT's launch, academic work has also begun to emerge on the impact of ChatGPT and generative AI in general, from its impact on education (Baidoo-Anu et al, 2023) to its multidisciplinary impact considerations in sectors and disciplines ranging from tourism and travel to service and product marketing (Dwivedi et al, 2023).

It is in discussing the potential implications for marketing in Dwivedi et al that the authors cite several potential use cases for ChatGPT. In one scenario, a marketer asks ChatGPT to "...(s)uggest (to) me an effective marketing campaign on Instagram for a bouquet start-up." Now consider this possibility, and in turn the current existential challenges to legacy revenue models for social media platforms discussed in the latest edition of OnResearch (Friedman, 2022): how might generative AI impact social media from the perspective of platforms, creators, consumers and advertisers? And with other variants of generative AI coming from a number of heavyweight players, including

Google and Meta, is generative AI a potential revenue-generating salvation to legacy social media platforms?

Let's look first at the various generative AI solutions appearing on the market, and then at the opportunities, issues and considerations facing social media players at the intersection of generative AI and social media.

LLAMAS, CHATS AND BARDS...SUMMARIZING DIFFERENT GENERATIVE AI SYSTEMS

While ChatGPT has become, like Kleenex for tissues or Jeep for 4x4s, a generic descriptor for generative AI, the generative AI space has become increasingly crowded since the public launch of ChatGPT (GPT-3). But not all are created equal. The recent flurry of new Chinese generative AI entrants, from Alibaba's Tongyi Qianwen to Baidu's Ernie, has demonstrated both their generative shortcomings in relation to ChatGPT and the government-driven restrictions in providing relevant answers (McMorrow & Liu, 2023). When it comes to ChatGPT and the other entrants from the major US tech players, each has a specific focus, so the impact of each entrant on social media stakeholders is potentially different.

At its core, each system is powered by a large linguistic model, defined as a "deep learning algorithm that can recognize, summarize, translate, predict and generate text and other content based on knowledge gained from massive datasets" (Lee, 2023). With this in mind, when ChatGPT (using GPT-3) is asked how it would define itself, the answer received is that it is "...a sophisticated natural language processing tool...trained on a massive corpus of textual data, enabling it to generate natural language responses to a wide range of input prompts...(and) can handle a wide range of tasks, including answering questions, generating text, completing sentences, and even engaging in conversation..."[1]

More specifically, GPT (Generative Pre-trained Transformer) is a type of machine learning model that examines all the words in a given text and makes connections between a long sequence of words as a whole, forwards and backwards, enabling it to predict and generate text.
In its most recent version launched in March 2023, ChatGPT-4, this capability has been further enhanced thanks to a larger and newer dataset on which it has been trained, as well as multimodal capabilities enabling text and image input.

As for the other entrants, such as Meta LLaMa or Google Bard, it's a mix of varying degrees of input mode flexibility, model complexity, training data recurrence and usage scope that determines much of the difference between the key players in generative AI.

Meta LLaMa, or Large Language Model Meta AI, has taken a different route from ChatGPT, presenting itself as a "responsible" generative AI system. It is trained on a larger number of tokens (chunks of text), but with a smaller number of variables, to make it "easier to re-train and refine for specific potential product use cases" and to help "...address the risks of bias, toxic feedback and hallucinations in large

1 Sourced from ChatGPT, April 9, 2023

language models...” (Meat AI, 2023). In fact, Meta sees LLaMa as a means of “democratizing access” to the “research community”, through the fact that the model requires less computing power and (unlike ChatGPT) that its source code is shared openly, albeit to a limited community.

Google’s Bard, meanwhile, has positioned itself as a “conversational AI service” tool that enables smoother, more natural conversations, and can be integrated into apps while enhancing Google search (Pichai, 2023). It is based on a transformer, like ChatGPT, and on Google’s LaMDA (Language Model for Dialogue Applications) model. Unlike ChatGPT, it relies on current Internet data, making its responses more timely - although Google recently denied that Bard was trained on text generated by ChatGPT itself (Quach, 2023).

Given what appears to be a series of emerging generative flavors, what are the intersections and potential considerations for social media?

ASSESSING FUTURE OPPORTUNITIES, QUESTIONS AND CONSIDERATIONS

As each day brings new advances in generative AI applications, as well as concerns, it’s fair to say that the generative AI scenario, and its future impact on social media, is in perpetual beta. But it’s also clear that there are considerations for social media platforms, creators, advertisers and consumers, from the potential for value creation and new revenue streams, to questioning the relevance of existing platforms, to content generation opportunities for users and businesses, to data management and trust-building considerations.

New value creation and revenue generation: extensive opportunities…assuming the right questions are asked and addressed.

Generative AI offers the possibility of new value creation for social media users, whether businesses or individuals, thanks to additional capabilities; it’s also an opportunity for platforms to further differentiate themselves. An early example of combining generative AI (in this case ChatGPT) with a social media platform is Snapchat’s introduction in March 2023 of My AI - which Snapchat describes as “...a friendly, experiential chatbot available exclusively to Snapchat+ subscribers, who get early access to our latest features...a personal sidekick for every Snapchatter...” (Snapchat, 2023).

To leverage on this opportunity, the platform needs to ask itself two questions. Firstly, is the platform relevant in an environment where social engagement is enhanced by AI? and if not, what needs to evolve? consider a platform whose role is to provide answers to user-generated questions, or to provide images to inspire. What is their current value? Secondly, what value proposition can the platform define and deliver using generative AI that (a) creates value for business users, creators and individual users; and (b) is compelling to drive each of these groups to use the platform. These questions become even more crucial when the extent to which social media posts will be generated by AI is considered - one vendor suggests this figure will reach 90% (Ghosh, 2023).

For the business user, the questions to ask are: which platform offers generative AI solutions that (a) create an optimal user experience for my target customer; (b) best help support my own business objectives; and (c) create and reinforce my target customers' trust in my brand and in the platform itself.

For the creator, the question is which platform understands the power of generative AI to power my content and empower it to further engage with and monetize its audience. YouTube, for example, is already considering how to appeal to the creator community, suggesting that "...creators will be able to extend their storytelling and increase their production value, from virtually swapping outfits to creating a fantastic cinematic setting...with thoughtful guardrails" (Mohan, 2023). Meta, meanwhile, talks about creating "AI personas" to "help people in different ways" in its textual and visual applications (Sankaran, 2023).

The right value proposition generates new revenue streams. This model is threatened by user concerns about data privacy, as well as the permanent restrictions on access to user data imposed on platforms by Apple's "App Tracking Transparency" (ATT).

Another example is Snapchat's My AI, offered to users for a monthly subscription fee ($3.99 in the U.S.) as part of Snapchat Plus. It's still early days to assess which services work best in terms of subscription-generated revenue, but the question for platforms is how generative AI can create a virtuous circle - generating both subscriber-generated revenue and, if it increases user engagement with platforms, and thus a deeper level of data-driven user insights, a new reason for advertisers to use a given platform to achieve greater ROI.

Managing data privacy and building trust: keys to opportunity realization

While the opportunities summarized above are tantalizing for stakeholders in the social media landscape, arguably the most crucial question for platforms is how to ensure that the user data harnessed by their generative AI solution is used responsibly - and that user trust is built.

Some of the most recent coverage on ChatGPT has focused on data privacy concerns. for instance, Italy has implemented a temporary ban on ChatGPT while investigating an "alleged violation of European data rules", and Canada has launched an investigation into OpenAI, the company behind ChatGPT, for "the collection, use and disclosure of personal information without user consent" (Fraser, 2023).

Investigations also reveal a lack of trust in the results of generative AI. A recent US survey suggests that, although on the rise, trust in the results is shared by only a third of adults, while a recent report on Snapchat's My AI results highlighted many concerns about their suitability for a younger audience (Marlatt, 2023; Fowler, 2023). Building trust is therefore essential if social media platforms are to truly benefit from generative AI.

In short, the intersection between social media and generative AI is still in its infancy. Asking the right questions, while keeping a watchful eye on data management and trust building, will be key considerations for those looking to monetize this intersection. How this might, in more detail, evolve with different generative AI options, will be a key theme of a forthcoming OnResearch study.

BIBLIOGRAPHY

1. Baidoo-Anu, D. and Owusu Ansah, L., 2023. Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Available at SSRN 4337484*.
2. Dwivedi, Y.K., Kshetri, N., Hughes, L., Slade, E.L., Jeyaraj, A., Kar, A.K., Baabdullah, A.M., Koohang, A., Raghavan, V., Ahuja, M. and Albanna, H., 2023. "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, *71*, p.102642.
3. Fowler, G.A. (2023) *Perspective | Snapchat tried to make a safe AI. it chats with me about booze and sex.*, *The Washington Post*. Available at: https://www.washingtonpost.com/technology/2023/03/14/snapchat-myai/ (Accessed: 03 June 2023).
4. Fraser , D. (2023) *Federal privacy watchdog probing OpenAI, CHATGPT following complaint | CBC News*, *CBCnews*. Available at: https://www.cbc.ca/news/politics/privacy-commissioner-investigation-openai-chatgpt-1.6801296 (Accessed: 03 June 2023).
5. Friedman, D.,(2022) Extinction or Evolution? A View to the Future of Social Media Platforms. *OnResearch* 9, 71-75
6. Ghosh, S. (2023) *CHATGPT content would flood social media platforms*, *AiThority*. Available at: https://aithority.com/representation-reasoning/information-fusion/chatgpt-content-would-flood-social-media-platforms/ (Accessed: 03 June 2023).
7. GlobalData UK Ltd. (2023) *Generative AI takes over social media with 200% mom growth in Twitter influencer discussions, finds GlobalData*, *GlobalData*. Available at: https://www.globaldata.com/media/business-fundamentals/generative-ai-takes-over-social-media-with-200-mom-growth-in-twitter-influencer-discussions-finds-globaldata/ (Accessed: 03 June 2023).
8. Hu, P. (2023) *CHATGPT sets record for fastest-growing user base - analyst note*, *Reuters*. Available at: https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/ (Accessed: 03 June 2023).
9. Lee, A. (2023) *What are large language models and why are they important?*, *NVIDIA Blog*. Available at: https://blogs.nvidia.com/blog/2023/01/26/what-are-large-language-models-used-for/ (Accessed: 03 June 2023).
10. Marlatt, J. (2023) *Generative Artificial Intelligence Awareness, interest surging*, *Morning Consult Pro*. Available at: https://morningconsult.com/2023/03/29/generative-artificial-intelligence/ (Accessed: 03 June 2023).
11. McMorrow, R. and Liu, N. (2023) *China slaps security reviews on AI products as Alibaba unveils chatgpt challenger*, *Subscribe to read | Financial Times*. Available at: https://www.ft.com/content/755cc5dd-e6ce-4139-9110-0877f2b90072 (Accessed: 03 June 2023).
12. Meat AI (2023) *Introducing Llama: A foundational, 65-billion-parameter language model*, *Introducing LLaMA: A foundational, 65-billion-parameter language model*. Available at: https://ai.facebook.com/blog/large-language-model-llama-meta-ai/ (Accessed: 03 June 2023).
13. Mohan, N. (2023) *Letter from neal: Our 2023 priorities*, *blog.youtube*. Available at: https://blog.youtube/inside-youtube/2023-letter-from-neal/ (Accessed: 03 June 2023).
14. Pichai, S. (2023) *An important next step on our ai journey*, *Google*. Available at: https://blog.google/technology/ai/bard-google-ai-search-updates/ (Accessed: 03 June 2023).

15. Quach, K. (2023) *Google denies Bard trained using openai CHATGPT responses, The Register® - Biting the hand that feeds IT.* Available at: https://www.theregister.com/2023/04/03/ai_in_brief/ (Accessed: 03 June 2023).
16. Sankaran, V. (2023) *Meta developing CHATGPT-like AI to help advertisers create ads*, *Yahoo! Finance*. Available at: https://ca.finance.yahoo.com/news/meta-developing-chatgpt-ai-help-102938296.html (Accessed: 03 June 2023).
17. Shum, H.Y., He, X.D. and Li, D., 2018. From Eliza to XiaoIce: challenges and opportunities with social chatbots. *Frontiers of Information Technology & Electronic Engineering*, *19*, pp.10-26.
18. Snapchat (2023) *What is My Ai on Snapchat and how do I use it?* Available at: https://help.snapchat.com/hc/en-us/articles/13266788358932-What-is-My-AI-on-Snapchat-and-how-do-I-use-it- (Accessed: 03 June 2023).

David Friedman, DBA, is a lecturer of marketing at EU Business School, Swiss campus.

EXPATRIATE COMPENSATION

Jayani Prithvi

ABSTRACT: *In recent years, the number of international assignments for corporate employees has increased dramatically. Many employees see this as an opportunity to advance their careers and enjoy all the benefits it brings to their personal lives, in terms of improved living standards and so on. In addition, multinational companies (MNCs) also benefit from this opportunity, as they can move highly skilled and competent employees from one part of the world to another as needed. These employees are then given the title of expatriates. In return, companies expect them to bring new perspectives or to help solve existing problems within the company effectively and avoid catastrophic consequences. In competitive labour markets, companies strive to attract the best and brightest professionals besides developing methods to retain them (Sims & Schraeder, 2004).*

Despite the benefits of expatriates to organizations, several factors must be considered to ensure that the right decisions are made. A substantial amount of money is invested in the employee, making it an extremely critical decision, as the costs of failure are exorbitant if one is wrong (Baruch, 2004). One factor that has not received the attention it deserves is the development of a perfect compensation package (Suutari & Tornikoski, 2000). This task is complex for both parties, the expatriate and the organization. The complexity stems from the variety of objectives that need to be considered when formulating the program and establishing a regular practice (Suutari & Tornikoski, 2001). According to Wentland (2003), these packages, which typically range from $300, 000 to $1 million per year, depend on the scope of the task.

KEYWORDS: **expatriates, compensation, employees, multinational companies, uncertainty**

COMMON WAYS EXPATRIATE COMPENSATION PACKAGES ARE CURATED

The most common methods used by companies to manage expatriate compensation packages in the best possible way for both parties involved include the following. Firstly, the home country policy is used to equalize the employee's standard of living between the level established in the home country and the international office. This policy is generally divided into four categories: taxes, services, discretionary income, and housing (SHRM, 2022). Although this method seems easy to implement, it has several drawbacks. One is that it leads to a disparity between the expatriate's income and that of host country executives, as well as expatriates of different nationalities (Chadwick, 1995: 236; Logger & Vinke, 1995; Schell & Solomon, 1997: 124). There is evidence that this option is attractive to implement when all expatriates are of the same nationality (Black et al., 1999:178).

The second method is to use the host country policy approach where expatriates are considered locals in the host country and are treated exactly the same in terms of the compensation offered to them (Crandall & Phelps 1991: Dowing et al., 1994; Logger & Vinke, 1995). Familiarity with local policies, procedures, and the current living standards makes this method simple and straightforward. Furthermore, the principles of the home country determine additional bonuses, housing, insurance, tuition, and so on (Dowing et al., 1994). This method is mainly used to remedy the disparity caused by the home country approach that offers different compensation packages to locals and expatriates. MNCs benefit from this method because it reduces the exorbitant expenses involved in maintaining an expatriate. Moreover, the host-country approach is best used in companies with a small number of expatriates (Black et al., 1999). However, Tornikoski (2011) pointed out that there is a dilemma in obtaining data from the country of origin.

The third method is the balance sheet approach which is popular in the United States and many companies use it. More than 85% of U.S. organizations that employ expatriates use it (Overman, 2000). In addition, it is also the oldest approach, created just after World War II. During that time, the balance sheet approach was implemented to ensure that there was no gain or loss when paying expatriates during their international assignments. The home country approach serves as the base with all allowances, deductions, and reimbursements (SHRM, 2022). It is a way to ensure that the expatriate and his or her family can maintain the same standard of living as in their home country, where they have the same purchasing power (Overman, 2000). HRM must ensure that internal equity is maintained with workers in their home country (Reynolds, 2000). In this worksheet, there is a list of all the major expenses that the expatriate faces, and the host country manages the difference by increasing or decreasing it, so that it remains balanced (SHRM, 2022).

The headquarters-based approach, which is the fourth method, is commonly used by multinationals. In this methodology, all employees, regardless of location, are compensated on a headquarters basis and are paid on the same balance sheet program (Sims, Schreader, 2005). In addition, the headquarters approach has been successful for the Gillette Company, which used this method to enter the Asian market (Zingheim & Schuster, 2001). While this approach promotes the primary objective of ensuring equity among all expatriates and locals, its main challenge is to find viable ways to manage country-specific aspects such as pensions, taxation, social security, etc. (Allard, 1996). According to Allard (1996), young employees find this option attractive, but as they work in the company, they find that their compensation does not increase despite their experience or skills.

HOW UNCERTAINTY AFFECTS COMPENSATION PACKAGES

Uncertainty can be described as a situation in which something is not known, or a matter that is not known or certain, according to the Cambridge Dictionary. Several events have had a significant impact on the economic, social, and political atmosphere, making it vulnerable to terrorist attacks, mass migration, and global pandemics such as SARS and Covid-19 (Maley et al., 2020). In addition, the Brexit, which was a political decision, affected many expatriates in Britain as well as the 12 million British citizens living in the 27 EU states (Moloney et al., 2016). In the eastern part of the globe, the Asian financial crisis of 1997 shook the world and particularly East and Southeast Asia (Maley et al., 2020). When such circumstances occur, many multinational companies significantly reduce their operating costs (Lee & Makhija, 2009). As demonstrated earlier, the cost of long-term international assignments is exorbitant and adds a huge burden to managing uncertainty. Therefore, managing their compensation is a challenge and has been overlooked by many researchers to find the right solution to this dilemma (Bonache et al., 2009; Tornikoski, 2011).

To minimize their expenses, MNCs have shifted from long-term employment contracts to short-term assignments and flexible approaches, especially before and after the COVID-19 epidemic (Knobloch, 2020). The goal is to achieve greater flexibility in expatriate compensation, attract younger employees, and send a message as a modern employer. Leaders expect organizations to maximize their potential with only the resources they have at the time, which has led to several restructurings of the Strategic Global Human Resource Management (SGHRM) process in multinationals (Sanchez, 2003). The global financial crisis (GFC) is an example of the impact of uncertainty on how Fortune 500 companies have had to restructure their HRMS systems. Many corporate giants were unwilling to invest in their global workforce (Bloom, 2014; Salt & Wood, 2012). The Managing Director of the IMF observed that macroeconomic uncertainty was impacting micro-HR issues, that the crisis was affecting several companies, and that relevant decision makers within the company were struggling to conclude their investments in employees and job creation (IMF, 2012). A plethora of leading organizations such as American Express, Google, and Proctor & Gamble planned and conducted their human capital activities with great ease during the GFC due to their effective expatriate compensation restructuring strategy and investment in employees (Staff, 2016). However, some companies did not understand the importance of continuing to invest in their human capital and made drastic cost-cutting, layoff, and restructuring decisions, such as Microsoft, Walt Disney, and Boeing, at the onset of the GFC (Mohrman & Worby, 2019). Furthermore, when restructuring, it is essential to adjust measures accordingly to ensure that they are appropriate for difficult times (Knobloch, 2020). With respect to the covid-19 crisis, companies had to ensure that their health care benefits were covered in the host country and in the home country in case of a sudden return to the home country (Knobloch, 2020). Therefore, in addition to compensation, there are several other aspects that need to be considered in times of crisis.

The majority of multinationals are not sure they have the right employees for the right job (Maley et al., 2020). In addition, uncertainty pushes expatriates to work longer hours with challenging goals and more ambitious financial targets (Maley & Kumar, 2014). In particular, measures to reduce investment in training have adverse effects on long-term employee growth (Maley, 2019). In conclusion, Zatzick and Iverson (2006) recommend that companies focus on investments in expatriate training to ensure that productivity losses are minimized and controlled.

REAL OPTIONS THEORY

Real options theory is an appropriate tool for assessing managerial flexibility in a situation where future decisions must be made to capitalize on favorable investment opportunities and prevent excessive risk of loss (Trigeorgis, 2022). As discussed earlier, uncertain business environments have a massive impact on human capital functioning. To address this, real options theory is a highly strategic management technique that serves as a guideline for management to make informed decisions about how these investments create value and positively impact their competitive advantage (Bhattacharya & Wright, 2004).

The foundations of the theory are derived and applied widely in the field of finance, but have been developed to assist strategic management (Maley et al., 2020). In the practice of SGHRM, this tool helps the MNC to have a clear view of current resources and assets as options for future investment choices, with these options being discovered based on the interaction of the current resources the firm is endowed with, that is, its knowledge, capabilities, and opportunities (Bowman & Hurry, 1993). In addition, it helps firms to weather economic downturns and business cycles (Bhattacharya et al., 2014). As explained below, five strategies illustrate the integration of flexibility.

WAIT

The first strategy is to wait, that is, to do nothing to the expatriate program. By following this strategy, the MNC has the opportunity to recoup the plethora of benefits offered by the program. Furthermore, under real options theory, expectation puts the multinational in an advantageous position, as it allows for the discovery of additional information (Maley et al., 2020). While there is an information advantage, there is also a risk of disrupting the expatriate, which can damage the relationship between the company and the expatriate (Maley et al., 2020). However, it is common for leaders to delay making critical decisions, resulting in delayed and inefficient communication (Bloom et al., 2018). In conclusion, pursuing this option is highly risky.

ABANDON

The second option is to abandon or terminate the expatriate program (Maley et al., 2020). It is completely opposite to the wait strategy, as it has an immediate effect on the operation of the expatriation program. Using this strategy has a lasting effect on both the tangible and intangible aspects of the expatriate program (McNulty, 2014). In terms of the tangible aspects, this strategy allows the company to reduce costs as the salary will be severed. While this may be beneficial to the financial aspect of the company by reducing costs, the company suffers a loss from the perspective of the long-term benefits invested in the expatriate program (Maley et al., 2020). In addition, the intangible aspect, namely the relationship between the multinational and the expatriate, will be completely severed. This strategy no longer has a fleeting effect on the long-term viability of the company (Maley et al., 2020).

EXTEND

The third strategy is to extend or increase the program. Increasing the program could have detrimental effects on the company, as there are considerable costs associated with extending an already cost-consuming expatriate program. However, this strategy would not jeopardize the tangible aspect of the salary (Maley et al., 2020). In contrast, the intangible aspects are negatively affected.

SCALING DOWN

Scaling down refers to adding limitations to the program. The downscaling option is the most viable and appealing because it provides a sense of stability for all stakeholders involved (expatriates, employees, and management). As discussed earlier, the real options theory is best suited to provide a sense of flexibility; this option provides a sense of flexibility in balancing the expatriates and their expectations for their compensation package during economic uncertainty (Maley et al., 2020). In addition, it is suggested that clear communication and regular feedback systems help maintain reciprocity between the expatriate and the company, which strengthens the expatriate's commitment to the MNC (Abu Bakir et al., 2009). However, the responsibility of maintaining openness in the channel of communication and discouraging the type of messages that negatively influence commitment to the company must rest with the leadership (Maley et al., 2020). In conclusion, the tangible aspect remains intact and the intangible aspect is easily preserved (Maley et al., 2020).

SWITCH

This last strategy offers some optimism in tackling the obstacles of uncertainty. This was witnessed in a situation where Irish subsidiaries of US healthcare giants were hit by the global financial crisis (GFC) in 2008. Prior to the crisis, the Irish subsidiaries played a strategic role in the operations of the MNC. However, the Irish subsidiaries struggled to maintain their significance after the GFC. Several branches posed as less cost-consuming in terms of labor as compared to Ireland in particular, meaning that Irish subsidiaries had to prove that they were worth investing in labor in the future (The Economist, 2011). Speculation was rife that the Irish operations would close and many expatriates would return to the United States. Contrary to these predictions, the Irish subsidiaries weathered the storm by making some changes to their HRM procedures and processes (Sheehan, 2012). First, one of the changes implemented by HRM was the elimination of outsourcing training and development. In times of uncertainty, outsourcing is not one of the most cost-effective method (Lepak et al., 2005). Instead, they implemented the idea to "train the trainer" to keep training in-house. In addition, they began to take more innovative approaches to fostering and cultivating experiential learning and leadership programs by partnering with a global talent management program. This initiative is recommended to maintain intangible values and satisfy cost-effective programs. The uncertainty of this situation was exploited to implement the most effective practices. Thus, by " switching", the tangible aspect remains unchanged and the intangible aspects are maintained (Maley et al., 2020).

CONCLUSION

It is evident that the issue of expatriate compensation is a complex topic to address and refine in a way that all stakeholders are equally satisfied. This paper illustrates the most common approaches used by most MNCs. It is important to take into account that some companies may not use conventional methods and may use a hybrid model of the given methods or use a mix-and-match cafeteria approach (Wentland, 2003). The main idea is that MNCs find the best solution by customizing practices to their needs. External or internal factors are likely to affect an expatriate's compensation package. Uncertain circumstances primarily raise the question of how to restructure the package so that both tangible and intangible aspects are satisfied. The real options theory is a useful framework for evaluating the strategy for bridging the gap between the dilemma caused by uncertainties and the outcome of an ideal compensation package. In this framework, the five strategies are assessed to determine the ideal strategy to implement, with the best ones being switching and scaling down. Therefore, compensation affects the quality of people hired, the level of motivation of employees, especially expatriates, and the level of loyalty to the company.

BIBLIOGRAPHY

1. Abu Bakar Hassan, Mustaffa Che Su, Mohamad Bahtiar. LMX quality, supervisory communication and team-oriented commitment: a multilevel analysis approach. Corp. Commun. Int. J. 2009;14(1):11–33. (Google Scholar)
2. Allard, L.A. (1996), "Managing globe-trotting expatriates", Management Review, Vol. 85, pp. 39-43
3. Bhattacharya, M. and Wright, P.M. (2004) "Managing Human Assets in an Uncertain World: Applying Real Options Theory to HRM."
4. Bhattacharya, M. and Wright, P.M. (2004) "Managing Human Assets in an Uncertain World: Applying Real Options Theory to HRM."
5. Black, J.S. (1991) 'Returning Expatriates Feel Foreign in their Nation Land', Personnel, 68(8):17.
6. Black, J.S. (1992) 'Coming Home: The Relationship of Expatriate Expectations with Repatriation Adjustment and Job Performance', Human Relations, 45(2): 177–92.
7. Black, J.S., Gregersen, H.B., Mendenhall, M.E. and Stroh, L.K. (1999) Globalizing People through International Assignment. Reading, MA: Addison-Wesley
8. Bloom H. Houghton Mifflin Harcourt; Florida: 2014. The Western Canon. [Google Scholar]
9. Bloom M., Milkovich G.T., Mitra A. International compensation: learning from how managers respond to variations in local host contexts. The International Journal of Human Resource Management. 2003;14(8):1350–1367. [Google Scholar]
10. Bloom M.C., Milkovich G.T. Cornell University ILR School; 1995. Issues in Managerial Compensation Research. CAHRS Working Paper Series. [Google Scholar]
11. Bloom N., Floetotto M., Jaimovich N., Saporta-Eksten I., Terry S.J. Really uncertain business Dasgupta S.A., Suar D., Singh S. Impact of managerial communication styles on employees' attitudes and behaviours. Employee relations. 2013;35(2):173–199. [Google Scholar]
12. Bonache J., Sanchez J.I., Zárraga-Oberty C. The interaction of expatriate pay differential

and expatriate inputs on host country nationals' pay unfairness. Int. J. Hum. Resour. Manag. 2009;20(10):2135–2149. [Google Scholar]

13. *British expats face uncertain future after Brexit* (2016) *The Wall Street Journal*. Dow Jones & Company. Available at: https://www.wsj.com/articles/british-expats-face-uncertain-future-after-brexit-1466771844 (Accessed: April 6, 2023).
14. Chadwick, W.F. (1995) 'TCN Expatriate Manager Policies'. In Selmer, J. (ed.) Expatriate Management: New Ideas for International Business. London: Quorum, pp. 233–53. Crandall, L.P. and Phelps, M.I. (1991) 'Pay for a Global Work Force', Personnel Journal, 70(2): 28–33.
15. *How-to guides* (2022) *SHRM*. Available at: https://www.shrm.org/ResourcesAndTools/tools-and-samples/how-to-guides/Pages/default.aspx (Accessed: April 2, 2023).
16. IMF . Lagarde: IMF Survey Magazine; 2012. International Monetary Fund (IMF). (2012). Global recovery, growth hampered by uncertainty. [Google Scholar]
17. Lee S.H., Makhija M. Flexibility in internationalization: is it valuable during an economic crisis? Strateg. Manag. J. 2009;30(5):537–555. [Google Scholar]
18. Lepak D.P., Bartol K.M., Erhardt N.L. A contingency framework for the delivery of HR practices. Hum. Resour. Manag. Rev. 2005;15(2):139_159. [Google Scholar]
19. Maley J.F., Kramar R. The influence of global uncertainty on the cross-border performance appraisal: a real options approach. Pers. Rev. 2014;43(1):19–40. [Google Scholar]
20. Maley J.F., Moeller M. Global performance management systems: the role of trust as perceived by country managers. J. Bus. Res. 2014;67(1):2803–2810. [Google Scholar]
21. Maley, J.F., Moeller, M. and Ting, A.F. (2020) "Sustainable expatriate compensation in an uncertain environment."
22. McNulty Y. Modern expatriation through the lens of global careers, psychological contracts, and individual return on investment. Glob. Bus. Organ. Excell. 2014;33(3):6–22. [Google Scholar]
23. McNulty Y. Why expatriate compensation will change how we think about global talent management. In: Guo Y., Rammal H.G., Dowling P.J., editors. Global Talent Management and Staffing in MNEs. Emerald Group Publishing Ltd; UK: 2015. pp. 125–150. [Google Scholar]
24. McNulty Y., De Cieri H. Global mobility in the 21st century. Manag. Int. Rev. 2011;51(6):897–919. [Google Scholar]
25. Real options theory (no date) obo. Available at: https://www.oxfordbibliographies.com/display/document/obo-9780199846740/obo-9780199846740-0213.xml#:~:text=Real%20options%20theory%20analyzes%20the, an%20uncertain%20and%20changing%20marketplace. (Accessed: April 12, 2023).
26. Reynolds, C. (2000), 2000 Guide to Global Compensation and Benefits, Harcourt Inc., New York, NY.
27. Sheehan M. Investing in management development in turbulent times and perceived organisational performance: a study of UK MNCs and their subsidiaries. *Int. J. Hum. Resour. Manag.* 2012;23(12):2491–2513. [Google Scholar]
28. Sims, R. and Schraeder, M. (2004), "An examination of salient factors affecting expatriate culture shock", Journal of Business and Management, Vol. 10 No. 1, pp. 73-87. Solomon, C.M. (1995), "Global compensation: learn the ABCs", Personnel Journal, Vol. 74 No. 11
29. Sims, R.H. and Schreader, M. (2005) *Expatriate compensation An exploratory review of salient contextual factors and common practices* [Preprint].

30. Solomon, C.M. (1995), “Global compensation: learn the ABCs”, Personnel Journal, Vol. 74 No. 11, pp. 70-6
31. Suutari, V. and Tornikoski, C. (2001) “he challenge of expatriate compensation: the sources of satisfaction and dissatisfaction among expatriates, ” *International Journal of Human Resource Management*, pp. 389–404.
32. *Toolkits* (2022) *SHRM*. Available at: https://www.shrm.org/ResourcesAndTools/tools-and-samples/toolkits/Pages/default.aspx (Accessed: April 6, 2023).
33. Tornikoski C., Suutari V., Festing M. Compensation package of international assignees. In: Collings D., Wood G., Caliguiri P., editors. The Routledge Companion to International Human Resource Management. Routledge; London: 2015. pp. 289–307. [Google Scholar]
34. Tornikoski, C. (2011) “Expatriate Compensation: A Total Reward Perspective .”
35. Trigeorgis L. MIT Press; Cambridge, MA: 1996. Real Options: Managerial Flexibility and Strategy in Resource Allocation. [Google Scholar]
36. Uncertainty (no date) Cambridge Dictionary. Available at: https://dictionary.cambridge.org/dictionary/english/uncertainty (Accessed: April 12, 2023).
37. Wentland, D.M. (2003), “A new practical guide for determining expatriate compensation: the comprehensive model”, Compensation and Benefits Review, Vol. 35 No. 3, pp. 45-50.

Jayani Prithvi is a current Bachelor student in finance at EU Business School Munich campus

MAKING A 90-DEGREE TURN: TO WHAT EXTENT CAN CONSUMER DEMAND DRIVE VERTICAL FARMING TO BECOME A VIABLE OPTION IN THE MARKET FOR SUSTAINABLE PRODUCE?

Felix Theodor Brühl & Antonia Koumproglou

ABSTRACT: *This study examines how vertical farming can lower the impact of climate change and population growth on global food markets, and how vertical farming can potentially increase the stability of this fragile system. Although this method of farming achieves higher yields and better water use, it requires much more energy than traditional farming methods, resulting in higher costs for consumers. This study examines whether German consumers are willing to pay a premium for vertically farmed products compared to organic ones, and how the government can facilitate the mainstream adoption of this farming method. Using a questionnaire, the study reveals that most German consumers are aware of vertical farming and its benefits, and that around half would be willing to pay up to 20% more than organic produce for this type of farming. However, vertically farmed products are not widely available to consumers, and companies find it difficult to sell them at competitive prices. The study proposes policies that the government can implement to include vertical farming in its plans to improve environmental sustainability in the German agricultural sector.*

KEYWORDS: vertical farming, new technologies, customer sentiment, green government policies

The world is facing two opposing trends with potentially serious consequences. On the one hand, the ever-increasing effects of climate change are complicating agricultural production, with droughts and floods becoming more frequent (European Environment Agency, 2015). On the other, the world's population is growing, meaning more people are demanding food in a situation where producing that food is becoming more difficult (U.S. National Intelligence Council, 2012). In developed countries like Germany, innovators are trying to find a potential solution to this problem. One such potential solution is vertical farming, a practice that involves growing plants, mainly leafy greens, in vertical racks in a controlled indoor environment, rather than in a field.

In vertical farming, crops are grown indoors using water, soil and light systems to increase efficiency and yield. Vertical farming can help provide high-quality food for a growing population while reducing water pollution and erosion. Closed environments limit the use of pesticides, reducing the impact of environmental disasters. Factory-like facilities can be adapted to local needs, reducing the distance between production and distribution (Ebrahmnejad, 2020). However, it remains to be seen whether these projects are economically viable, whether they can be operated profitably and whether their products are accepted by consumers.

The Vertical Farming Industry

The vertical farming industry is experiencing significant growth in recent years, fueled by rapid global urbanization, climate change and its effects on the environment, which limit the production potential of traditional farming methods. By 2021, the global revenue of the vertical farming market will amount to $3.09 billion. The market is expected to grow at a rate of 23.5% by 2022, with Europe accounting for 32.3% of revenues (Emergen Research, 2022). In Germany, there are around 200 connected and remotely controllable Infarm cabinets in supermarkets, and another 150 in wholesalers (Rosenbach, 2019). As vertical farms maximize the yield per area of different crop types, they can be built closer to the point of sale and therefore reduce the resources needed for transportation, which can improve profitability as well as reduce the CO2 footprint of the vertical farming industry.

However, a number of obstacles stand in the way of vertical farming becoming the default farming method. The initial investment costs of vertical farms are high. Building a vertical farm can be six to ten times more expensive than building a greenhouse (iFarm, 2021). Most vertical farms use LED lights, which require electrical power to operate, meaning that vertical farms need around 7 times more energy than a greenhouse to grow a kilogram of produce (McDonald, 2022). The high energy intensity makes vertical farming ventures vulnerable to supply constraints that can have a multitude of reasons. For example, the price of electricity in France and Germany has risen fivefold since the invasion of Ukraine by the Russian Federation, a former major supplier of energy resources to the European Union (Mathis and Gillespie, 2022). The initial investment and higher energy costs mean that consumers will probably have to pay higher prices for products from vertical farms (Tasgal, 2019).

RESEARCH QUESTIONS AND METHODOLOGY

This study aims to discover why vertical farming is not the default farming method by answering several questions. Factors affecting long-term profitability will reveal the cost structure and whether it is profitable. Studying the demand for vertically farmed products and consumers' willingness to pay a premium will help identify measures to improve market prospects. Government policy and tools to facilitate the growth of the sector can help to understand what measures the German government might take to achieve policy objectives such as reducing emissions or improving water use efficiency.

This paper provides an overview of what is required for conventional and vertical farming through existing literature on water, land and energy use in order to compare the environmental impact of the two farming options and establish a basis for comparison on these parameters. Some studies compare the yield per area, water use and energy consumption of vertical farms. The 2015 study "Comparison of Land, Water, and Energy Requirements of Lettuce Grown Using Hydroponic vs. Conventional Agricultural Methods" by Barbosa et al provides a clear overview of some of the inputs, such as energy, required for lettuce production in traditional and hydroponic vertical farms. A questionnaire will be developed and analyzed to determine the extent to which consumers want more sustainable products, whether they are willing to pay extra and, if so, how much. The best way to find out what consumers think, what they know, and whether vertical farming can be an alternative to traditional (organic) farming, is to ask them directly. By examining documents published by the government, mainly by the ministry for agriculture, this paper aims to identify the objectives of policymakers, how vertical farming can help achieve them, and what the federal government can do to help the vertical farming sector develop.

Vertical farming versus traditional agriculture

Vertical farming requires much less water than traditional farming, and can yield more than 10 times as much. On the other hand, it requires 90 times more energy, which can significantly increase operating costs (Barbosa et al., 2015). traditional farming is even more dependent on fossil fuels (U.S. Department of Agriculture, 2018) than the electricity grid of many developed countries such as Germany (Statistisches Bundesamt, 2022a), to which vertical farms are connected, so the net positive or negative effect of vertical farms depends on the energy sources of a country's electricity grid.

Neither traditional nor vertical farming are free of risks, both environmental and economic. The high initial investment and operating costs of vertical farms mean that vertically grown produce will be more expensive for consumers (Gupta and Ganapuram, 2019). This could mean that consumers, who agree with the general idea of reducing the environmental impacts of agriculture through vertical farms, may find it difficult to afford a product they want to buy. The environmental impact of the high energy consumption of vertical farms can be reduced by the use of renewable energy sources and national grids, such as Germany's (Rooks, 2022), which increasingly rely on green energy sources, but if a significant proportion of the electricity produced in a country comes from fossil fuels, vertical farms that aim to reduce agriculture's environmental impact are likely to result in the opposite, that is, an increase in agriculture's overall CO_2 emissions.

RESEARCH FINDINGS

Although there was no strong link between age, gender or income and how respondents answered the first three sections of the questionnaire, this information is valuable in its own right. The questionnaire responses showed that there is a relatively strong demand for vertically farmed products among consumers of all ages, genders and incomes.

As shown in Figure 1 below, responses to the first section of the questionnaire () show that most consumers want to include vegetables in their diet. Although more respondents said they did so because of the health benefits, more than half of respondents in all definition groups and almost two-thirds of all respondents said they also cared about the environmental impact. This indicates that consumers are taking into account the effects of their purchasing decisions on third parties, and that a significant number of consumers can be persuaded to buy vertically farmed products.

Figure 1

Responses to the second section of the questionnaire show that 80% of respondents do not know where to buy vertically farmed products (see Figure 2 below). This means that even if demand for vertically farmed products were strong, it would be difficult to reflect this in sales by suppliers of vertically farmed products, as these are not accessible to consumers.

Figure 2

The third section of the questionnaire shows that 95% of respondents would be prepared to pay the same price or more for vertically farmed products as for conventionally farmed organic products (see Figure 3 below). However, only 2% would be prepared to pay 50% more than for conventionally farmed organic products. This means that, although most consumers are reluctant to spend much more than they would on organic products, many consumers can, with convincing arguments, be persuaded to pay a premium for vertically-farmed products, and will not reject them out of hand because of their higher price, but rather factor the reasons for the higher price into their purchasing decision.

Figure 3

A significant number of consumers of different ages, genders and incomes are demanding vertically farmed products and are willing to pay more than conventionally farmed organic products, but these consumers don't have access to what they're asking for. Most consumers don't buy vertically-farmed products because they don't want to, or because they're too expensive for them; they simply can't buy them because they don't know that a vertically-farmed outlet exists. However, even if many consumers are willing to pay the same price as for organic products, or even 20% more, this does not guarantee the economic viability of vertical farms, given the significant increase in costs compared to traditional and organic farms, which could also explain the lack of accessibility of vertical farming outlets. To meet consumer demand and price expectations, the cost gap between vertical farms and traditional organic farms is currently still too wide.

The Role of Government

The German government has made climate change, food security and the rational use of water major policy objectives for the agricultural sector. The Ministry of Nutrition and Agriculture has set ambitious targets for reducing greenhouse gas emissions, increasing the share of organic produce and improving biodiversity in local ecosystems (Bundesministerium für Ernährung & Landwirtschaft, 2022). Vertical farming can contribute to achieving these goals, and the government could create a more favorable market environment for this industry by implementing several policies.

The government already offers low-interest loans to innovative companies that meet its objectives through the Credit Institute for Reconstruction (KfW, n.d.). This institute could specifically target the vertical farming sector and offer R&D funding as well as low-interest loans for farms that can produce all year round. Labels can also help consumers better understand products and trust their suppliers. The government could create a label to help consumers identify vertically farmed products, with a standard on water-use efficiency and growing conditions that many vertical farms can meet. Finally, the government could consider abolishing or reducing VAT on vertically farmed products to reduce costs for consumers.

Such policies could incentivize the vertical farming sector to play a more active role in achieving policy objectives such as transitioning to renewable energy sources, reducing CO2 emissions, producing fresh vegetables all year round or improving water use efficiency. Given that consumers are already familiar with vertical farming and have expressed a desire to buy it, a new label could increase the visibility of vertically farmed products and help consumers find the product they are looking for. VAT exemption or reduction could also encourage consumers to buy more vertically farmed products, stimulating growth in the sector.

CONCLUSION

Although vertical farms are unlikely to replace most traditional farms, they have an important role to play in the future of agriculture. This study looked at the growing effects of climate change and the increasing demand for food due to population growth, which is likely to lead to an unstable situation on world food markets. The study revealed that most consumers are already aware of vertical farming, are informed of the benefits it can bring, and are therefore willing to pay a premium for vertically farmed products. Analysis of the questionnaire also showed that consumers do not perceive vertically farmed products as being available to them. This is probably due to the high cost of vertically farmed products, which makes it difficult for companies to set prices that are competitive with traditionally farmed products. The German government could include vertical farming in policies to reduce industry costs, but has not done so to date.

BIBLIOGRAPHY

1. Barbosa, G., Gadelha, F., Kublik, N., Proctor, A., Reichelm, L., Weissinger, E., Wohlleb, G. and Halden, R. (2015). Comparison of Land, Water, and Energy Requirements of Lettuce Grown Using Hydroponic vs. Conventional Agricultural Methods. *International Journal of Environmental Research and Public Health*, [online] 12(6), pp.6879–6891. doi:https://doi.org/10.3390/ijerph120606879.
2. Bundesministerium für Ernährung und Landwirtschaft (2022b). *Globale Ernährungssicherung*. [online] BMEL. Available at: https://www.bmel.de/DE/themen/internationales/agenda-2030/globale-ernaehrungssicherung.html [Accessed 22 Nov. 2022].
3. Ebrahmnejad, R. (2020). *Farming to save the Environment*. [online] Association for Vertical Farming. Available at: https://vertical-farming.net/blog/2020/11/23/farming-to-save-the-environment/ [Accessed 15 Aug. 2022].
4. Emergen Research (2022). *Vertical Farming Market, by System (Hydroponics, Aeroponics,*

Aquaponics), by Type (Aggregate System, Liquid System) by Structure (Building-based, Shipping Container-based), by Equipment, and by Region Forecast to 2030. Surrey: Emergen Research.
5. États-Unis. National Intelligence Council (2012). *Global trends 2030 : alternative worlds*. Washington (D.C.): Government Printing Office.
6. European Environment Agency (2015). *Agriculture and Climate Change*. [online] European Environment Agency. Available at: https://www.eea.europa.eu/signals/signals-2015/articles/agriculture-and-climate-change.
7. Gupta, M. and Ganapuram, S. (2019). *VERTICAL FARMING USING INFORMATION AND COMMUNICATION TECHNOLOGIES*. [online] pp.3–7. Available at: https://www.infosys.com/industries/agriculture/insights/documents/vertical-farming-information-communication.pdf [Accessed 10 Oct. 2022].
8. iFarm (2021). *Vertical Farms vs Greenhouses – The First Consideration: Location*. [online] ifarm.fi. Available at: https://ifarm.fi/blog/2021/02/vertical-farms-vs-greenhouses [Accessed 26 Sep. 2022].
9. KfW (n.d.). *KfW – Responsible banking | KfW*. [online] www.kfw.de. Available at: https://www.kfw.de/About-KfW/ [Accessed 24 Nov. 2022].
10. Mathis, W. and Gillespie, T. (2022). *Bloomberg - Are You a robot?* [online] www.bloomberg.com. Available at: https://www.bloomberg.com/news/articles/2022-08-26/german-power-rises-to-record-800-euros-in-latest-inflation-boost?leadSource=uverify%20wall [Accessed 26 Sep. 2022].
11. McDonald, J. (2022). *Vertical Farms Have the vision, but Do They Have the energy?* [online] Emerging Tech Brew. Available at: https://www.emergingtechbrew.com/stories/2022/04/21/vertical-farms-have-the-vision-but-do-they-have-the-energy [Accessed 26 Sep. 2022].
12. Rooks, T. (2022). *Germany Gets Solar Power Boost amid Energy Crisis | DW | 08.08.2022*. [online] dw.com. Available at: https://www.dw.com/en/photovoltaic-solar-panel-energy-can-germany-regain-its-solar-power-crown/a-62704103 [Accessed 17 Oct. 2022].
13. Rosenbach, M. (2019). *Ultra-Locally Grown: Urban Farming Takes off in Germany*. [online] Spiegel Online. Available at: https://www.spiegel.de/international/business/growth-of-urban-farming-in-germany-a-1284485.html [Accessed 2 Dec. 2019].
14. Statistisches Bundesamt (2022a). *Bruttostromerzeugung in Deutschland*. [online] Statistisches Bundesamt. Available at: https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Energie/Erzeugung/Tabellen/bruttostromerzeugung.html [Accessed 10 Oct. 2022].
15. Tasgal, P. (2019). *The Economics of Local Vertical & Greenhouse Farming Are Getting Competitive*. [online] *AgFunder News*. AgFunder News. Available at: https://agfundernews.com/the-economics-of-local-vertical-and-greenhouse-farming-are-getting-competitive [Accessed 26 Sep. 2022].
16. U.S. Department of Agriculture (2018). *Energy Consumption in Agriculture Increased in 2016, Driven Mainly by Diesel and Fertilizer Use*. [online] www.ers.usda.gov. Available at: https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=87964.

Felix Theodor Brühl, BBA, is a current MBA student at EU Business School, Munich campus.
Antonia Koumproglou, FHEA, MCMI is a PhD Candidate in Education, University of East Anglia, and a lecturer in management at EU Business School, Online campus.

“We have found a method of creating an order of human co–operation which far exceeds the limits of our knowledge. We are led to do things by circumstances of which we are largely unaware. We do not know the needs which we satisfy, nor do we know the sources of the things which we get. We stand in an enormous framework into which we fit ourselves by obeying certain rules of conduct that we have never made and never understood, but which have their reason”

Friedrich Hayek

euruni.edu

Barcelona
Diagonal Campus:
Diagonal 648 bis
08017 Barcelona
Spain

Ganduxer Campus:
Ganduxer 70
08021 Barcelona
Spain

T +34 93 201 81 71
F +34 93 201 79 35
info.bcn@euruni.edu

Digital
T +34 93 201 81 24
info.dgtl@euruni.edu

Geneva
Rue Kléberg 6
1201 Geneva
Switzerland
T +41 22 779 26 71
F +41 22 779 26 73
info.gva@euruni.edu

Munich
Theresienhöhe 28
80339 Munich
Germany
T +49 89 5502 9595
F +49 89 5502 9504
info.muc@eumunich.com

SCAN FOR INFORMATION

FIND US ON

@EU_Business_School
EUBusinessSchool
@EU_group
EU Business School
euruni.edu/blog
euruni.edu/youtube
eu_business_school

VALIDATING & ACCREDITING PARTNERS

UCAM Universidad Católica de Murcia
University of Derby
London Metropolitan University
DBS Dublin Business School

MEMBER OF

OMNES Education