CHAPTER I

INTRODUCTION

1.1 Background

In today's world, society is heavily dependent on technology to the point that it would be incredibly challenging, if not impossible, to carry out their daily lives without it. From the moment we wake up to our phone alarms, to navigating through the day with the assistance of navigation apps, communicating with friends through social media, and then unwinding in the evening with on-demand streaming services, our society is intricately connected with technology. Furthermore, in addition to facilitating society's daily lives, the continued advancement of technology has profoundly impacted various aspects of societal infrastructure and services as well like transportation, telemedicine applications, digital payment systems, and e-learning platforms. From the example above, we can see that society's dependence on technology has manifested into not only the efficiency that it can afford but also the profound transformation it makes on both the societal structures and individual behaviors.

Throughout history, technology has been a driving force in shaping human civilization.[1] From the creation of wheels and the utilization of fires to the creation of complex machinery and the emergence of digitalization through the internet, technological advancements have continuously moved civilization forward, and with it, the shaping of the course of human progress. In addition, the development

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[1] "The Evolution of Technology: How It Has Transformed Human Habits", Kidi, accessed October 10, 2023,
https://kidi.co.id/article/detail/?article_id=15#:~:text=The%20invention%20of%20the%20personal

of technology has often been intertwined to address pressing challenges, improving efficiency, and enhancing productivity. This idea is very evident in the process of the Industrial Revolution.

The First Industrial Revolution, which started in England around 1750–1760 and lasted until sometime between 1820 and 1840, marked a significant milestone in the history of technological advancement and societal transformation as introduced innovations such as textile manufacturing and steam-powered machinery which led to a reduction of manual labor roles and agrarian practices for economic production as major companies preferred the use of machinery in their manufacturing processes.[2]

As society continued to progress, both machinery and technologies continued to advance as well. This progression then led to The Second Industrial Revolution, in the late 19th and 20th centuries, which was known as the Technological Revolution era due to its innovation of electrical power and the revolution of telephones. These revolutions fundamentally changed the way people lived and worked,[3] as they marked the socioeconomic transition from an agricultural and handicraft-based economy to one that is dominated by industry and machine manufacturing.[4]

[2] "Industrial Revolution", Encyclopedia Britannica, accessed October 10, 2023, https://www.britannica.com/event/Industrial-Revolution.

[3] Lena Ellitan. "Competing in the Era of Industrial Revolution 4.0 and Society 5.0.", *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship* 10, no. 1, https://doi.org/10.30588/jmp.v10i1.657.

[4] "Industrial Revolution | Definition, History, Dates, Summary, & Facts", Britannica, accessed October 10, 2023, https://www.britannica.com/money/topic/Industrial-Revolution.

This transition was further fueled by the Third Industrial Revolution, often referred to as the Digital Revolution Era, in the late 20th century until the early 21st century. This era brought a new era of human progress and possibility, marked by the integration of electronics and information technology to automate production processes.[5] During this period, there was a rapid shift from traditional industries into a digital economy, driven by the introduction of the internet, the widespread adoption of personal computers, and digital communication technologies. These innovations changed not only the industry but also society as the integration of computing, telecommunications, and media technologies created the foundation for an interconnected digital ecosystem. This era then ushered in the era of the information age, granting society access to a wide array of global information and knowledge in previously unimaginable ways.

One significant change in the period is the way society communicates.[6] Through the rise of digital and online communication platforms like Facebook and Instagram, it has revolutionized the way people exchange news, videos, and messages across the globe in real time. Thus, breaking down barriers and enabling instant, global connectivity. Furthermore, this revolution has also brought forth the rise of the digital economy through the emergence of e-commerce and online marketplaces. These platforms have revolutionized how goods and services are

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[5] Min Xu, Jeanne M. David, and Suk Hi Kim, "The Fourth Industrial Revolution: Opportunities and Challenges". *International Journal of Financial Research* 9, no. 2, https://doi.org/10.5430/ijfr.v9n2p90.

[6] "Is Society Moving in the Right Direction with Technology Rapidly Taking over the World?", Forbes, accessed October 23, 2023, https://www.forbes.com/sites/andrealoubier/2021/06/01/is-society-moving-in-the-right-direction-with-technology-rapidly-taking-over-the-world/?sh=3e8d7dba7c09.

brought, sold, and consumed which offer consumers unparalleled convenience and choice while enabling businesses to effortlessly access global markets.

As the industry became more integrated with the internet, the technological landscape and society continued to grow and innovate into what is now called the era of the Fourth Industrial Revolution, often referred to as Industry 4.0. Backed by the information and data that were being shared and stored online across the internet during the Third Industrial Revolution, this era has taken a step further in its internet integration into society and its technological development with the introduction of its "smart" devices such as smartphones and smartwatches.[7] Driven by disruptive trends including the rise of data and connectivity, analytics, human-machine interaction, and improvements in robotics.[8] This technological convergence has further blurred the lines between the physical, digital, and biological realms, ushering in an era of unparalleled disruption and opportunity.

Furthermore, the addition of the Internet of Things (IoT) has further transformed the world economic landscape,[9] as companies integrate the Internet into their core business processes to attract new customers and monitor their evolving interest.[10] These actions often involve the creation of applications and

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[7] Fonseca, and Luis Migues, "Industry 4.0 and the digital society: Concepts, dimensions and envisioned benefits", *Proceedings of the International Conference on Business Excellence*, https://doi.org/10.2478/picbe-2018-0034.

[8] "What Is Industry 4.0 and the Fourth Industrial Revolution?", McKinsey & Company, accessed on August 17, 2022, https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir.

[9] Rabeh Morrar, and Husam Arman, "The Fourth Industrial Revolution (Industry 4.0): A Social Innovation Perspective", *Technology Innovation Management Review* 7, no. 11 (November): 12–20, https://doi.org/10.22215/timreview/1117.

[10] "What Personal Data Do Companies Track?", SAP, accessed August 3, 2022, https://www.sap.com/resources/what-is-digital-transformation.

websites that offer convenient ways for people to complete tasks such as shopping or travel, which require users to input personal information into the company's database. This information, including identity-related data such as your name, gender, and Social Security number, as well as device-related information like IP addresses and device IDs,[11] is then used by companies to create customer profiles and gain insights into their preferences and interests which would allow them to push targeted products and offers to their customers.

With more and more daily activities being conducted online, the need for data storage has increased as society needs a digital space for them to store and manage their online files. This need has then led to the rise of cloud computing. Cloud computing, an on-demand service that allows users to access and store data securely on remote servers via the internet,[12] has become essential in modern society. While public cloud computing services offered by companies like Google, Amazon, and Microsoft provide convenient and affordable options for individuals and businesses, they also present data security risks due to the large quantity of user data stored on remote servers. As businesses and individuals increasingly rely on cloud-based applications for data storage and management, addressing these security concerns becomes paramount in ensuring data privacy in the digital age.

With the present dangers of our data being leaked or exploited, it does raise the question of how much the matter is worth. At its core, the ability to control

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[11] SAP, "What Personal Data Do Companies Track?".
[12] ´M. Supriyanto Rumetna, "Pemanfaatan Cloud Computing pada dunia bisnis: studi literatur*", Jurnal Teknologi Informasi dan Ilmu Komputer (JTIIK).* Vol.5, No.3, https://doi.org/10.25126/jtiik.201853595.

personal information or data about oneself that might have been made public is what the right to privacy is about. But, as we delve deeper, it is highlighted that the right to privacy is regarded as a fundamental human right as the law has been stated in a few international conventions such as Article 12 of the Universal Declaration of Human Rights (UDHR) and Article 17 of the International Covenant on Civil and Political Rights (ICCPR) which states: "*No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honor and reputation*".[13]

Seeing how privacy is both a necessity and a fundamental right, one may argue that its importance cannot be overstated. As we use the internet, a vast repository of personal information is shared across the web and so protection becomes crucial as without it then it would make us vulnerable to certain threats such as fraud, identity theft, data breaches, and other illegal access to or disclosure of private data.[14] Given this, it may be argued that every firm that collects and uses their customer's personal data would then have an ethical and legal obligation to safeguard such data.

Although many actors are aware of the significance of protecting personal data, it is unfortunate that adherence to this principle is not universal. Corporations have long been monetizing data, with the industry projected to reach a market size

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[13] "Universal Declaration of Human Rights", United Nations, accessed August 30, 2024, https://www.un.org/en/about-us/universal-declaration-of-human-rights#:~=Article%2012.

[14] "Data Breaches and GDPR", IT Governance UK, accessed August 3, 2024, https://www.itgovernance.co.uk/data-breachs.

of \$11.83 billion in 2032.[15] However, this practice often involves breaches of data privacy laws. For instance, Meta (formerly Facebook) was fined €390 million for attempting to bypass consent requirements for online advertisements and tracking, violating the principles regulated under the European Union General Data Protection (GDPR). According to the Irish Data Protection Commission (DPC), Meta illegally coerced consent from its users on Facebook and Instagram by including a consent clause in their terms and conditions that prohibited users from using both platforms if they did not agree to have their data used for targeted advertisements.[16] Similarly, CRITEO (a french advertising giant) was fined €40 Million in 2018 for failing to provide user consent to have their data being used for targeted advertising.[17]

As we can see, data has evolved into an invaluable resource that transcends national boundaries and impacts every aspect of contemporary society. As of 2024, there have been over 30 billion known records of data breaches and cyber-attacks globally.[18] The need for comprehensive data privacy regulation is clear and is further emphasized by the widespread occurrence of data leaks, which not only compromise individual online data but also pose threats to national security. For instance, in 2015, the Swedish Government experienced a significant data leak due

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[15] "Data Monetization Market: Value, Size & Share", Fortune Business Insight, accessed August 3, 2022, https://www.fortunebusinessinsights.com/data-monetization-market-106480.

[16] Chris Vallance, "Meta Fined €390m over Use of Data for Targeted Ads." *BBC News*, January 5, 2023, https://www.bbc.com/news/technology-64153383.

[17] "Adtech giant Criteo hit with revised €40M fine by French data privacy body over GDPR breaches", *Tech Crunch*, September 5, 2023, https://techcrunch.com/2023/06/22/adtech-giant-criteo-his-with-revised-e40m-fine-by-french-data-privacy-body-over-gdpr-breaches/.

[18] "Global Data Breaches and Cyber Attacks in 2024", IT Governance UK, accessed February 5, 2024, https://www.itgovernance.co.uk/blog/global-data-breaches-and-cyber-attacks-in-2024.

to outsourcing the management of its vehicle registration database to IBM Cloud, one of the major public cloud computing providers, which exposes confidential data on military personnel, defense plans, and witness protection details.[19] Similarly, in the U.S., an incorrectly configured database in 2015 had exposed the data of over 190 million voters which include names, addresses, contact information, and party affiliation.[20]

It can be seen from both cases how fragile personal data is on the internet, and how the government manages data in both examples shows that the governmental role has been filled with negligence in managing citizen's data and ensuring data security. The lack of comprehensive data privacy regulation has left individuals vulnerable in the digital world. In response, many countries and international organizations have adopted data protection regulations, reflecting the global concern for data privacy.

This concern is particularly evident in the European Union, where data privacy is enshrined as a fundamental right under Article 8 of the EU Fundamental Rights Charter (2000). To address this issue, GDPR was introduced to help regulate data privacy and protection within the EU. Recognizing the importance of evaluating the evolution of EU's implementation on data privacy, which then culminated in the establishment of GDPR, this thesis aims to raise the topic:

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[19] "Sweden Data Leak 'a Disaster', Says PM," *BBC News*, sec. Technology, July 24, 2017, https://www.bbc.com/news/technology-40705473.

[20] "Database of 191 Million U.S. Voters Exposed on Internet: Researcher", *Reuters*, sec. Internet News, December 29, 2015, https://www.reuters.com/article/us-usa-voters-breach-idUSKBN0UB1E020151229.

"ANALYZING THE EUROPEAN UNION GENERAL DATA PROTECTION REGULATION 2018-2023".

1.2 Research Question

According to the understanding of data privacy is recognized as a part of universal human rights that must be protected at all costs, especially within the EU, as many European countries have long found the importance of the establishment of data protection law. Therefore, this research sees that there is an importance in studying the evolutional process for data protection within the EU.

In explaining this research, this researcher includes a selected timeframe of 2018–2023, to observe the impact of GDPR. By analyzing this specific timeframe, the research will explore the establishment of GDPR, assess its effectiveness, and evaluate its implications on data privacy in the EU, considering both internal factors and external disruptions such as the global pandemic. The chosen period enables a thorough examination of the regulation's adaptability and the broader context of digital privacy in an era of rapid technological and societal change.

Building on this timeline, this researcher would like to raise the following research questions:

1. How did the European Union establish GDPR?

2. What are the implications of the implementation of GDPR 2018-2023?

1.3 Research Objective

Following the research questions and the making of this research, this research seeks to accomplish certain key objectives:

1. To describe the creation and enactment of GDPR and its impact on the diplomatic relations and regulatory harmonization in the EU and non-EU countries.

2. To depict how the implementation of GDPR could influence global governance structures regarding data protection and privacy.

1.4 Research Significance

The significance of this study lies in its potential to shed light on the complex relationship between data privacy and international relations. As GDPR becomes the benchmark of data protection, understanding its impact is crucial for governments, businesses, and individuals alike. Furthermore, this research has the potential to provide valuable insights into the future of global data governance, regulatory cooperation, and the broader framework of international relations by examining the diplomatic and economic ramifications of GDPR.

1.5 Structure of Thesis

This research will be divided into five chapters. The first chapter would present the introduction of the issues, involving actors, and the relevance of the research in International Relations. Later, this chapter would also present this paper's research questions, objectives, and significance of the research which would then become the guide for the discussions in the following chapters.

The second chapter will focus on the theoretical framework of the research as it will incorporate literature reviews, theories, and concepts that will be used throughout the research. The literature review would focus on scholarly article as the foundation for describing and analyzing the responses to the research questions that had been raised. This chapter would be divided into three

Additionally, this segment would also include one international relations theory and several concepts to help complement the research findings.

The third chapter is specifically designated to explore the research methodology that is being used in this research. It would detail the research approach, data collection techniques, and data analysis techniques.

The fourth chapter explains the research as it focuses on the analysis to address the research questions. Preliminary findings will also be presented and analyzed by using the established theories and concepts while systematically connecting the significant data findings.

The fifth chapter will include the research's conclusion and recommendations for further research.