Do legal systems affect the organizational consequences of IT innovation?

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Abstract

The purpose of this study is to ascertain if and how organizations are affected by the legal context in which they carry out their business. We develop a model which takes into consideration the macro environment, the competitive environment, and the focal firm. In the macro environment, we analyze country characteristics and, in particular, we examine differences between civil law and common law systems. In the competitive environment, we focus on the differences between centralized vs decentralized regulatory systems by analyzing and comparing legal cases as to how Europe and the U.S. enforce privacy regulations differently. Finally, we focus on the focal firm with respect to the differences in business behaviors taken by organizations in the European Union and the United States with reference to IT innovation and the development of new information and communication technologies. The results of this study offer significant insights from a theory, practice, and regulatory perspective.

Keywords (Required)

Legal system, Privacy regulations, IT innovation.

Introduction

The ubiquitous presence of the Internet and the proliferation of social media have made the world a tightly connected global community. In this community, massive data is generated, communicated, and shared knowingly and unknowingly often crossing national boundaries. Recent reports on data breaches by numerous major social media organizations have raised concerns and made the public increasingly conscious about the potential perils of the privacy issue. In order to prevent and remedy these ill effects, governments have proposed and implemented various laws and regulations to address present and potential privacy concerns. However, the lingering conundrum is that these regulations are typically national or regional in their scope, while the issue of privacy is increasingly global in nature. Each country or region addresses and deals with the privacy issue reflecting their own macro-environment including the legal system. With data more freely moving across national boundaries, it is inevitable that the law and regulations addressing data privacy issues will have an increasingly more profound impact on individuals and organizations beyond its own national or regional boundary. For example, the recent introduction of General Data Protection Regulation (GDPR) by the European Union intends to protect data and privacy of individuals within its jurisdiction. However, the scope of this regulation extends beyond its geopolitical boundary as it applies to organizations outside the EU that collect and process personal data of individuals residing in the EU. Today e-commerce organizations conducting business across national boundaries routinely collect and process customer data, and make themselves implicated in more complex and confounding legal systems of different nations and regions. Thus, it is important to understand the role and impact of legal systems in IT in general and data privacy in particular.

IT plays a critical role in every organization (George and King 1991; Gurbaxani and Whang 1991) and previous research considered it as a valuable resource that can improve organizations' performance and
render competitive advantages (Brown, Gatian, and Hicks 1995; Kettinger et al. 1994; Mason, Mckenney, and Copeland 1997). Organizations spend a significant part of their budgets on IT as Gartner (2018) estimates worldwide spending on IT to reach $3.8 trillion in 2019. However, how they spend IT budget varies among different organizations as well as among different countries or regions across the world (Tractinsky and Jarvenpaa 1995; Winston and Chung-Yean 2011). Previous studies have attempted to explain these differences by identifying and focusing on external environmental factors that may influence the decisions and behavior of organization (Melville et al. 2004; Tractinsky and Jarvenpaa 1995; Lancelot Milteneng and Peyrat-Guillard 2011). In particular, organizations across the world take different approaches to addressing and dealing with IT-related decisions reflecting their own unique cultures, research and development environments, and government requirements.

Numerous IS studies have revealed that the adoption of a new technology does not solely depend on the attributes of the technology, but it is also affected by various external factors such as legal systems. For example, a study (Kuan and Chau 2001) showed that the decision to adopt and use EDI by small businesses has been influenced by the enforcement of a law that interrupted the use of paper in import and export declarations. Other studies have demonstrated how an increasing number of laws and regulations affect “information management and related control systems” by necessitating the use of a certain technology in their business processes (Luthy and Forcht 2006).

It is evident that certain laws and regulations introduced by governments have serious implications on IT management decisions. However, most studies on legal systems and their impact on IT practices are limited to a single country and did not take into consideration the differences among diverse legal systems and how such diversity affect IT management decisions across different countries.

This study expands on the current line of reasoning that law is an external environment factor which has profound impact on IT practices, by focusing on how different legal systems can shape different competitive environments and influence decisions and behaviors chosen by organizations in different countries or regions (Beck et al. 2002; Jafari et al. 2017). This study raises and attempts to address the question about the impacts by different legal systems on the decisions and actions taken by organizations, particularly concerning privacy-related issues. The study is based on a three-layer framework, adopted from the IT business value model (Melville et al. 2004) to study the impact of the legal environment on IT decisions (see Figure 1). The framework consists of three levels of environment, starting with the macro environment, followed by the competitive environment, and finally the focal firm. Each preceding environment encloses the ensuing one, suggesting the influence it exercises on the sub-environment. In the top macro environment, country characteristics and, in particular, the legal system are investigated. The study focuses on the difference between the civil law and the common law systems, as they influence the competitive environment in which individual firms operate. In the competitive environment, it focuses on the differences between centralized vs decentralized regulatory systems as a result of different legal systems on IT issues, particularly privacy regulations. Finally, at the focal firm level the study investigates the differences in organizational decisions and behaviors made within the context of previous two environments. The study compares the legal systems – the common law and the civil law as they have been practiced in two different geopolitical entities – the European Union and the United States.

![Figure 1. Research Framework](image)
Research Model

Theory and Hypotheses

Macro Environment

Legal systems across the world have the common goal of regulating “fairly” the relationships among individual and legal entities. However, the modalities in which such goal is reached are different among countries with different legal systems such as the civil law and the common law with deep-rooted historical and cultural distinctions (Dainow 1967). For example, in civil law systems the precedent is not binding, i.e. judges are not bound to follow previous decisions in similar adjudications. On the other hand, in common law systems the binding rule of precedent is applied in judicial decisions. Moreover, in civil law countries, rules are provided through codes, i.e. bodies of general principles with the purpose of regulating the entire subject. In common law countries, instead, legislation is not provided through codes, but rather through specific statues that regulate particular situations in detail.

Competitive Environment

In relation to privacy, previous studies (Milberg et al. 1995; Esteve 2017; Schwartz and Peifer, 2017) have shown that civil law countries tend to have a higher government involvement and therefore, they tend to have more centralized regulatory systems. On the other hand, common law countries tend to have lower government involvement and more decentralized regulatory systems (Fligstein and Choo 2005; La Porta et al. 1997). Moreover, it has also be ascertained that the level of regulation and protection exercised by nations has significant impact on business activities and performance (Fuller 2016; Edelman and Suchman 1997). This study expands on the previous research to better understand how privacy regulations are shaped by the legal system and how such regulations shape IT innovation. The investigation on the differences between legal systems and their consequences on privacy regulations and IT innovation is extremely important as the impact of a law and regulation adopted by one country or region can easily transcend its own jurisdiction in the increasingly interconnected global community.

Focal Firm

At the focal firm level, the study analyzes how the differences in the macro and competitive environments may affect the allocation of IT budget on innovative activities by organizations. As pointed out by previous studies, regulations can affect the capacity of organizations to be innovative and competitive (Blind 2012). In particular, stricter privacy regulations can decrease the competitiveness of companies in the market (Campbell et al. 2013). The study measures IT spending on innovative activities as a way to ascertain the potential impact of different legal systems on individual organizations’ decisions and actions.

Hypotheses

On the basis of the proposed research model, the following hypotheses are tested:

Hypothesis (H1): Civil law systems, because of centralizing privacy regulation, tend to provide high level of privacy protection towards consumers, employees, and agents.

Hypothesis (H2): Common law systems, because of decentralizing privacy regulation, tend to provide low level of privacy protection towards consumers, employees, and agents.

Hypothesis (H3): Civil law systems, because of centralizing privacy regulation, tend to discourage business innovation and the development of new communication techniques.

Hypothesis (H4): Common law systems, because of decentralizing privacy regulation, tend to encourage business innovation and the development of new communication techniques.

Hypothesis (H5): Organizations have more benefits in carrying out their business in common law systems, because of decentralizing privacy systems rather than in civil law systems, because of centralizing privacy regulation.
Data Collection

Due to the nature of the study evolving around legal systems and practices, it is difficult if not impossible to employ conventional data collection approaches. Instead the study systematically collects, reviews and analyzes relevant legal cases from countries or regions representing different legal systems. In particular, the study compares legal cases and decisions provided by Courts in Europe and in the U.S. related to the protection of privacy rights of consumers, employees, and agents.

The study combines the data of the case law analysis with secondary data related to the level of the IT budget allocations for innovative activities between EU and US companies. The analysis of combined data is expected to confirm that EU companies are less innovative than US counterparts because they have to adopt more cautious business posture due to the stricter legal mandate. With highly strict privacy regulations, organizations may be forced to adopt costly practices to comply with the regulations, such as the collection of users’ consents. These regulations, in turn, may discourage organizations from adopting innovative technologies and business practices as evidence in studies such as Miller and Tucker (2008) that investigated the diffusion of Electronic Medical Record technology (EMR) by hospitals.

Conclusion

To sum up, nowadays the increasing use of information technology has led numerous studies to analyze the role of external factors which may affect the implementation and the development of such systems. The goal of this paper is to expand the discussion on the external factors which affect organizational behaviors in IT by analyzing the relevant legal system.

In particular, this study increases and stimulates current research on how the differences between countries in the legal origin affect the differences in privacy regulations and companies’ decisions in terms of IT innovation. Moreover, a deeper knowledge on the causes of different organizational behaviors in IT from the legal perspective will help practitioners to adopt and to implement strategies best suited for specific legal systems in which they operate.

Finally, the study should raise the awareness for governments and regulators that their legal systems and regulations may have profound impact – intended as well as unintended – on organizations and their attitudes and behaviors and eventually their performance.

References


General Data Protection Regulation, retrieved from https://eugdpr.org/the-regulation.


