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Legal Foundation of Cross Border Digital Trade: Jurisdiction, Contracts & Data

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Abstract: The impact on technology digital technologies has influenced the way international trade is done. They are facilitating trade in a way that is borderless and almost real-time through e-commerce platforms, cloud computing, digital payment systems and algorithm-based business models. But the rules of the road across the globe have not adjusted to this movement. This contribution focuses on core legal aspects of digital trade in cross-border terms, and does not touch issues of jurisdictional fuzziness, contractual enforceability or data governance. By using the modalities as a template, the article illuminates the loopholes in predictability/legality and trust, which are to be reconceptualized through certain international instruments; including UNCITRAL Model Laws, GDPR and OECD principles. Doctrinally and comparatively it is argued that the classical territorial rules of *lex loci contractus* ("law of the place where the contract is made") and *lex loci solutionis* ("law of the place where performance takes effect") are inappropriate for cyberspace transaction. For businesses and governments the stakes are jurisdictional tussles over where law applies, enforcing contracts online and rival models of protecting data. The paper identifies as sources for the findings of research, the unequal application of UNCITRAL functional equivalence principles, divergences between national privacy laws and data localization measures that undermine cross-border legal uncertainty. The study then concludes with proposals for reforms in mutual recognition agreements, inter-operability frameworks, cooperation on cyber security and aid for capacity building in developing countries. In a single cohesive framework, this article contributes to enhance legal certainty, trust, and fair play in the international digital economy.

Keywords- Cross border digital trade, Jurisdictional challenge, electronic contracts, Data governance.

INTRODUCTION

In the last 20 years digital technologies have combined with global commerce in such a way that it is almost unheard of. Besides the powerhouses like Amazon, Alibaba, and Shopify which make it possible for businesses, especially SMEs, to trade internationally without the need of a physical office or a logistics network in the foreign country, tools like cloud computing, cryptocurrency, and AI-driven

analytics are breaking down the barriers to new markets. The World Trade Organization (2024) states that global e-commerce sales have soared past the US\$6.5 trillion, with a significant share of these sales comprising cross-border digital transactions. On the other hand, this revolution in digital business undermines the very foundations of trade law and raises enormous numbers of economic opportunities. The current (conventional) legal regimes were

designed for physical goods, national borders and customs enforcement. In comparison, digital trade is based on intangible assets, algorithmic intermediaries, and virtual contracts which make it difficult to use the traditional rules of *lex loci contractus* (law of the place of contract formation) and *lex loci solutionis* (law of performance). These rules, which have been considered the pillars of private international law for a long time, are not able to deal with conflicts that arise in borderless digital environments. The time taken for a digital transaction is hardly a few seconds, and it may also involve more than one jurisdiction at the same time. This, in turn, brings with it the fundamental issue of legitimate authority of courts, the determination of law, and enforceability of digital contracts. At the same time, consumers and regulators express concern over data privacy, network security, and fair enforcement of rights. Divergences are further created by the different policies—such as the GDPR for the EU, sectoral self-regulation for the U.S., and localization requirements for developing countries. As well, the upcoming technologies such as blockchain, smart contracts, and AI-based marketplaces are not helping to resolve the issues, but making them worse. It might be hard to identify the jurisdiction, difficult to authenticate the electronic evidence, and uncertain to implement the decisions made in other countries. This paper discusses these fundamental issues, evaluates the existing international frameworks, and suggests reforms aimed at increasing the predictability of the law and trust in cross-border digital trade.

RESEARCH PROBLEM AND SIGNIFICANCE

2.1 Problem Statement

While numerous international efforts have been made, there is still no coherent legal structure that would regulate cross-border digital trade. It is unclear who has jurisdiction and can enforce contracts, and these issues are compounded by differing data protection requirements, all of which hinder the proper functioning of digital market on a global scale. On the one hand, traditional legal principles based on the territorial nature are not suited to the decentralized, pseudonymous Internet and instantaneous conduct of business online. Companies and the regulators are in quandary as they have contradictory duty to protect; consumers had doubt if they do have right protection. Such gaps reduce market efficiency, increase complexity of compliance, and undermine trust in digital transactions.

2.2 Significance of the Study

If we want to enable the continual evolving of the digital economy this gaps must be allowed to be closed. Predictability under business law increases confidence among business, attracts SMEs to cross-border markets and it also secures consumers' rights. The results of the research can serve as a good

motivation for policy makers and international bodies as well as company that are willing to make the best use of the evolving legal environment. The article, in its consideration of jurisdiction, contracts, and data governance as one, demonstrates how legal certainty, digital trust, and regulatory harmonisation are mutually supportive.

3. Objectives of the study

This study's key aims are to:

1. Study the application of jurisdictional and contractual rules to cross-border digital transactions
2. Consider the sufficiency of the relevant existing international instruments
3. To analyse the impact of the data protection and privacy regimes
5. Propose reforms and policy measures.

4. Research Questions

1. In which way could private international law regulations be changed to suit the virtual nature of digital trade?
2. To what extent are current international instruments (UNCITRAL Model Laws, GDPR) adequate for the fulfilment of promises made in electronic contracts?
3. To what extent do variations in national data protection regulations influence the cross-border transactions?
4. Which changes would help to facilitate interoperability, mutual recognition, and trust in global digital governance?

6. Research Gaps

- The discussion of the local legal aspects and the contractual ones has been fragmented.
- There is little empirical research that evaluates how businesses and consumers react to legal uncertainties.
- There is a lack of emphasis on the interaction between data protection regulations and electronic contracts.
- The voices of developing countries are less heard in the discussion of the global digital trade governance.

ANALYSIS AND DISCUSSION

7.1 The Complexity of the Jurisdiction Issue

Digital transactions operate under the influence of multiple jurisdictions at the same time. They experience difficulty in asserting jurisdiction and determining the governing law. The use of cloud servers, content delivery networks, and other remote platforms adds an additional layer of complexity to claims of jurisdiction. Mutual recognition agreements (MRAs) may offer a way to

reduce uncertainties.

7.2 Contract Enforcement

Electronic contracts, e-signatures and smart contracts are challenging some of the long-standing rules of evidence. Principles of functional equivalence enable contracts to take same legal effects and physical contracts in most national law but their power is weakened by inconsistent interpretations. Uniform rules and recognition of international evidence will be needed.

7.3 Data Governance

Divergent privacy regulations impact how a business operates and how it can enforce contracts. GDPR places rigorous restrictions on data transfer, whereas U.S. law is more permissive and industry-specific. Data localization requirements of developing countries are creating barriers to cross-border dealings.

7.4 Cybersecurity & Digital trust

Security concerns undermine consumer confidence in and the reliability of online contracts. Cooperation on the international response, on matters like cybercrime and risk mitigation, and on standards for digital authentication, builds trust in cross-border digital trade.

7.5 Inclusive Governance

Developing countries don't just need a seat at the table—they need a leg up. So that means learning how to do the work, accessing technical assistance, and having a real say in setting global standards. Programs like UNCTAD's eTrade for All step in here, helping these countries step up to the table of international digital rules instead of just looking on from the sidelines

CONCLUSION

The world is now governed by the digital economy which has not only changed the commodities but the nature of trade as well. Thanks to cloud computing, AI, and algorithm-based models that enable instant global transactions, new markets, ideas and financial opportunities are being born at a pace never before seen. Nevertheless, this radical change in trade calls for a profound overhaul of traditional legal instruments that have been conceived with the assumption of physically tangible goods, geographically-fixed jurisdictions, and the physical modes of commerce. The principles of private international law such as *lex loci contractus* and *lex loci solutionis* are not sufficient to deal with the phenomena of cross-border digital trade as the virtual world is characterized by the fact that contracts can be entered into online, data flows can come under several jurisdictions at the same time, and the creation of value is often in the form of

intangibles. Notwithstanding the above, the problem of jurisdiction is still as acute as ever. Courts are faced with questions about which legal system should be applied in the case of electronic contracts, who has the right to judge such cases, and how enforcement is to be carried out in different countries. The probability of a clash between jurisdictional claims is ever higher when countries place more and more data localization measures, digital taxation mechanisms, and privacy regulations in their national legislations. On another note, there are also difficulties in the enforcement of digital contracts due to the different views on electronic signature, digital evidence, and smart contract methods. Although UNCITRAL's Model Laws on Electronic Commerce and Electronic Signatures set the standards, not all countries have adopted them uniformly and have implemented them at the national level, hence legal fragmentation, which refers to a situation in which there is a lack of uniformity in the different parts of the law that govern a given legal sphere, thus unpredictability for businesses and consumers exists. Meanwhile, data governance remains a key issue around which all other concerns revolve. The different privacy and cyber security regimes such as the EU GDPR, U.S. sector-specific regulations, and data sovereignty laws in developing countries put high demands on compliance and also raise issues of enforceability, particularly for SMEs that do not have enough resources to cope with complex multi-jurisdictional regulatory regimes. The presence of non harmonized legal systems is leading to a legal uncertainty under which businesses operate, consumers are subjected to privacy breaches and the trust on which digital markets rely is compromised. Within this framework, the protection of digital trade as a source of income and its further growth depend on a coherent multilateral legal and regulatory reform agenda. Trade scarecrowd must be national sovereignty and policy diversity B full trade universe is virtual and fragmented must be taken into account in integration. The rule of functional equivalence, mutual recognition, and interoperability, acts as bridges between gaps of jurisdiction and also facilitate enforcement of contracts. In addition to consumer protection and mutual trust, robust data governance, cooperation in cyber security, and digital trust are needed. But developing countries have to be listened to more. Via capacity building, technical assistance, and equitable representation, they can access opportunities in global digital trade and promote sustainable development. In the end, the right combination of jurisdiction, contract enforcement, and data governance will give us an inclusive, trustworthy, and globally meaningful digital economy.

9. Policy Recommendations

Several policy actions can be adopted to enhance

cross border digital trade in a legitimate and secure way. Fundamentally, it is of paramount importance that countries enter into agreements recognizing each other's electronic signatures, contracts, and authentication standards as this will be instrumental in reducing the issues of different jurisdictions and thereby making cross-border legal relations more easily executable. Next, all countries should unanimously agree and implement the laws based on UNCITRAL Model Laws on Electronic Commerce, Electronic Signatures, and Electronic Transferable Records in order to fulfil the requirement of functional equivalence between digital and paper-based documents and at the same time to secure the legal system from unpredictable changes. Third, the cooperation between such international organizations as the WTO, OECD, and UNCTAD should be aimed at the creation of new legal frameworks that would make regulations concerning jurisdiction, contracts, and data governance compatible and thus, global digital commerce easier and faster. Fourth, the fight against cyber-attacks should be organized in a more effective way by the establishment of multilateral standards and information-sharing mechanisms which, in turn, would ensure security from data breaches, cybercrime, and intellectual property violations. Fifth, a variety of focused measures designed to build up the capacities of the less-privileged countries such as technical assistance, training, and infrastructure support, will have a positive effect on the inclusive participation in the digital markets. Lastly, the use of universal principles of digital trust and ethics, to name a few, will be essential to guarantee transparency, fairness, and accountability in the functioning of the platform and the handling of data.

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