ISLA 2021 Proceedings   Latin America (ISLA)

8-9-2021

Success Factors for e-Justice Adoption

Cinara Rocha
University of Minho, cinaracarneirorocha@gmail.com

Follow this and additional works at: https://aisel.aisnet.org/isla2021

Success Factors for e-Justice Adoption

Research in Progress Paper

Cinara Maria Carneiro Rocha
University of Minho
cinaracarneirorocha@gmail.com

Abstract

Justice is a pillar of the democratic rule of law. However, there are few studies in the administration of justice. This research addresses the topic of e-Justice and aims to make an exploratory study to identify the factors that favour its successful adoption. Based on eight case studies found in the literature, the success factors are classified using the Gil-García and Pardo (2005) e-Government theoretical foundations. The results point to the prevalence of information technology and the organisational and managerial challenges. Another conclusion is the need to develop theoretical frameworks that conform to the specificities of e-Justice success adoption.

Keywords

e-Justice, success factors, e-Government, ICT, e-Court.

Introduction

Justice is a pillar of modern society and the constitutional state. The United Nations (UN) recognise its importance since justice is part of the 16th Goal of Sustainable Development Goals 2030 Agenda: Peace, Justice and Strong Institutions. Justice also contributes to other UN goals, like health, environment, education, and equality. Meanwhile, limited access to justice remains a threat to sustainable development (United Nations 2021a).

Justice is also important for the economy, society, and politics. Despite this there is little investigation into the administration of justice and the field remains understudied and fragmented (Yu and Xia 2020). The e-Justice experiences are also poorly understood (Contini and Cordella 2016).

It is known that the use of ICTs helps courts increase productivity, diminishes costs, reduces the duration of procedures, broadens access to the judiciary, improves transparency, and increases confidence in the judicial system and greater legitimacy of judicial power (Martínez and Abat 2009).

Investigating e-Justice is fundamental for the advantages mentioned, however it became more relevant after the covid 19 crisis when the courts intensively used digital tools to work and relate with litigants. As a result, the European Union (EU) started to publicise the measurements of digital tools of member states and provided a toolbox aiming to speed up the digitalisation of justice (European Union 2020).

Although the literature presents cases of e-Justice adoption, they're fragmented and not organised. The frameworks of success factors related explicitly to e-Justice have significant constraints and don't address the complexity of the e-Justice implantation process. Organising the success factors for e-Justice adoption is important to help to clarify the dimensions that demand more attention for academics and managers.

Learning with e-Justice experiences around the world helps to achieve efficiency without neglecting the main principles of justice. This essay aims to make an exploratory study to identify factors for successful e-Justice adoption and organise then in categories. It intends to answer the question: what are the main factors for successful e-Justice adoption? The factors described in the literature are classified into five

categories of an e-government framework success challenges (Gil-García and Pardo 2005) in an attempt to frame the existing knowledge.

The paper is divided into five parts, including the introduction. The second presents the e-Justice concepts and the theoretical foundations for research. Third describes the design used to framework the challenges to successful adoption of digital tools. The fourth describes the e-Justice cases. Finally, in the fifth, the discussions and conclusions are presented.

Concepts

The concept of e-Justice arises at the beginning of the century as a specialisation in e-Government (Cano et al. 2015). UN defines e-government as using IT to generate more effective and efficient delivery of public services to citizens. It is a way of achieving the ends of a public nature by digital means (United Nations 2021b).

However, e-Government and e-Justice have different aspects. The first is culture. Subjective culture is a social factor that influences the intention to use technologies (Thompson et al. 1991). The conservatism, fragmentation, autonomy, and decentralisation are specific characteristics of the courts that differentiate them from other public entities and make it difficult to use common study dimensions (Ostrom et al. 2007). There are three other aspects, namely, context, users, and type of services offered. The context indicates what kind of public organisation is offering the service. Justice is provided by the courts, while the government provides other public services. The users of justice are not all citizens, as they are for e-government, but only litigants. And finally, the type of service consumed by users of e-Justice platforms is most to obtaining general information or consulting specific cases (Yu and Xia 2020).

In this article, the concept of e-Justice adopted the objectives delineated by Kesan et al. (2015): to improve access to justice, increase cooperation between legal authorities, strengthen the justice system, and improve legal institutions and the overall administration of law.

The theoretical frameworks in e-Justice success are scarce. Agrifoglio et al. (2016) assessed the success of a Case Management System, specifically in the Judicial System and validated Delone and McLean model. Deligiannis and Anagnostopoulos(2017) measure the intentions to use the judicial system in Greece using the Technology Acceptance Model. These two studies use an existing and well-known model and apply them to the judicial field.

Oktal et al. (2016) proposed a framework for describing both the dimensions of satisfaction and the acceptance of Turkey's National Judiciary Informatics System. Jneid et al. (2019) state a specific conceptual model of e-Justice success, considering three dimensions: technological, organisational and human resource. Although they suggest a particular scheme for e-Justice, both have constraints. The first one is related to the satisfaction of use, so the focus is on internal use and not addressing other variables. The second one poorly describes the organisational dimension, making it difficult to frame the factors for success. It also disregards aspects like planning, governance and regulation.

(Gil-García and Pardo 2005) research for e-Government success factors is a comprehensive framework. It considers five categories of challenges concerning: (1) information and data, (2) information technology, (3) organisational and managerial, (4) legal and regulatory, and (5) institutional and environmental. Information and data (ID) are related to data quality and homogenous information. Information Technology (IT) includes usability and ease of use, security issues, technological incompatibility, technology complexity, technical skills and expertise and technology newness. The organisational and managerial (OM) category encompasses project size and complexity, users and organisational diversity, lack of alignment between organisational goals and IT, multiple or conflicting goals and resistance to change. Legal and regulatory (LR) issues are related to restrictive laws and regulations, budget limitation and intergovernmental relationships. Finally, the institutional and environmental (IE) category addresses privacy concerns, institutional arrangements, political pressure, identification of partners and theirs contributions and lessons learned.

Design

A search made at Scopus and WoS in January 2021 using the filters "e-Justice, digital justice, e-Court, digital court, ICT and justice and ICT and courts" returns 484 papers. Thirty-five were case studies related to e-Justice implantation. Similar references from the same case studies were eliminated. By reading the abstracts, those cases that indicate success factors, challenges or risks in e-Justice adoption were selected, resulting in eight e-Justice experiences. Due to the immaturity of the e-Justice study field, both one-off initiatives and broader e-Justice deployment processes are considered as long as they meet the objectives of the e-Justice adopted in this study.

The main success factors, challenges and risks cited in the literature are summarised and classified by the theoretical foundation's e-Government success factors proposed by (Gil-García and Pardo 2005) in table 1.

Descriptive e-Justice initiative

This section describes the context of digital justice tools adoption. From the e-Justice experiences presented, one is from European Union, two are from European countries, three are from Asia, one is from South America, and one is from Africa. The experiences descriptions are not homogeneous since the articles don't provide the same detailed report for the cases.

European Union: This case presents an overview of technologies adopted in several EU countries. One of the analyses performed considers the path adopted in the e-Justice implementation procedure. While some initiatives focused on choosing simple procedures, others focused on simplifying the procedure. And finally, a third focused on the process being entirely online. The success cases were those that adopted the two first paths (Velicogna 2007).

Iraq: Digital signature, IT skills, ICT laws, external issues, public portal usage, training, and human resource were listed as the key challenges to implementing successful E-Justice systems. The study took place in Sulaimaniyah Appellate Court.

India: Singh et al. study (2018) explores 23 success factors for implementing e-Court. From all, awareness of e-Court, stakeholders training, technology, connectivity, infrastructure, and up-gradation are essential factors to e-Justice success.

Belgium: A project started in 2002 aiming at the whole computerisation of all country tribunals failed in 2007. The experience shows the need to start with local and dedicated experiences instead of structure all the development; progressively convince all stakeholders of the project's benefits and hear them (Fairchild et al. 2006).

France: The experience describes the development of an e-filing and document exchange system between lawyers and ordinary courts. The research has shown that establishing a governance network with relevant organisational actors to sustain and implement the innovation and the motivation for users to participate during the creation of the new e-service are challenges in e-Justice deployment (Velicogna et al. 2011, p. 165).

Malaysia: The study presents the e-Shariah case study, which is restricted to Muslim personal law and family matters. Its deployment includes an integrated CMS, Shariah lawyers management system, office automation, library management system, and an e-Shariah portal. The authors report two main issues to be observed: correct delineation between the potential of the technology and the legislation that regulates it, and the need to standardisation of policy and practice concerns to IT (Saman and Haider 2013).

Cape Verde: Focusing on the Cape Verde criminal project, the authors, based on cases from four different countries, identified risk factors associated with developing and implementing e-Justice systems. The initial design phase and the continuous development scrutiny were listed as the critical issues. However, whether in-house or outsourced, the development team may succeed considering overall information vision, leadership, and technical skills (Rosa et al. 2013).

Brazil: The Brazilian Superior Court of Justice implemented the Electronic Processing System to reform the paper-based procedure into an electronic one. The authors studied the view of lawyers and the professionals in the Department of ICT. They found that the lack of interoperability among different electronic systems is an essential issue, so as the lack of adequate technological infrastructure (Freitas and Joslin 2015).

Country	E-Justice Success Factors	Success Factors Categories
European Union	1. To choose a simple procedure 2. To choose to simplify the procedure	· OM · OM
Iraq	3. Digital signature 4. ICT skills 5. ICT laws 6. Public portal usage 7. Training	· IT · Not classified · LR · IR · Not classified
India	8. Awareness of E-Court 9. Stakeholders training 10. Technology 11. Connectivity 12. Infrastructure 13. Up-gradation	· OM · Not classified · IT · IT · IT · IT
Belgium	14. Start with local and dedicated experiences 15. Stakeholders engagement	· OM · OM
France	16. Governance network 17. Motivation for users to participate during the creation of the new e-service	· IE · OM
Malaysia	18. The correct delineation between the potential of the technology and the legislation that regulates it 19. Standardisation of policy and practice	· LR · LR
Cape Verde	20. To plan the initial design phase 21. The continuous development scrutiny 22. Team overall information vision, leadership, and technical skills	· OM · OM · IT
Brazil	23. Interoperability among different electronic systems 24. Technological infrastructure	· IT · IT

Source: Elaborated by the authors.

Table 1. Relation between e-Justice success factor and e-Government challenges for the success

Discussion and conclusion

This research aims to identify factors for successful e-Justice adoptions. 24 successful e-Justice factors were identified.

Information technology (IT) is the most cited category presenting nine factors concerning some general subjects such as interoperability, infrastructure and connectivity, and others more specific, like digital signature, up-gradation and portal usage. The organisational and managerial (OM) category presents eight factors encompassing issues related to the IT project and others framed under the diversity of users and organisations. The legal and normative (LM) category has three occurrences, and institutional and environment (IE) has one challenge. Information and data (ID) aren't pointed out in the cases.

ICT skills, training, and stakeholders training do not match a connection to the e-Government model adopted in this research. Although IT category listed technical skills and expertise, they refer to the IT project team. In contrast, ICT skills and training include court users, staff, and stakeholders in the cases studies. The challenges listed in the e-Government model could be expanded to include not only IT team skills and training but also all stakeholders.

The cases selected diverge from the region and legal culture. The approaches are also very diverse. Besides these constraints, the e-Justice success factors described in this study contribute to constructing and organising the knowledge of e-Justice success research. Moreover, they are useful to support government and practitioners to plan new e-Justice projects.

Finally, the research indicates the need for theoretical frameworks for e-Justice success. The distinctions between e-Government and e-Justice may give a different contour to the deployment, processes, and outcomes of e-Justice.

Acknowledgements

References

Agrifoglio, R., Metallo, C., and Lepore, L. 2016. "Success Factors for Using Case Management System in Italian Courts," *Information Systems Management* (33:1), Taylor & Francis, pp. 42–54. (https://doi.org/10.1080/10580530.2016.1117871).

Cano, J., Jimenez, C. E., Hernandez, R., and Ros, S. 2015. "New Tools for E-Justice: Legal Research Available to Any Citizen," *2015 2nd International Conference on EDemocracy and EGovernment, ICEDEG 2015*, pp. 108–111. (https://doi.org/10.1109/ICEDEG.2015.7114455).

Contini, F., and Cordella, A. 2016. "Law and Technology in Civil Judicial Procedures," in *The Oxford Handbook of Law, Regulation and Technology* (Vol. 1), R. Brownsword, E. Scotford, and K. Yeung (eds.), Oxford University Press. (https://doi.org/10.1093/oxfordhb/9780199680832.013.47).

Deligiannis, A. P., and Anagnostopoulos, Di. 2017. "Towards Open Justice: ICT Acceptance in the Greek Justice System: The Case of the Integrated Court Management System for Penal and Civil Procedures (OSDDY/PP)," in *Proceedings of the 7th International Conference for E-Democracy and Open Government, CeDEM 2017*, Institute of Electrical and Electronics Engineers Inc., September 19, pp. 82–91. (https://doi.org/10.1109/CeDEM.2017.26).

European Union. 2020. "European Commission-Press Release Modernising EU Justice Systems: New Package to Speed up Digitalisation of Justice Systems and Boost Training of Justice Professionals," , December 2. (https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2246, accessed June 29, 2021).

Fairchild, A., de Vuyst, B., and Azran, Y. 2006. "E-Justice in Belgium: Experiences and Challenges," in *Proceedings of the European Conference on E-Government, ECEG*, pp. 121–130.

Freitas, C. S. de M., and Joslin, J. 2015. "Organizational Impacts of the Electronic Processing System of the Brazilian Superior Court of Justice," *JISTEM - Journal of Information Systems and Technology* (12:2), pp. 317–332.

Gil-García, J. R., and Pardo, T. A. 2005. "E-Government Success Factors: Mapping Practical Tools to Theoretical Foundations," *Government Information Quarterly* (22:2), Elsevier Ltd, pp. 187–216. (https://doi.org/10.1016/j.giq.2005.02.001).

Jneid, M., Saleh, I., and Fakhoury, R. 2019. "Digital Transformation in Justice: Discussion of Challenges and a Conceptual Model for e-Justice Success," *Proceedings of the European Conference on E-Government, ECEG*, pp. 35–42. (https://doi.org/10.34190/ECDG.19.051).

Kesan, J. P., Jimenez, C. E., and Gasco, M. 2015. "Introduction to E-Justice and E-Law Minitrack," *Proceedings of the Annual Hawaii International Conference on System Sciences*, IEEE Computer Society, p. 2095. (https://doi.org/10.1109/HICSS.2015.251).

Martínez, A. C., and Abat, P. F. 2009. *E-Justice: Information and Communication Technologies in the Court System*, (Hershey, ed.), New York.

Oktal, O., Alpu, O., and Yazici, B. 2016. "Measurement of Internal User Satisfaction and Acceptance of the E-Justice System in Turkey," *Aslib Journal of Information Management* (68:6), Emerald Group Publishing Ltd., pp. 716–735. (https://doi.org/10.1108/AJIM-04-2016-0048).

Ostrom, J. B., Ostrom Jr., C. W., Hanson, R. A., and Kleiman, M. 2007. *Trial Courts as Organizations*, Philadelphia: Temple University Press.

Rosa, J., Teixeira, C., and Sousa Pinto, J. 2013. "Risk Factors in E-Justice Information Systems," *Government Information Quarterly* (30:3), pp. 241–256. (https://doi.org/10.1016/j.giq.2013.02.002).

Saman, W. S. W. M., and Haider, A. 2013. "E-Shariah in Malaysia: Technology Adoption within Justice System," *Transforming Government: People, Process and Policy* (7:2), pp. 256–276. (https://doi.org/10.1108/17506161311325396).

Singh, M., Sahu, G. P., Dwivedi, Y. K., and Rana, N. 2018. "Success Factors for E-Court Implementation at Allahabad High-Court," in *PACIFIC ASIA CONFERENCE ON INFORMATION SYSTEMS (PACIS)*, Undefined. (https://aisel.aisnet.org/pacis2018/137).

Thompson, R. L., Higgins, C. A., and Howell, J. M. 1991. "Personal Computing: Toward a Conceptual Model of Utilization," *Quarterly* (15:1), pp. 125–143.

United Nations. 2021a. "Peace, Justice and Strong Institutions - United Nations Sustainable Development," *Sustainable Development Goals*. (https://www.un.org/sustainabledevelopment/peace-justice/, accessed June 30, 2021).

United Nations. 2021b. "E-Government." (https://publicadministration.un.org/egovkb/en-us/About/UNeGovDD-Framework#whatis, accessed June 29, 2021).

Velicogna, M. 2007. "Justice Systems and ICT. What Can Be Learned from Europe?," *Utrecht Law Review* (3:1), pp. 129–147. (http://www.coe.int/t/dg1/legalcooperation/cepej/evaluation/2006/Table2006_en.asp).

Velicogna, M., Errera, A., and Derlange, S. 2011. "E-Justice in France: The e-Barreau Experience," *Utrecht Law Review* (3:E), pp. 27–44. (http://www.rtsa.ro/en/).

Yu, J., and Xia, J. 2020. "E-Justice Evaluation Factors: The Case of Smart Court of China," *Information Development* (10). (https://doi.org/10.1177/0266666920967387).