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Understanding Digital Sovereignty: A Textual Analysis Of EU Policy Documents

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UNDERSTANDING DIGITAL SOVEREIGNTY: A TEXTUAL ANALYSIS OF EU POLICY DOCUMENTS

TREO Paper

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Abstract

The rapid growth of digital transformations globally has compelled European policymakers to discuss the possibility of a "Digitally Sovereign" model of the Internet. However, both policymakers and researchers have yet to solidify the concept behind such an ecosystem. While recent policies on digital issues often center around "Digital Sovereignty," there remains a lack of clear distinction between this term and similar concepts such as "Data Sovereignty" and "Technological Sovereignty". This extended abstract proposes a thorough textual analysis of EU policy documents to grasp the values and principles behind Digital Sovereignty.

Keywords: Digital Sovereignty, Digital Policy, Data Policy, Internet.

1 Introduction

The rapid global digital transformation has heightened discussions surrounding **Digital Sovereignty** among policymakers and businesses, driven by international developments and multidimensional geopolitical challenges. Internet governance conflicts and increased censorship for national cybersecurity underline the need for transnational institutions to foster global communication-information policy governance" (Mueller, 2010). Efforts to formulate policies in this realm have intensified various concepts of sovereignty in the digital ecosystem, a trend that began in the late twentieth century (Grant, 1983). Amongst them is the notion of "Digital Sovereignty" which resurfaced following key events including the U.S. Patriot Act (2001), the Snowden Disclosure (2013), Brexit (2016), the U.S. Cloud Act (2018), and the COVID-19 pandemic.

A Digitally Sovereign European Union entails its capacity to exert varying levels of authority and control over its digital sphere. At the 14th Internet Governance Forum (2019), former German chancellor Angela Merkel stated that "Digital Sovereignty does not mean protectionism or the dictates of government agencies as to what information can be disseminated, but rather describes the ability to shape the digital transformation in a self-determined manner, whether as an individual [...] or as a society" (Merkel, 2019). The concept was crystallized in the European Commission's Communications on the EU's cybersecurity strategy for the Digital Decade as well as on Shaping Europe's Digital Future policies. They emphasize that behavior in the digital realm should adhere to societal values and legal accountability akin to the physical world, enabling fundamental rights of all entities, regardless of territorial boundaries or geopolitical

arrangements.

2   Background

With the swift integration of digital technologies across all economic sectors, Europe faces mounting security threats and digital risks affecting the global order concerning internet-based products, platforms, and services. Recently, the narrative of strategic autonomy has gained traction in EU policy discussions to combat digital foreign interference and reduce reliance on foreign governments, digital platforms, and infrastructures (Jansen et al., 2023). Escalating cybercrime and cyber-attacks have elevated concerns about cyber warfare, prompting governments to safeguard their sovereignty in the global digital landscape. Studies exploring such concepts indicate Data Sovereignty being discussed more often in the academic literature and EU policies (Hellmeier and Scherenberg, 2023). While the term *Data Sovereignty* has acquired ideas of confidentiality and self-determination of data from the US Patriot Act back in 2001 (Hallinan, Ronald, and Paul, 2022), the term *Digital Sovereignty* is highly influenced by the US Cloud Act (2019) with the inclusion of different strategic requirement such as integrity, transparency, interoperability and resilience in the digital ecosystem. This study seeks to offer businesses and organizations insights into the values EU policies align with *Digital Sovereignty* with the help of the following Research Question (RQ):

What values are associated with "Digital Sovereignty" in EU policy documents?

3   Research Design

The political and territorial inclination of the concept of *Digital Sovereignty* has led researchers to either deflect from using this concept in literature or mix it with other similar concepts. Our research mainly focuses on exploring EU policy documents discussing on *Digital Sovereignty*.
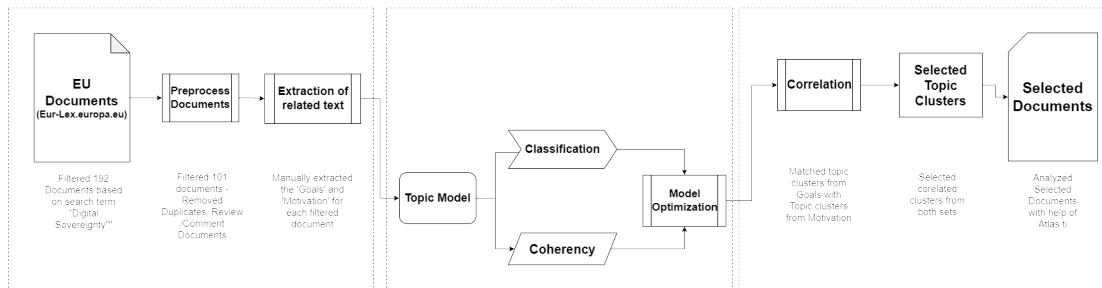

Figure 1.   EU Policy Review Methodology

As depicted in Figure 1, we gathered 192 EU policy documents by searching for "Digital Sovereignty" (case-insensitive) on the platform "eur-lex.europa.eu," which hosts legislative and policy documents spanning all sectors. Next, we refined the results by eliminating duplicates and comments, selecting unique policy documents for manual extraction of topic, year, category, goals, and motivation. Finally, we utilized the topic modeling library 'BERTopic' on the dataset to generate document clusters based on their goals. Finally, we examine the documents from selected clusters extensively using Atlas.ti to comprehend the context of *Digital Sovereignty* and the associated values in EU policy documents.

4   Discussion

The geopolitical and geo-economic stance emphasizes private sector involvement in "rowing" and "steering" through market-based approaches. This relies heavily on trust relationships among corporations sharing values and interests (Carrapico and Farrand, 2021). However, there exists a gap in collaboration for developing and deploying a more secure and resilient digital market, an issue that EU addresses through

the concept of *Digital Sovereignty*.

Regulations like NIS2 aim to strengthen cybersecurity capabilities and resilience within the EU, while the Interoperable Europe Act complements NIS2 by regulating how European organizations and administrations collaborate and secure information exchange across borders. From mandating data protection and security measures to ensuring cyber resilience and cross-border data flow compliance, EU policies strive to uphold the sovereignty of European societies and citizens in the digital domain.

References

Carrapico, H. and B. Farrand (2021). "When Trust Fades, Facebook Is No Longer a Friend: Shifting Privatisation Dynamics in the Context of Cybersecurity as a Result of Disinformation, Populism and Political Uncertainty." URL: https://doi.org/10.1111/jcms.13175.

Grant, P. (1983). "Technological Sovereignty: Forgotten factor in the Hi-Tech Razzamatazz." URL: https://doi.org/10.1080/08109028308628930.

Hallinan, D., Ronald, and Paul (Feb. 2022). *Data Protection and Privacy*. URL: https://www.bloomsbury.com/us/data-protection-and-privacy-volume-14-9781509954513/.

Hellmeier, M. and F. von Scherenberg (2023). "A Delimitation of Data Sovereignty from Digital and Technological Sovereignty." URL: https://aisel.aisnet.org/ecis2023_rp/306.

Jansen, B., Natalia, Dennis, Michel, Kevin, and Tobias (Oct. 2023). "Pushing boundaries: An empirical view on the digital sovereignty of six governments in the midst of geopolitical tensions." URL: https://linkinghub.elsevier.com/retrieve/pii/S0740624X2300062X.

Merkel, A. (Nov. 2019). "Speech by Federal Chancellor Dr Angela Merkel Opening the 14th Annual Meeting of the Internet Governance Forum in Berlin on 26 November 2019." URL: https://www.intgovforum.org/en/content/german-chancellors-remarks-to-the-igf-2019.

Mueller, M. L. (Sept. 2010). *Networks and States: The Global Politics of Internet Governance*. URL: https://doi.org/10.7551/mitpress/9780262014595.001.0001.