

**RIGHT TO PRIVACY AND DATA PROTECTION IN THE DIGITAL AGE:
IMPLICATIONS FOR ECONOMIC FREEDOM**

Akshaya Kishor

Research Scholar & Assistant Professor
Faculty of Law, Manipal University Jaipur, India

Dr Govind Yadav (Corresponding Author)

Assistant Professor
Faculty of Law, Manipal University Jaipur, India

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Abstract

In the age of digital technology, there has been an exponential growth that has reshaped the global markets and governance systems across countries by harnessing personal data as a key economic asset. Digital economies have turned out to be a blessing in matters of innovation, efficiency, and growth, but a curse in terms of privacy and protection of data, as some of the important concerns. This paper is significant in helping understand the interlinkage between the right to privacy and economic freedom and examining the efficiency of the regulatory regime in relation to economic activity. A qualitative and analytical approach coupled with a conceptual empirical model is used in this paper. The regulatory regimes under consideration in this paper are GDPR and the Digital Personal Data Protection Act, 2023, in Europe and India, respectively. It has been shown how the data protection law regime has helped foster trust among consumers, minimise information asymmetries, and encourage economic participation holistically. However, this new legal regime does not escape legal hurdles. The issue of innovation, especially in small and medium enterprises, seems to pose a threat to innovation. In light of the above, this paper seeks to provide a balanced approach towards regulation, one that would promote privacy protection and economic flexibility simultaneously. Privacy and economic freedom are complementary to each other and not two opposite poles, and the need of the hour is a governance framework that maintains an ideal equilibrium in the ever-developing digital economies.

Keywords

Right to Privacy, Data Protection, Economic Freedom, Digital Economy, GDPR, DPDP Act

1. Introduction

Over the past two decades, there has been a fast-paced advancement and development of digital technologies that have fundamentally altered the face and functioning of the global economies. Today, a plethora of tools and instruments has proliferated in the age of the internet, like mobile computing, artificial intelligence, cloud infrastructure and big data analytics. They have brought unprecedented changes in the field of data generation, its collection and processing, making personal data the most important economic resource. The personal data has become so crucial

in the present landscape that it has been coined as the “new oil” of innovation and competition in the digital economy (World Bank,2021).

The digital markets are increasingly relying on data-driven models to boost the efficiency of operations, provide more personalised services to consumers and enhance decision-making capacity. There has been a drastic shift from the traditional economic paradigm. Today, the algorithm-based digital markets have completely altered the traditional economic setup. But this development of digital markets put the personal data of consumers at great risk. Harnessing personal data for the growth and development of the digital market has exhibited bounds of promise, but the rapid dependency on personal data has given rise to profound legal concerns related to the privacy of the individual and their autonomy. Privacy has always been an essential element of an efficient democracy since the dawn of time. But now it finds itself in a delicate situation due to incessant data monitoring and digital connectivity. In the famous and groundbreaking case of Justice K.S. Puttaswamy vs Union of India (2017), where the right to privacy was declared a fundamental right in the Indian judicial system, the domestic law was brought into conformity with international human rights laws (Supreme Court of India, 2017).

Similarly, another key international framework that has set stringent guidelines for data protection, placing more emphasis on consent and transparency, is the General Data Protection Regulation of the European Union (European Union, 2016). In the modern economy, the fundamental principle of economic freedom remains the cornerstone of economic systems and can be defined as the ability of individuals and corporations to conduct economic activity without being overly regulated. Economic freedom in the digital sphere is placed at the level of ability to access, analyze, and utilize the data. Two complicated legal issues emerge from this – protecting individual privacy and ensuring the unhindered flow of information that is necessary for economic growth. The conflict between privacy rights and economic freedom is complicated further by the rise of algorithm-driven data-driven business models in almost every aspect of the digital economy – e-commerce, financial technology, social media, and other segments. Businesses spend a lot of resources on building instruments for analysis of customer data, targeting possible clients, and generating valuable data that leads to abuse of personal data, surveillance of customers, and violation of individual autonomy. The term used to describe this process is “surveillance capitalism” by Zuboff (2019).

In addition, the disparity between the data collectors (corporations and governments) and the data providers (individual users who are also data subjects) gives rise to information asymmetry and aggravates the issue. This information asymmetry claims to be beneficial to the digital markets, but in certain situations can also be the cause of the downfall of these markets, as consumers slowly reduce their participation in digital markets due to inadequate privacy protections and a lack of trust. This has been aptly highlighted by Acquisti et al. (2016) as when individuals lack the knowledge of how their data is being collected and used, they might make decisions that can be unfavourable to the long-term interests of the digital players.

Considering the theories of economics, privacy can play the role of an enabler as well as a constrainer. Posner (1981) has advocated the traditional theory of economics that states market efficiency may be largely obstructed due to privacy restrictions that limit access to valuable data. But the contemporary research published by OECD 2020 holds a contrasting finding and suggests that privacy protection fosters economic growth by inculcating trust, reducing

transactional cost and encouraging broader participation in the digital economy. To achieve this, the role of the regulatory framework becomes eminent in balancing the relationship between privacy and economic freedom and reinstating them as complementary forces rather than opposing ones. When balanced effectively, then only the privacy of the individual and sustainable development of the digital economy can be achieved hand in hand (Voigt & von dem Bussche, 2017).

Technological innovation is yet another important facet of the privacy-economy relationship, where the advanced privacy-enhancing technologies (PETs), e.g., differential privacy, encryption, digital signature, etc., provide new opportunities for merging privacy with data utilisation. They ensure the utilisation of data for economic benefit without putting at risk the privacy rights of an individual, and support both (Solove, 2021). But this has not yet emerged as a viable solution because many of the digital economies are resourceful enough to deploy these tools. Another issue is the transcendental nature of the data in the digital market as it flows without recognising the barriers of the territorial jurisdiction which makes it difficult to be regulated. Different jurisdictions have different regulatory regimes, which complicate the regulation of cross-border data transfer, trade and international cooperation. For example, Europe has stringent laws related to data privacy, and other jurisdictions are still at a nascent stage of the development of privacy laws. In such a scenario, achieving a harmonious regulation of the issues violating the privacy might still be an unachievable dream. Generally, due to these restrictions, commerce, especially in the digital realm, faces a regulatory uncertainty, and the privacy rights of individuals are also under constant threat.

The world witnessed a sudden boom in reliance on digital platforms for varied walks of life, like education, healthcare, employment, commerce, etc., after the COVID-19 pandemic. This seismic shift forged intensive debates around data governance. It would be an understatement to reflect that such discourses demonstrated the potential of data-driven economies and governance systems, but at the same time, they highlighted the gap and the need to enact robust laws for privacy safeguards.

On this background, the study undertakes the complex relationship between the right to privacy and economic freedom in the digital age. The paper seeks to analyse the impact of the regulatory framework upon economic outcomes, innovation and market participation by adopting a comparative and analytical approach of GDPR and the DPDP Act by relying on insights from economic theory and empirical research.

The central argument of this paper revolves around the fact that an efficient and effective economy can be achieved only by balancing privacy and economic freedom so that they are interdependent on each other rather than acting as conflicting forces.

It becomes all pervasive for the law makers to regulate this balance in the digital market ecosystem as accumulation of data can also lead to the creation of dominant enterprises upturning the free and fair competition in the market. It can lead to firm abusing their dominant position and indulging in anti-competitive practices which can have appreciable adverse effects over the competition.

2. Literature Review

The vast ocean of legal and economic literature has time and again pondered over the complex correlation of privacy and economic freedom, especially in the realm of the digital markets, as they have become increasingly dependent upon the harnessing of personal data of the user. As more and more research and market studies are undertaken, the privacy rights, which were once considered as a hindrance in the development of the economy, are now being understood in the light of a balanced and essential condition for the boost of the digital economy and the growth of trust for the consumer and enhanced market participation. This has ensured the long-term economic sustainability of the digital markets.

Early economic theories and economists had a very different perception of privacy, which was based on efficiency-oriented perspectives. Upholding privacy rights ultimately resulted in restricting the free flow of information, and this could reduce the transparency and impair the decision-making ability and reduce the market ability, as per Posner (1981). Obliging with this theory, it was pertinent to have free flow and access to information to enable certainty and rational behaviour in the market. This theoretical foundation was enough to consider the personal data as an important resource to boost the economy. The same concept is the backbone of the modern-day digital economy.

However, the advancing technology and the rise of algorithm-based data-driven business models have completely revamped the conventional theoretical foundation. Now, privacy is not merely a resource; it is an indistinguishable part of an efficiently functioning, healthy digital market. But there are certain cons to it in terms of the privacy rights of an individual. Acquisti, Taylor, and Wagman (2016) clearly showcased that most of the time, individuals have no idea how their personal information is being collected, processed and monetised. At times, they have no idea that their personal data is extremely valuable. This puts the users at a precarious position, and users give their consent to data sharing practices and algorithms without conceptualising the implications of such decisions, often affecting their privacy and long-term interests.

This situation gives rise to information asymmetry, which in the long run is unfavourable to the effectiveness of the digital markets. The large-scale data collection denotes “surveillance capitalism”, which is rightly expressed by Zuboff (2019), where firms extensively use technology to harness the personal data of users, replicate it and exploit it as their core business models. When users realise that their data is being exploited and monetised for the profit making if the firms, they lose their trust in the digital markets and they become sceptical of the functioning. They start limiting their engagement with online services and reducing their participation in the digital economy, which is a financial loss to the online platforms. This brings to light the crucial challenge of the right to maintain individual privacy and autonomy, and balance it with the fairness and market concentration. The drawbacks of this data regime are not just limited to this; the unchecked accumulation of data leads to the creation of dominant firms that usurp market power and pose complex competitive challenges by resorting to abuse of dominant behaviour and resorting to anti-competitive practice in the economy, thus hampering the free and fair competition in the market.

Goldfarb and Tucker (2012), through their empirical research, found that privacy restrictions can reduce the effectiveness of targeted advertising by limiting firms’ ability to personalise content. Since targeted advertising remains a key revenue source for many digital businesses,

such limitations may reduce efficiency and slow innovation in certain sectors. This line of scholarship supports the view that excessive regulation may impose costs on firms and constrain economic activity.

OECD (2020), through its market reports, has emphasised the presence of a robust and stringent framework of laws which can enable the economy in the long run and also ensure data governance and protection, hence enhancing the trust and confidence of the consumer by being more transparent, accountable and by providing greater control over personal data. When users feel confident, they participate more in the digital economy, which leads to a more stable economy and sustainable growth.

This observation becomes more pertinent in the context of developing economies, where factors such as digital literacy, institutional capacity, and technological framework play a crucial role in the interplay of privacy laws (World Bank, 2021). If the enforcement mechanism is not robust, the regulations, however stringent they are, remain a toothless tiger. At last, a consensus can be found in the literature that privacy and economic growth are not contradictory forces; rather, they complement each other and should be balanced with thoughtful regulations and adaptive governance models. The correlation between the two cannot be fathomed through the literature, scholarly articles, or economic models. This relationship is far more complex and dynamic and builds a cause-and-effect relationship. Both are interdependent on each other, and poorly framed laws can be detrimental to the social structure as well as the nation's economy. Protecting the right to privacy of an individual nurtures trust and reduces information asymmetry. The lawmakers and policymakers are tasked with the crucial task of framing laws that protect individual rights while providing enough flexibility to encourage and innovate market efficiency. On achieving this balance alone, the digital economies can truly be dynamic in economic terms and remain socially legitimate.

An emerging faction of scholars is also debating an essential issue of data ownership and is pondering the extent to which an individual can claim proprietary ownership over data. Some eminent scholars like Jaron Lanier argue for a model where individuals can treat data as their property and exert more control over it by monetising it as well. The amount of data they use they will be compensated for that and this is known as data labour.

3. Methodology

To explore the intersection of right to privacy, data protection and economic freedom in the digital economy, the paper adopts a qualitative and analytical approach along with a conceptual empirical framework. A need to adopt a mixed methodology is ascertained by the interdisciplinary nature of the paper, ranging from law, economics, and technology, effectively focusing on the normative and functional dimensions of data governance.

3.1 Research Design

This paper employs a research design that is exploratory and explanatory in nature. The study mainly utilises the secondary sources of data rather than the primary sources, which facilitates comparative policy analysis and theoretical modelling. The paper, through the established research design, seeks to explore the impact of privacy laws on the economic outcomes.

There are three main components-

- a. A doctrinal analysis of the legal framework of data protection.
- b. A comparative analysis to examine the laws of the EU and India
- c. A conceptual Economic model to examine the correlation between privacy and economic freedom.

3.2 Academic Literature

The study relies exclusively on secondary data, collected from credible and authoritative sources:

3.3 Legal and Policy Documents

To undertake the study, reliance was placed on secondary sources of data in the form of reputed articles, books, reports and news articles to lay the theoretical foundation of economics and privacy.

3.4 Institutional Reports

Reports from international organisations such as the OECD and World Bank were used to provide macroeconomic and policy insights (OECD, 2020; World Bank, 2021).

3.5 Analytical Framework

The study considers a three-layered analytical framework to examine the research problem.

3.5.1 Legal-Doctrinal Analysis

The foremost framework focuses on the interpretation and explanation of the statutory provisions, judicial precedents and regulatory guidelines. It evaluates:

- Scope of privacy rights
- Nature of consent mechanisms
- Enforcement structures and penalties

The doctrinal method helps establish the normative foundation of privacy laws and their intended economic implications.

3.5.2 Comparative Policy Analysis

The second framework considers a comparative study of different jurisdictions, basically a mix of developed and developing nations, to focus on -

Cross-Jurisdictional Comparison: GDPR (EU) vs. DPDP Act (India)

Dimension	GDPR (EU)	DPDP Act (India)
Regulatory Approach	Rights-based	Hybrid
Enforcement	Strong	Emerging
Compliance Burden	High	Moderate
Economic Impact	Innovation-led trade	Growth-oriented

Figure 4.4 — Developed vs. Developing Economy Regulatory Framework

3.5.3 Thematic Analysis

- Trust and Market Participation
- Innovation and Data Utilisation
- Regulatory Burden
- Information Asymmetry

Thematic analysis helps in analysing outcomes and identifying recurring patterns across different jurisdictions.

3.6 Conceptual Empirical Model

At this juncture, the study introduces a conceptual model of economics to exhibit the correlation between privacy regulation and economic freedom.

The model is defined as:

$$EF = \alpha PP + \beta TL + \gamma IC - \delta RB$$

Where:

EF = Economic Freedom

PP = Privacy Protection

TL = Trust Level

IC = Innovation Capacity

RB = Regulatory Burden

3.6.6 Model Assumptions

- Trust is majorly influenced by the protection of privacy. (OECD, 2020)
- Enhanced trust further boosts participation in the economy and market efficiency

- Privacy-related regulations have the potential to negatively affect market innovation (Goldfarb & Tucker, 2012)
- Innovation is the biggest contributor to economic freedom.

3.6.6 Interpretation

- If PP increases, TL increases, leading to higher EF
- If RB increases excessively, IC decreases, reducing EF.

3.7 Case Study Approach

The study considers certain theoretical findings and illustrative case studies-

- The implementation of GDPR in the European Union Digital Markets
- The evolution of the data governance regime under the DPDP Act in India
- The regulatory responses to increasing Big Data practices.

3.8 Reliability and Validity

To ensure methodological rigour:

- Source Triangulation: Multiple data sources were used to validate findings
- Cross-Verification: Legal provisions and academic interpretations were compared
- Theoretical Consistency: Findings were aligned with established economic theories

3.9 Limitations of the Study

The paper is afflicted with certain academic limitations-

- A. No use of Primary Data- The research relies on secondary data, which creates a gap in empirical data research.
- B. Dynamic Laws: Data Protection laws are still in a nascent stage and dynamic, and are evolving rapidly, which may interfere with the long-term relevance of the research.
- C. Territorial Limits- The paper considers a comparative framework between the EU and India, which creates a research gap as other jurisdictions are not considered.

3.10 Ethical Considerations

- Proper citation of all sources
- Avoidance of plagiarism
- Objective and unbiased analysis

3.11 Scope for Future Methodological Enhancement

This methodology can be further aided by the following future research:

- Conducting quantitative regression analysis using global datasets
- Using survey-based primary data on consumer trust
- Applying panel data models across countries
- Incorporating AI-driven data analytics techniques

4 Results

4.6 Driving force: Privacy

As the privacy norms and statutory norms get enhanced, the consumer feels confident and uses more digital platforms for their daily needs and services.

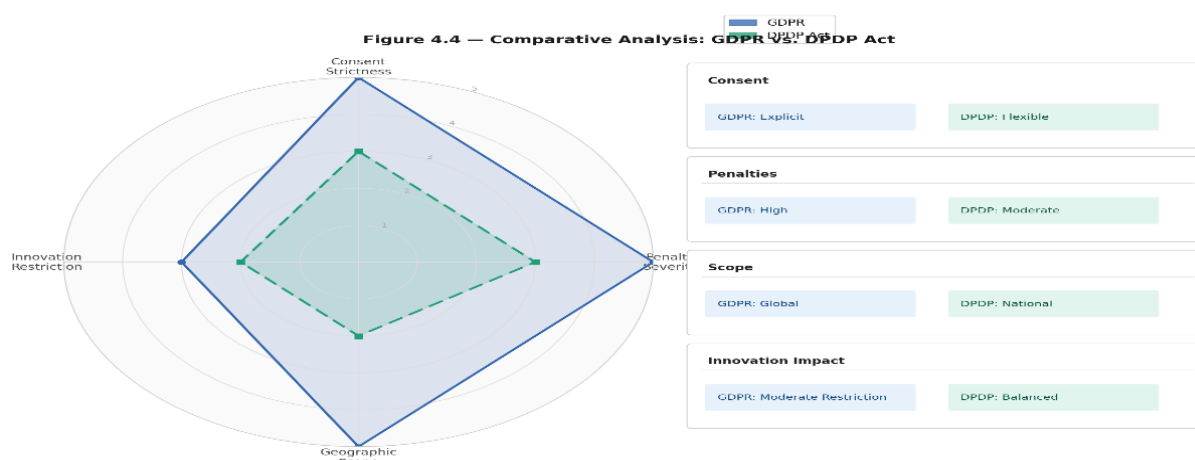
4.7 Burden of Regulation and Cost

In Europe, the GDPR follows strict regulations, which are not always easy for new firms and companies that are not registered in the European Union.

4.8 Data is the new Oil

Technological advances have made data a precious asset; now, each of the developed nations wants to establish data centres, which are required in AI, fintech, banking and other service sectors.

4.9 Comparative Analysis between GDPR & DPDP



This comparative analysis chart suggests the challenges and opportunities.

4.10 Empirical Interpretation

Applying the conceptual model:

- High privacy protection increases trust (+EF)
- Excessive regulatory burden reduces innovation (-EF)

Thus, optimal regulation maximises EF by balancing PP and RB.

5 Discussion

The findings of the paper suggest that privacy regulations and economic freedom are not in contradiction to each other; instead, they complement each other, which fulfills gaps for the development and right based economic system. The free and open economic environment and protection of fundamental rights are the best approaches for a developing nation like India.

5.6 Economic Freedom and Privacy

The well-structured privacy regulations not only protect the right but also enhance trust among the market contributors.

5.7 Regulatory Mechanism

The regulation and regulatory authorities should be flexible and open to the changes that will benefit the market and also help the non-governmental data fiduciary to perform their business in India.

5.8 Digital Age

In the digital age, as technology grows, it opens the door for innovation, but it also comes with risk and issues related to personal rights. Technology makes things easier for the generations to come.

5.9 Recommendations

- Require an advanced framework for AI and data privacy
- Privacy compliance should be framed as per the needs of small and medium businesses.
- Promote cross-jurisdictional data protection laws

6 Conclusion

This study concludes that digital privacy and a liberal economic setup are intertwined in the age of the digital economy. A robust mechanism for digital privacy not only protects individual rights but also acts as a catalyst for a free economy and boosts trust. But if the regulations and rules are framed without a fair implementation policy, it can hamper the mid and low business setups.

An advanced governance model that can follow the middle path, which can reach a balanced approach, that provides a scope for economic advancement as well as the protection of the privacy rights of individuals. Economic sovereignty and privacy regulations are the strength of an advanced economic system; they should be considered as a boon to the governance system, not as a hurdle.

This study determines that:

- Right to privacy must be ensured for economic freedom and certitude.
- Data accessibility and its protection are essential for a developed economy.
- A balanced approach is vital for the free and open market.

- The red tapism and non-regulatory market will both hamper the economic growth of a nation.

The path of the digital revolution of the economy depends on innovation, digital transparency, advancement, and effective governance. The futuristic approach and rights of the individual must be respected and protected.

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