

Arias, María Isabel; Maçada, Antonio Carlos Gastaud

JUDICIARIES' MODERNISATION THROUGH ELECTRONIC LAWSUITS: EMPLOYEES' PERCEPTIONS FROM THE BRAZIL AND ARGENTINA FEDERAL JUSTICE SERVICES

Information Development

2020, vol. 36, no. 1, pp. 1-44

Arias, I., Maçada, A.C.G. (2020). Judiciaries' modernisation through electronic lawsuits: Employees' perceptions from the Brazil and Argentina federal justice services. Information Development. En RIDCA. Disponible en:

<http://repositoriodigital.uns.edu.ar/handle/123456789/4775>



Esta obra está bajo una Licencia Creative Commons
Atribución-NoComercial-CompartirIgual 2.5 Argentina
<https://creativecommons.org/licenses/by-nc-sa/2.5/ar/>



**Judiciaries' modernisation through electronic lawsuits:
Employees' perceptions from Brazil and Argentina federal
justice service**

Journal:	<i>Information Development</i>
Manuscript ID	ID-19-0196.R1
Manuscript Type:	Original Manuscript
Keywords:	court management, judiciary, modernisation, electronic lawsuits, information systems, information and communication technology
Abstract:	This paper assesses the perceptions of a group of employees from the federal judiciaries of Brazil and Argentina regarding the impact of electronic lawsuits on individual performance and public service quality. A model is proposed and tested with data collected from fourteen interviews with public managers and employees. The results of this study suggest that court administrators should align task characteristics and individual characteristics to achieve better task-technology fit, individual performance and public service quality. These findings present important implications to understand the processes of the implementation of electronic lawsuits within courts and may provide guidance for future research about the judiciary.

SCHOLARONE™
Manuscripts

1
2
3 **Judiciaries' modernisation through electronic lawsuits: Employees' perceptions**
4
5 **from Brazil and Argentina federal justice service**
6

7
8 **Abstract**
9

10 This paper assesses the perceptions of a group of employees from the federal judiciaries
11 of Brazil and Argentina regarding the impact of electronic lawsuits on individual
12 performance and public service quality. A model is proposed and tested with data
13 collected from fourteen interviews with public managers and employees. The results of
14 this study suggest that court administrators should align task characteristics and
15 individual characteristics to achieve better task-technology fit, individual performance
16 and public service quality. These findings present important implications to understand
17 the processes of the implementation of electronic lawsuits within courts and may
18 provide guidance for future research about the judiciary.
19
20
21
22
23
24
25
26
27
28
29

30 **Keywords:** court management, judiciary, modernisation, electronic lawsuits,
31 information systems, information and communication technology.
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Introduction

Modernisation has become the core idea of many government programs. Current modernisation agendas include public sector and service performance improvement (Bertot et al., 2016), through better employee performance and service quality, development of Information Systems (IS) and Information and Communication Technology (ICT), and application of principles of Open Government, among others.

The judiciary has the responsibility to solve conflicts in difficult cases and to apply the law impartially and fairly in a determined judicial system (Martinez-Villa and Machin-Mastromatteo, 2016). Judges' work is directly linked to citizens' desire to resolve litigation and bring about social peace (Silva et al., 2019). Currently, justice has a substantial prevalence in the Sustainable Development Goals documentation (Heeks and Renken, 2018), which shows the integration of justice and sustainability. Therefore, modernisation programs will continue to impact on courts and judiciary procedures (Raine, 2000).

Nonetheless, courts are organisations that typically resist administrative reform and have few managerial competences (Busetti and Vecchi, 2018). As part of the public sector but independent from government, judiciaries have been indirectly but increasingly affected by IS (Velicogna et al., 2018), even though little is still known about IS impacts, challenges, and pitfalls in the judicial branch of government (Sandoval-Almazán and Valle-Cruz, 2016).

Although judiciaries around the world continue to be among the least willing institutions to implement policies on transparency and access to information, generally because of their conservative tradition and lack of accountability practices, they are making progress toward developing IS to improve their processes and strengthen the relationships with stakeholders (Elena and van Schalkwyk, 2017). Among these

endeavours are Electronic Lawsuits (EL), Court Management Systems, Electronic Notifications, Electronic Signatures, and Electronic Communications.

In Latin America, there have been progressive reforms in judicial matters. Among them, IS appear (CEJA, 2014) as a possible solution to the problem of law losing its capacity for timely response in the dynamics of the current tech-society (Lezcano and Olivera, 2009). Countries should continue to advance in IS projects in the judiciary while sharing and exchanging good practices (CEJA, 2015). However, some studies suggest that developing countries should improve their capacity to use and sustain ICT and, in particular, human capacity for directing ICT toward improving citizen participation (Park and Oh, 2019). Therefore, IS implementation in judiciaries of Latin America becomes attractive to researchers.

Some investigations show that the importance of IS in courts has increased (Sousa and Guimarães, 2017) as they are institutionalized and ordinarily used with a high level of acceptance (Luzuriaga and Cechich, 2011). Moreover, previous studies show that IS positively influence performance measures in courts, such as efficiency, efficacy, effectiveness, and accountability (Joia, 2008, 2009), while the use of new ICT may bring users closer to the judiciary (Silva et al., 2019). This highlights the relevance of IS and ICT implementation in other courts and judiciaries, mainly those that are struggling with similar management problems (Guimarães et al., 2011).

However, several studies (e.g. Luzuriaga et al., (2009) and Luzuriaga and Cechich (2011)) are merely descriptive of the initiatives undertaken, thus lacking a rigorous theoretical background. Other studies were built on theories of intellectual capital (Joia, 2008, 2009), strategic planning and ICT strategies (Andrade, 2009; Andrade and Joia, 2012), innovation in the public sector and the role of resources and capabilities (Guimarães et al., 2011; Sousa and Guimarães, 2017), and research on open

1
2
3 judicial data (Elena and van Schalkwyk, 2017; Jiménez-Gómez, 2017; Sandoval-
4
5 Almazán, 2017).

6
7
8 This suggests that few theoretical advances were made on this topic. A common
9
10 problem in e-government literature is that articles often do not use specific theories as a
11
12 foundation for the study (Belanger and Carter, 2012). Studies about the impact of IS on
13
14 the judiciaries of Latin America using rigorous theoretical foundations are lacking.
15
16 More research is needed to explore the main factors that impact the quality and
17
18 performance of IS that automate processes and improve bureaucratic tasks in order to
19
20 improve policies and governance of judiciaries (Sandoval-Almazán and Gil-Garcia,
21
22 2015). Research on these topics may enrich the needed reflection that is required to
23
24 close gaps between theoretical models of justice and their application to reality
25
26 (Martinez-Villa and Machin-Mastromatteo, 2016).

27
28
29
30 The present study aims to fill these gaps by assessing the following research
31
32 question: How do EL impact on perceived individual performance and public service
33
34 quality in the federal judiciaries of Brazil and Argentina? A model grounded on Task-
35
36 Technology Fit (TTF) theory (Goodhue, 1995; Goodhue and Thompson, 1995) is
37
38 proposed, and its relationships are assessed with perception data collected through
39
40 interviews with public managers and employees.
41
42
43

44
45 This paper proposes a theoretical model on how EL can be assessed and focuses
46
47 on how judicial modernisation projects affect perceived individual performance and
48
49 public service quality. This study addresses a topic that has been relatively neglected by
50
51 research. Courts have often been overlooked in public administration analysis because
52
53 they are independent (Velicogna et al., 2018) and lie aside from what is usually
54
55 considered to be the mainstream of public service, i.e. central and local government
56
57 (Raine, 2000). This article has the potential to create knowledge in an area in which
58
59
60

1
2
3 there is a relative lack of studies and generate contributions that result in the
4
5 improvement of IS management in courts (Sousa and Guimarães, 2017).
6
7

8 The study also has practical value as it contributes to the discussion of
9
10 technology induced change by integrating the interaction of ICT, public employees and
11
12 judiciaries institutional dynamics (Bellamy and Taylor, 1996). Court managers seek to
13
14 understand the social and technological context created by IS in order to promote the
15
16 development of effective public policies (Barbosa et al., 2013). The article examines the
17
18 perceived effectiveness of two EL implemented in Brazil and Argentina, thus helping
19
20 public administrators to successfully implement IS in courts. The social value of this
21
22 research lies in that society is arguably more critical to courts than to other public
23
24 institutions because their legitimacy depends, not on electoral mandates, but simply on
25
26 their ability to command public respect and confidence (Raine, 2000).
27
28
29

30 This article opens with the literature review on IS implementation in Latin-
31
32 American judiciaries. Then, the theoretical foundation and research model are
33
34 presented. This is followed by the method and the results and their discussion. Finally,
35
36 the conclusions are exposed.
37
38
39

40 41 42 **Literature review on IS implementation in the justice systems of Latin**

43 44 **America**

45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Judiciaries in Latin America adopted many reforms since the democratic restorations of the '80s and '90s (CEJA, 2014). The major changes discuss modernisation, management improvement, better service offer, and generation of statistical data and performance indicators (Andrade, 2009). A recent study shows that Brazilian judges are concerned about the excessive demands on the courts, which can cause work overload, generate frustration and lack of motivation (Silva et al., 2019). As

1
2
3 a solution, IS may counteract the daunting administrative task faced at courts in their
4 workload management (Guimarães et al., 2011). E.g., the electronic notification spreads
5 information faster and safer, along with visibility and transparency of the process
6
7
8
9
10 (Luzuriaga and Cechich, 2011).

11
12 Another example are EL, which were proved to have a decisive role as a tool to
13 improve work conditions in courts and access to justice (Andrade, 2009). EL facilitate
14 standardisation and homogeneity of routines (Sousa and Guimarães, 2017) as they allow
15 to manage and produce information from cases simplifying administrative tasks while
16 documents are standardised (Luzuriaga and Cechich, 2011). EL help to achieve
17 structural transformation and integrate organisational redesign within judiciaries
18
19 (Andrade and Joia, 2012), which is especially important for developing countries where
20 leaders of government organisations should seriously reconsider the workflow
21 reengineering of their work processes (Park et al., 2015).

22
23 In Latin America, some academic studies describe and evaluate IS
24 implementation in the judiciary. In Brazil, Joia (2008, 2009) measured the perceived
25 variation of intellectual capital in 30 courts of justice involved in a government-to-
26 government project, which links the Brazilian Central Bank and the Justice Department.
27 Andrade (2009) identified different actors and institutions in the process of strategic
28 planning and definition of IS strategies in the Brazilian justice system. Later, Andrade
29 and Joia (2012) analysed the influence of the Brazilian judiciary organisational structure
30 in the definition and implementation of IS strategies. Moreover, Guimarães et al. (2011)
31 described administrative reforms involving management innovations undertaken at the
32 Brazilian Superior Tribunal of Justice, while Sousa and Guimarães (2017) assessed the
33 adoption of EL in Brazilian labour courts.

1
2
3 In Argentina, there are academic studies that described the design and
4 implementation of the electronic signature and notification in the judiciary of Neuquén
5 Province (Luzuriaga et al., 2009; Luzuriaga and Cechich, 2011). Sandoval-Almazán and
6 Gil-Garcia (2015) proposed a framework to evaluate judicial websites, which was tested
7 in 20 out of the 32 states of Mexico. Later, this instrument was refined by Sandoval-
8 Almazán and Valle-Cruz (2016) to evaluate judiciary websites in a cross-country study
9 of 25 countries in Latin America. Another cross-country study assessed existing
10 conditions and current status of judicial data openness and its emerging impacts on 7
11 countries of Latin America: Argentina, Chile, Uruguay, Brazil, Costa Rica, México and
12 Peru (Elena and van Schalkwyk, 2017).
13
14
15
16
17
18
19
20
21
22
23
24
25

26 These articles show that IS implementation in judiciaries is still done for
27 administrative purposes, following policies to increase transparency. However, IS
28 developments are not usually citizen-centred, thus failing to meet citizens' needs as well
29 as to improve justice service delivery. There is no evidence to confirm that the
30 information from the judiciary may have been specifically planned for systematic use in
31 the design of justice quality policies or might be used to improve court productivity or
32 efficiency in terms of quality, quantity and duration of court processes (Elena et al.,
33 2014).
34
35
36
37
38
39
40
41
42
43

44 As future research, Guimarães et al. (2011) recommend focusing on a broader
45 sample of courts to deepen the understanding of their administration. Sousa and
46 Guimarães (2017) call for the analysis of the adoption of innovations in other judicial
47 fields and courts. More investigations are needed to examine how similar endeavours
48 work in different countries in order to enhance external research validity (Andrade and
49 Joia, 2012). Thus, a study that evaluates IS implementation in judiciaries of different
50 countries becomes interesting. As far as we are aware, there are no academic articles
51
52
53
54
55
56
57
58
59
60

1
2
3 that assess the impact of the EL implemented in the federal judiciaries of Brazil and
4
5 Argentina on perceived individual performance and public service quality. This paper
6
7 aims to fulfil this gap by proposing the model that follows.
8
9

10 11 12 **Theoretical foundation and research model** 13

14
15 This research explores an extension of TTF theory (Goodhue, 1995; Goodhue
16
17 and Thompson, 1995) in the federal judiciaries of Brazil and Argentina. In this theory,
18
19 technologies are seen as tools used by individuals in carrying out their tasks and TTF
20
21 suggests that a better fit between technology functionalities, task requirements and
22
23 individual abilities will lead to a better perceived individual performance.
24
25

26
27 TTF focuses on the employee's perspective, which was deemed suitable for the
28
29 present study in which the perceptions of public employees about EL are explored. No
30
31 empirical examination was performed using TTF to understand perceived individual
32
33 performance and public service quality in the justice systems of Latin-American
34
35 countries, thus creating an interesting gap of research.
36
37

38
39 TTF is also suitable because civil servants in public institutions are forced to use
40
41 IS to deliver public services. This means that regardless of the assessment of EL by
42
43 justice service employees, it is impossible to provide the service without using it.
44
45 Recognizing the mandatory nature of IS use is important because one might reasonably
46
47 suppose that when individuals are compelled to use a newly implemented corporate
48
49 ICT, they may engage in resistance behaviours (Carter and Grover, 2015). In addition,
50
51 when IS usage is mandatory, the constructs and relationships of Technology Acceptance
52
53 Models (Davis, 1989) provide limited explanations of ICT acceptance and applying
54
55 such models may lead to inappropriate organisational decisions (Brown et al., 2002).
56
57

58
59 Kim and Ammeter (2014) argue that when the acquisition of an IS occurs in an
60

1
2
3 organisation through an adoption decision made by senior managers or executives, the
4
5 end-user has much less flexibility to choose to use it or not. This process places the
6
7 majority of employees in a passive role, and an implicit assumption in TTF theory is
8
9 that adoption has already occurred once IS are in the hands of end-users. Therefore, in
10
11 the context of organisational adoption, TTF can be applied to evaluate IS impact on
12
13 performance and its overall success.
14
15

16
17 Based on TTF theory, the proposed model (Figure 1) suggests that *task*
18
19 *characteristics* and *individual characteristics* influence *task-technology fit* and a better
20
21 fit will lead to better *individual performance*. This perceived impact at the individual
22
23 level also affects at the organisational level on perceived *public service quality*.
24
25

26
27
28 [Insert Figure 1 here]
29
30

31
32
33 The definitions in Table 1 delimit the dimensions of the research model.
34
35

36
37
38 [Insert Table 1 here]
39
40

41
42 The proposed research model considers users' evaluations to assess IS perceived
43
44 impact on individual performance and public service quality (Petter et al., 2013), as
45
46 stated in the following propositions.
47
48

49 50 51 *Task and individual characteristics: Task-Technology Fit*

52
53
54 ICT is designed for specific tasks (Burton-Jones and Grange, 2013). Users are
55
56 aware of how an IS may fit their tasks context, how it differs from alternative ICT and
57
58 the inconveniences it may bring to their work (Sun et al., 2016). *Task characteristics*
59
60

1
2
3 not only define the purposes and functionalities that are expected of an IS (Kim and
4 Ammeter, 2014) but also affect users' perceptions of the ICT they use in performing
5 their tasks (Goodhue and Thompson, 1995). Therefore, different tasks must be
6 supported by different ICT.
7
8
9
10

11
12 In general, government employees will be assigned to tasks that differ in content
13 and complexity (Luarn and Huang, 2009). Tasks performed by public managers have
14 implications for his or her IS use and ICT is more valuable to managers on routine tasks
15 compared to less routine management tasks (Kraemer et al., 1993). Hence, employees
16 may judge IS to be more useful for structured and routine tasks than for complex tasks.
17
18
19
20
21
22

23
24 *Individual characteristics* are often complex and may include needs and learning
25 abilities, among other issues (Sun et al., 2016). Their consideration is important to
26 assess whether users' attitudes toward an IS are biased (Torkzadeh and Doll, 1999) and
27 to achieve a high alignment between ICT and individual performance (Sun et al., 2016).
28 In fact, articulating the intertwinement of ICT and individual identity is relevant to
29 understand individuals' behaviour with respect to ICT in embedded social contexts
30 (Carter and Grover, 2015).
31
32
33
34
35
36
37
38
39

40 Users with greater computing experience are likely to rely upon ICT more
41 extensively and find it more useful (Kraemer et al., 1993). Training, computer
42 experience and motivation could affect how easily an individual uses ICT. People who
43 are more competent, better trained, or more familiar with IS will find that they meet
44 their needs more completely and give higher evaluations to IS (Goodhue, 1995;
45 Goodhue and Thompson, 1995). Venkatesh et al. (2016) found that gender had no
46 effects on the intentions of citizens to use two e-government services, while age and
47 self-efficacy of the Internet had significant effects on both services, and education was
48 substantial only in one of them. Recent research based on TTF proposes that social
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 influence, performance expectations and effort expectations affect IS use (Muslimin et
4 al., 2017).
5
6

7
8 A single IS could get very different evaluations from users with different task
9 needs and abilities, and there are significant contributions from users' task
10 characteristics (Ahmed et al., 2017) and individual characteristics (Muslimin et al.,
11 2017) in TTF perceptions. Hence, the first two propositions of this research state:
12
13
14
15

16
17 *P1: Task characteristics influence users' evaluations of TTF.*
18

19
20 *P2: Individual characteristics influence users' evaluations of TTF.*
21
22

23 24 *Individual performance*

25
26 *Individual performance* refers to a specific task performance outcome
27 accomplished with an IS at the individual level (Serrano and Karahanna, 2016) because
28 it involves an evaluation of the degree to which the task outputs meets the task goals
29 (Burton-Jones and Straub, 2006). In the current end-user ICT environment, both
30 academics and practitioners recognize that IS success (DeLone and McLean, 1992,
31 2003) can potentially be measured through their impact on work at the individual level
32 (Torkzadeh and Doll, 1999).
33
34
35
36
37
38
39
40
41

42 *TTF* is essential in explaining task performance (Sun et al., 2016). In the context
43 of e-government, public employee *individual performance* is critical (Luarn and Huang,
44 2009). Better *individual performance* is obtained with better *TTF* (Goodhue, 1995;
45 Goodhue and Thompson, 1995; Luarn and Huang, 2009) and employees' perceptions of
46 IS are a critical factor in determining their performance (Bharati and Berg, 2003). Thus,
47 the third proposition of this investigation affirms:
48
49
50
51
52
53
54

55
56 *P3: TTF influences individual performance.*
57
58
59
60

Public service quality

Improved service quality ultimately means improved organisational performance (Hays and Hill, 2006). Organisational performance depends on tasks accomplished by individuals (Kositanurit et al., 2006). First-order ICT effects arise at the process level, and they form second-order ICT effects at the organisational level (Barua et al., 1995). At the individual level, this research focuses on the effect of ICT on *individual performance*, while at the organisational level it focuses on *public service quality*.

The possibility that ICT investments in government agencies may improve their cost efficiency by compromising the quality of public services should not be ruled out (Pang et al., 2014). IS impact on employee performance influences service quality (Bharati and Berg, 2003). This means that employee performance (first-order effect) contributes to service quality (second-order effect). Hence, the fourth proposition of this investigation states:

P4: Individual performance influences public service quality.

Method

Unit of analysis

This research involves more than one unit of analysis: the federal judiciaries of Brazil and Argentina. They were analysed because of the object to be studied (Stake, 2003, 2005), i.e. EL impact on perceived individual performance and public service quality. Studying federal judiciaries may lead to a better understanding of an even greater collection of cases, thus illustrating possibilities and implications for the wider public sector (Raine and Willson, 1996).

1
2
3 Within Latin America, judiciaries modernisation through IS use is spreading to
4 many tribunals (Andrade and Joia, 2012). Brazil has been a reference country in the
5 computerisation of the judiciary (Andrade, 2009). Federal Law 11419/06 (December 19,
6 2006) permits IS use for the management of legal cases and it allows every unit to
7 develop its own IS, although such development is not mandatory. This means that each
8 agency has the freedom to choose the development model that best suits its own use,
9 without the need to use the IS developed by the Council of Justice (Andrade and Joia,
10 2012). This is completely different from Argentinian federal courts, where there is only
11 one specific type of software allowed to manage court records. Federal Law 26685 (July
12 7, 2011) authorized IS use in the judiciary and delegated IS development and
13 implementation jointly to the Supreme Court of Justice and the National Council of the
14 Magistracy, i.e. with governance at the national level.

15
16
17 In the last years, the Brazilian judiciary has been in the spotlight because of the
18 investigations into money laundering and politicians' corruption in the operation
19 Carwash or Lava Jato (The New York Times, 2017). Meanwhile, the Argentinian
20 judiciary is criticized as being among the costliest in the world, with staff benefiting
21 from long vacations, which means the service is interrupted for 45 days a year (Infobae,
22 2017). The contemporary historical moment in both countries proves that court
23 management is critical for society to remain without systematic and continued research
24 attention (Guimarães et al., 2011).

25
26 In spite of the different contexts, the justice systems of Brazil and Argentina
27 have similarities due to their geographical proximity, their reality as public institutions
28 belonging to the judiciary and the application of the Roman-German legal system. Also,
29 Brazil and Argentina are developing countries, where the use of e-government services
30 is still at an early stage compared to developed countries, such as the US and the UK

1
2
3 (Kumar et al., 2017). Experiences in emerging countries are worth documenting for
4
5 greater comparison with developed countries (Barbosa et al., 2013).
6
7
8
9

10 *Data collection and analysis*

11
12 Perceptions of public servants of the federal justice systems of Brazil and
13
14 Argentina were analysed. Fourteen semi-structured interviews were conducted,
15
16 following a common questionnaire, but allowing the interviewer to ask new questions to
17
18 record other peculiarities that were not included in the initial questionnaire (Yin, 2001).
19
20 As building theory involves verifying relationships (Eisenhardt, 1989), the questions
21
22 aimed to collect opinions regarding the rationality of the propositions defined a priori in
23
24 this study.
25
26
27

28
29 The logic to obtain the sample was such that participants could better explain
30
31 their experience regarding IS implementation in the judiciary. The interviewees were
32
33 contacted through non-probabilistic and convenience sampling, which allows the
34
35 identification of potential subjects when they are difficult to find (Hernández Sampieri
36
37 et al., 2010). First, the potential interviewees were contacted and, then, each proposed
38
39 others to complete the sample. To reach the end of the process, a theoretical saturation
40
41 should be achieved. This is simply the point at which incremental learning is minimal
42
43 and marginal improvement becomes small because researchers are observing previously
44
45 seen phenomena (Eisenhardt, 1989). Hence, twelve people were interviewed until no
46
47 newer concepts were found and, then, the last two interviews were conducted to confirm
48
49 that no other relevant information was missing. This process was similar to the one
50
51 conducted by Silva et al. (2019), where saturation point, when respondents begin to
52
53 repeat the same answers, occurred after the thirteenth interview.
54
55
56
57
58
59
60

1
2
3 Different people have different values and forms of expression (Kumar et al.,
4 2017) and interviews with key actors in different relevant social groups characterize the
5 triangulation of data sources (Barbosa et al., 2013). Therefore, interviewees' profiles
6 were classified based on three criteria: Public Managers (PM), ICT Managers (ICTM),
7 and Public Employees (PE). All references to interviewees are done with letters and
8 numbers, according to their profiles and the order in which the interviews were
9 conducted. The interviews were conducted personally in three different cities (Bahía
10 Blanca and Buenos Aires in Argentina, and Porto Alegre in Brazil), with questions
11 provided in Appendix A. Each interviewee was informed about the aim of the research,
12 there were no right or wrong answer, and he/she should answer according to his/her
13 perception. The country of each interviewee is shown in Table 2.
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

31 [Insert Table 2 here]
32
33
34

35 The interviewees were asked permission to record the interviews, which were
36 literally transcribed (Kumar et al., 2017) into accessible text format for further analysis
37 (Barbosa et al., 2013). Then, content analysis was carried out. This involves conducting
38 a systematic analysis of the words and topics that emerge during the interviews,
39 identifying the content and characteristics of the information contained in the text. In
40 this phase, the three chronological steps proposed by Bardin (1977) were followed.
41
42
43
44
45
46
47
48

49 Content analysis was conducted using QSR NVIVO®, which provides
50 management tools, such as coding, attribute creation, categorization and relationship
51 determination. Data coding was done in nodes, which produces a structured view of the
52 main concepts under study, thus facilitating the structuring, categorization and
53 organisation of empirical data. The nodes were classified by inductive themes based on
54
55
56
57
58
59
60

1
2
3 the relationships proposed in the research model. Emerging relationships between
4 constructs should fit the evidence. Sometimes a relationship is confirmed by the case
5 evidence, while other times it is revised, or rejected due to insufficient evidence
6 (Eisenhardt, 1989). Hence, one node was established for each proposition and sub-
7 nodes were labelled based on the agreement, partial agreement or disagreement of the
8 interviewees with each proposition.
9

10
11
12 In the following section, for each proposition a table is presented, in which the
13 right column expresses the degree to which the evidence and proposition relate, based
14 on the evidence representativeness as stated by different interviewees. Similar to da
15 Silva et al., (2017), *high* was considered when the evidence was mentioned by more
16 than half of the interviewees, *medium* when mentioned by four to seven, and *low* when
17 mentioned by two or three. Next, the results and their discussion are presented.
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

33 **Results and Discussion**

34
35 As shown in Table 3, the interviewees perceived that due to EL judicial
36 processes have not changed because a judge still makes the final decision without ICT
37 use. On the contrary, they perceived that the lawsuit administrative flow has changed
38 because it is faster and many operational activities are automatized (e.g. electronic
39 notification). Similarly, Guimarães et al. (2011) found that management innovation
40 affects administrative processes and lawsuits management but does not change the
41 judging process.
42
43
44
45
46
47
48
49
50
51
52

53 [Insert Table 3 here]
54
55
56
57
58
59
60

1
2
3 Most interviewees support P1 as they believed that *“the computer system has*
4 *more repercussions in more repetitive tasks and less in the tasks that are of*
5 *elaboration”* (PM3). Previous literature highlighted that EL impact on courts enhances
6 performance because of eliminated bureaucratic steps in the flow (Sousa and
7 Guimarães, (2017). Among justice modernisation are activities automation (Andrade,
8 2009), such as an automatic mechanism for controlling deadlines, tasks or notification
9 delivering (Luzuriaga and Cechich, 2011).

10
11
12 The interviewees also perceived a distinction between support and primary
13 activities, which have different objectives and thus, different system functionalities.
14 Guimarães et al. (2011) also found a sharp demarcation between primary and support
15 activities. There was a differentiation between judges and their legal staff, on the one
16 hand, and the non-legally trained staff members, responsible for conducting
17 administrative support activities, on the other.

18
19
20 However, some interviewees disagree with P1 because *“for everyone it's the*
21 *same”* (PE11), *“it facilitates for all”* (PE12), *“if the system offers the tools for each of*
22 *the tasks executed by that person, to solve his problem, i.e. his work...”* (ICTM5).
23 Likewise, Joia (2008, 2009) concluded that there was no cognitive dissonance between
24 judges' and employees' perceptions about a positive impact on the intellectual capital
25 variation in courts and the value accrued from an IS endeavour.

26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49 [Insert Table 4 here]

50
51
52
53 The interviewees perceived that individual characteristics affect users'
54 evaluations of TTF because *“it depends on how people adapt to the changes”* (ICTM2)
55 and *“there is always a resistance to something new”* (ICTM5). Like any other change in
56
57
58
59
60

1
2
3 the justice system, IS incorporation does not occur quickly, especially because IS could
4 be seen as a risk factor that challenges political interests and resistance from judges and
5 employees exists (Sandoval-Almazán and Valle-Cruz, 2016). Previous studies showed
6 that when individuals are compelled to use IS, they may engage in resistance behaviours
7 (Carter and Grover, 2015), such as minimal use, complaining or personal withdrawal
8 (Lapointe and Rivard, 2005). Nonetheless, with time resistance to work with electronic
9 processes, indicators and computerized operations may be overcome (Guimarães et al.,
10 2011).

11
12
13
14
15
16
17
18
19
20
21 Sousa and Guimarães (2017) also found a cultural resistance associated with the
22 generation gap, i.e., older court management staff and judges would be more likely to
23 resist the adoption of innovations. The interviewees also highlighted issues related to
24 age as *“those of us who were not born in the digital age are going to have much more...
25 complications when interacting with these technologies than younger people”* (PM4). In
26 fact, *“it has to do with age, but not because of physical age, because of attitude,
27 because of their life experience with technology”* (PE14).

28
29
30
31
32
33
34
35
36
37 However, other interviewees believed that age was not an issue *“because
38 technology is so present in people’s lives today... Honestly, I do not see it, aside from
39 those one or two cases of older people who still have a bit of difficulty.”* (PE10).
40 Besides, *“there are attitudinal issues... that have to do with a commitment to work”*
41 (PM4) as *“the interest of each one to learn”* (PE11). In this sense, individual skills
42 management is essential to EL successful implementations (Sousa and Guimarães,
43 2017).

44
45
46
47
48
49
50
51
52
53
54
55
56 [Insert Table 5 here]
57
58
59
60

1
2
3 The interviewees seemed to agree with P3 since “*when the issue is attached to*
4 *technology, the results are always more precise than when they depend on a human*
5 *being*” (PE13). This suggests that EL turn attendance into a standard (Andrade, 2009;
6 Guimarães et al., 2011; Andrade and Joia, 2012) well-understood process capable of
7 solving citizens’ requirements in less time and with more accurate responses (Luzuriaga
8 and Cechich, 2011). TTF was perceived to help to “*generate automatic actions*”
9 (ICTM1) and “*spend less time in bureaucratic tasks to gain more time in the quality of*
10 *service provision*” (PE9). Correspondingly, a previous investigation found that
11 standardised routines and eliminated steps in the flow speed up the process and
12 procedural times (Sousa and Guimarães, 2017). This affects individual performance and
13 improvements are seen; “*in times of physical process... we manage to reach an average*
14 *of, working at our hardest, 200 judgments per month... Here we already reached 700*
15 *processes judged per month. You see the difference in productivity, agility, process*
16 *production*” (PE10).

17
18
19 To acquire TTF and its consequent impact on individual performance, the
20 interviewees perceived that the IS division has to “*continue to improve the system... to*
21 *make the activity of the individual operator more efficient*” (ICTM1). Some public
22 servants believed that “*the person who makes the technical tool does not talk much with*
23 *the one who is going to use that tool. So sometimes there is a communication conflict*”
24 (PE11). Public managers also felt there needs to be “*feedback... so that a user can*
25 *propose... the steps of the procedure to be done in a different way*” (PM6). This
26 suggests that for IS to be successful, there should be effective communication of goals,
27 schedules and deliverables. In order to help reach support, the IS division should listen
28 to opinions and adjust the IS accordingly. This may make participants become involved
29 in the process and be willing to support its implementation. Installing a help-desk
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 service for communication and support (Luzuriaga and Cechich, 2011) and
4
5 communication actions about system changes (Sousa and Guimarães, 2017) were found
6
7 in previous research to be essential because users must easily get assistance (Goodhue,
8
9 1995).

10
11
12 However, some interviewees perceived that the relationship between TTF and
13
14 performance might be compromised if there is a service shutdown. IS must be reliable;
15
16 they should be available when needed without frequent problems and crashes
17
18 (Goodhue, 1995). This means that IS should not be subject to unexpected or
19
20 inconvenient downtimes, which makes it harder to work (Goodhue and Thompson,
21
22 1995). Reliability of the network, capability of providers, and service availability should
23
24 be assessed in such a way that low quality does not affect service provision (Luzuriaga
25
26 and Cechich, 2011). In Brazil and Argentina, Internet access might be a large concern as
27
28 there are regions with electricity and connection problems (Sousa and Guimarães,
29
30 2017). IS need technological infrastructure, which is one of the most important drivers
31
32 (Park and Oh, 2019) in achieving solutions for a meaningful and beneficial
33
34 implementation of e-government in developing countries (Park et al., 2015).

35
36
37
38
39
40
41
42 [Insert Table 6 here]

43
44
45
46
47 Interviewees perceived that individual performance is related to public service
48
49 quality as *“the person who operates the system has a profound influence on how the*
50
51 *information and the product come out”* (PE13). For a judge *“the operator is very*
52
53 *important... you can have top technology... and an operator who is not very committed*
54
55 *to the task he is doing, who is little motivated, or little interested in the final result ...*
56
57 *and yes, it does influence service quality a lot”* (PE14). Hence, *“many times public*
58
59
60

1
2
3 *service quality is linked to the public servant quality” (ICTM8) because for “individual*
4 *performance, obviously the individualities in any organisation... determine the*
5 *functioning of everything, of the whole organisation” (ICTM1).*
6
7
8
9

10 Other interviewees highlighted that *“one thing is linked to the other... quality*
11 *and productivity always have to be together” (PE11), and “you have to balance them...*
12 *which is complicated” (PE9). Similar results were found in previous research in which*
13 *judges stated that “implementation... has really improved the quality of service delivery*
14 *and the quality of the professionals that work here” (Guimarães et al., 2011: 305) and*
15 *“Quality, basically, depends on people.” (Guimarães et al., 2011: 307).*
16
17
18
19
20
21
22
23

24 Nevertheless, some interviewees perceived that other factors influence the
25 relationship between individual performance and service quality. Among them,
26 managers highlighted employees’ training because *“if the user misuses the system,*
27 *whether it is intentionally, unintentionally, or due to lack of training or for whatever*
28 *reason, the system stops working in the way it should work. Then, the evaluation or the*
29 *valuation of the quality will be impacted” (PM6). In this sense, in order to achieve*
30 *service quality, management of individual skills may be needed, including the diagnosis*
31 *and identification of skill-development needs, and the lack of budget for employees’*
32 *training and learning is a huge barrier (Sousa and Guimarães, 2017) to EL success.*
33
34
35
36
37
38
39
40
41
42
43
44
45
46

47 **Conclusions**

48
49 This research aims to study judiciaries’ modernisation by assessing the
50 perceptions of a group of employees from the federal judiciaries of Brazil and Argentina
51 regarding EL perceived impact on individual performance and public service quality.
52
53 There are gaps in the study of EL perceived impact on individual performance and
54 public service quality in judiciaries of Latin America using a sound IS theoretical
55
56
57
58
59
60

1
2
3 foundation. The literature presents some studies that do not combine these issues and
4
5 treat them in isolation.
6

7
8 Hence, the first contribution of this work is the development of a theoretical
9
10 model grounded on TTF theory (Figure 1) on how judiciaries' modernisation through IS
11
12 interventions can be assessed. The second contribution is the adaptation of the
13
14 propositions, which are based on IS literature for companies and were adjusted to be
15
16 applied in the public sector, i.e. in the federal judiciaries of Brazil and Argentina. The
17
18 third contribution is that this article advances in the study of IS implementation in
19
20 different judiciaries. Previous studies tend to analyse judiciaries from a single country
21
22 or province. In this sense, the proposed model was applied in different user populations
23
24 and different contexts (Wang and Liao, 2008).
25
26
27

28
29 This qualitative study with court managers and employees through interviews
30
31 suggests that the model adheres to the reality of the federal judiciaries of Brazil and
32
33 Argentina. The interviewees perceived that, when implementing EL, task characteristics
34
35 and individual characteristics should align to achieve better task-technology fit,
36
37 individual performance and public service quality.
38
39

40
41 A limitation of this research is that the perceptions of a relatively small sample
42
43 of employees within the Brazilian and Argentinian judiciaries were considered.
44
45 Although the sample does not contain an extensive number of officials, it provided a
46
47 significant mass of data (Myers, 1997) and helped to understand the processes of IS
48
49 implementation within a complex political environment (Yildiz, 2007). Participants may
50
51 have been difficult to find because judicial institutions are among the least willing to
52
53 implement policies on transparency and access to data (Elena, 2015).
54
55

56
57 In future research, the proposed model could be tested with a bigger number of
58
59 officials being interviewed at different times and in a broader context of judiciaries in
60

1
2
3 order to compare results. Also, a quantitative data collection instrument may be required
4
5 to obtain a larger sample in different places for greater generalization (Wang et al.,
6
7 2007). A survey may be applied to gather public employees' perceptions of EL and their
8
9 perceived impact on individual performance and public service quality. The results of
10
11 this kind of quantitative study could be further discussed in fresh interviews with public
12
13 officials.
14
15

16
17 This paper addresses gaps in knowledge by complementing existing IS and
18
19 public modernisation research through their study in the judiciary. This contributes to
20
21 the academy by assessing the relationship between IS and application areas like the
22
23 justice system. The perceived effectiveness of the EL implemented in the federal
24
25 judiciaries of Brazil and Argentina is examined, thus suggesting how courts can lead to
26
27 successful EL implementations in Latin America. It is hoped that this research can
28
29 reinforce and provide guidance for future court management research. For managerial
30
31 practice, this study aims to clarify the interaction between IS and employees in an
32
33 organisational context, so that court administrators understand how IS affect perceived
34
35 individual performance and public service quality.
36
37
38
39

40 The results that emerged from interviews with public managers and employees
41
42 suggest that judiciaries should move beyond digitisation to transform judicial processes.
43
44 Judiciaries should exercise greater responsibility for developing their own
45
46 modernisation projects to suit their particular circumstances and conditions.
47
48 Modernisation presents not only a considerable challenge but also an opportunity for
49
50 judiciaries to revitalise the relationship with stakeholders, who demand independent and
51
52 effective judiciaries. IS may re-empower courts to take a more assertive role in the
53
54 process of developing a framework for the administration of justice that commands
55
56 public respect, confidence and legitimacy (Raine, 2000).
57
58
59
60

1
2
3 IS are closely related to the current Open Government initiatives, which promote
4 transparency and citizen engagement through equipped ICT tools and open data
5 accessibility (Park and Oh, 2019). The importance of increased public access to courts
6 and lawsuits data (Andrade, 2009) reinforces the need for better IS implementation in
7 the justice system. Justice needs to open up, modernise and provide alternatives to
8 technical structures if data justice for development is to be delivered in practice (Heeks
9 and Renken, 2018). In this sense, this investigation is expected to help managers reduce
10 gaps between policy and design of EL in other Latin-American countries, thus guiding
11 further IS endeavours, open data policies and modernisation by practitioners.
12
13
14
15
16
17
18
19
20
21
22
23
24
25

26 **Funding**

27
28 The author(s) received no financial support for the research, authorship, and/or
29 publication of this article.
30
31
32
33

34 **References**

- 35
36
37 Ahmed Z, Kader A, Harun Rashid BU, et al. (2017) USER PERCEPTION OF
38 MOBILE BANKING ADOPTION: AN INTEGRATED TTF-UTAUT MODEL.
39 *Journal of Internet Banking and Commerce* 22(3): 1–19.
40
41
42
43
44 Alanezi MA, Mahmood AK and Basri S (2012) E-Government Service Quality: a
45 Qualitative Evaluation in the Case of Saudi Arabia. *The Electronic Journal on*
46 *Information Systems in Developing Countries (Ejisd)* 54(3): 1–20. Available at:
47 <http://www.ejisd.org/ojs2/index.php/ejisd/article/view/971/435>.
48
49
50
51
52
53
54 Andrade A (2009) The strategic planning and ICT in the Brazilian Justice. In:
55 *Proceedings of the 3rd International Conference on Theory and Practice of*
56 *Electronic Governance - ICEGOV '09*, New York, New York, USA, 2009, p. 91.
57
58
59
60

1
2
3 ACM Press. DOI: 10.1145/1693042.1693061.
4

5
6 Andrade A and Joia LA (2012) Organizational structure and ICT strategies in the
7
8 Brazilian Judiciary System. *Government Information Quarterly* 29(SUPPL. 1).
9
10 Elsevier Inc.: S32–S42. DOI: 10.1016/j.giq.2011.08.003.
11
12

13
14 Barbosa AF, Pozzebon M and Diniz EH (2013) Rethinking E-government performance
15
16 assessment from a citizen perspective. *Public Administration* 91(3): 744–762. DOI:
17
18 10.1111/j.1467-9299.2012.02095.x.
19

20
21 Bardin L (1977) *Analise de Conteudo*. Lisboa: Presses Universitaires de France.
22
23 Available at: [https://archive.org/stream/bardin-laurence-analise-de-](https://archive.org/stream/bardin-laurence-analise-de-conteudo#page/n9/mode/2up)
24
25 [conteudo#page/n9/mode/2up](https://archive.org/stream/bardin-laurence-analise-de-conteudo#page/n9/mode/2up).
26
27

28
29 Barua A, Kriebel CH and Mukhopadhyay T (1995) Information technologies and
30
31 business value: An analytic and empirical investigation. *Information Systems*
32
33 *Research* 6(1): 3–23. DOI: 10.1287/isre.6.1.3.
34

35
36 Belanger F and Carter L (2012) Digitizing Government Interactions with Constituents:
37
38 An Historical Review of E-Government Research in Information Systems. *Journal*
39
40 *of the Association for Information Systems* 13(5): 363–394. Available at:
41
42 <http://aisel.aisnet.org/jais/vol13/iss5/1> (accessed 6 September 2015).
43
44

45
46 Bellamy C and Taylor J (1996) New information and communications technologies and
47
48 institutional change: The case of the UK criminal justice system. *International*
49
50 *Journal of Public Sector Management* 9(4): 51–69. DOI:
51
52 10.1108/09513559610128717.
53
54

55
56 Bertot J, Estevez E and Janowski T (2016) Universal and contextualized public
57
58 services: Digital public service innovation framework. *Government Information*
59
60 *Quarterly* 33(2): 211–222. DOI: 10.1016/j.giq.2016.05.004.

- 1
2
3 Bharati P and Berg D (2003) Managing information systems for service quality: A study
4
5 from the other side. *Information Technology & People* 16(2): 183–202. DOI:
6
7 10.1108/09593840310478685.
8
9
- 10 Brown SA, Massey AP, Montoya-Weiss MM, et al. (2002) Do I really have to? User
11
12 acceptance of mandated technology. *European Journal of Information Systems*
13
14 11(4): 283–295. DOI: 10.1057/palgrave.ejis.3000438.
15
16
17
- 18 Burton-Jones A and Grange C (2013) From Use to Effective Use: A Representation
19
20 Theory Perspective. *Information Systems Research* 24(3): 632–658. DOI:
21
22 10.1287/isre.1120.0444.
23
24
- 25 Burton-Jones A and Straub DW (2006) Reconceptualizing System Usage: An Approach
26
27 and Empirical Test. *Information Systems Research* 17(3): 228–246. DOI:
28
29 10.1287/isre.1060.0096.
30
31
- 32 Busetti S and Vecchi G (2018) Process tracing change management: the reform of the
33
34 Italian judiciary. *International Journal of Public Sector Management* 31(5): 566–
35
36 582. DOI: 10.1108/IJPSM-06-2017-0158.
37
38
39
- 40 Carter M and Grover V (2015) Me, My Self, and I(T): Conceptualizing Information
41
42 Technology Identity and Its Implications. *MIS Quarterly* 39(4): 931–957.
43
44
- 45 CEJA (2014) Índice de Accesibilidad a la Información Judicial en Internet (IAcc).
46
47 Available at: [http://w1.cejamericas.org/index.php/areas-de-trabajo/tecnologia-de-](http://w1.cejamericas.org/index.php/areas-de-trabajo/tecnologia-de-la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-internet.html)
48
49 [la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-](http://w1.cejamericas.org/index.php/areas-de-trabajo/tecnologia-de-la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-internet.html)
50
51 [informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-](http://w1.cejamericas.org/index.php/areas-de-trabajo/tecnologia-de-la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-internet.html)
52
53 [internet.html](http://w1.cejamericas.org/index.php/areas-de-trabajo/tecnologia-de-la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-internet.html).
54
55
- 56
57 CEJA (2015) Índice de Servicios Judiciales en Línea (ISJL). Available at:
58
59 [http://www.cejamericas.org/areas-de-trabajo/tecnologia-de-la-informacion-y-](http://www.cejamericas.org/areas-de-trabajo/tecnologia-de-la-informacion-y-transparencia/transparencia-rendicion-de-cuentas-y-acceso-a-la-informacion-judicial/indice-de-accesibilidad-a-la-informacion-judicial-en-internet.html)
60

1
2
3 transparencia/uso-de-la-tecnologia-para-la-gestion-y-acceso-a-la-justicia/informe-
4
5 indice-de-servicios-judiciales-2015.
6
7

8 da Silva Freitas Junior JC, Maçada ACG and Brinkhues RA (2017) Digital Capabilities
9
10 as Key to Digital Business Performance Full Paper. In: *Twenty-third Americas*
11
12 *Conference on Information Systems*, Boston, MA, 2017, pp. 1–10.
13
14

15 Davis FD (1989) Perceived Ease of Use, and User Acceptance of Information
16
17 Technology. *MIS Quarterly* 13(3): 319–340. DOI: 10.2307/249008.
18
19

20 DeLone WH and McLean ER (1992) Information Systems Success : The Quest for the
21
22 Dependent Variable. *Information Systems Management* 3(1): 60–95. DOI:
23
24 10.1287/isre.3.1.60.
25
26

27 DeLone WH and McLean ER (2003) The DeLone and McLean Model of Information
28
29 Systems Success: A Ten-Year Update. *Journal of Management Information*
30
31 *Systems* 19(4): 9–30. DOI: 10.1080/07421222.2003.11045748.
32
33
34

35 Eisenhardt KM (1989) Building Theories from Case Study Research. *Academy of*
36
37 *Management Review* 14(4): 532–550. DOI: 10.5465/amr.1989.4308385.
38
39

40 Elena S (2015) Open Data for Open Justice: A Case Study of the Judiciaries of
41
42 Argentina, Brazil, Chile, Costa Rica, Mexico, Peru and Uruguay. In: *Center for the*
43
44 *Implementation of Public Policies Promoting Equity and Growth, Open Data*
45
46 *Research Symposium*, Ottawa, Canada, 2015, pp. 1–11.
47
48
49

50 Elena S and van Schalkwyk F (2017) Open Data for Open Justice in Seven Latin
51
52 American Countries. In: *Advances in Public Policy and Administration*, pp. 210–
53
54 231. DOI: 10.4018/978-1-5225-0717-8.ch011.
55
56

57 Elena S, Aquilino N and Pichón Riviére A (2014) *Emerging Impacts in Open Data in*
58
59 *the Judiciary Branches in Argentina, Chile and Uruguay*. Buenos Aires. Available
60

1
2
3 at: [http://www.opendataresearch.org/sites/default/files/publications/Case study -](http://www.opendataresearch.org/sites/default/files/publications/Case%20study%20-%20CIPPEC.pdf)
4
5 CIPPEC.pdf%5Cn[http://opendataresearch.org/content/2014/658/emerging-](http://opendataresearch.org/content/2014/658/emerging-impacts-open-data-judiciary-branches-argentina-chile-and-uruguay)
6
7 impacts-open-data-judiciary-branches-argentina-chile-and-uruguay.
8
9

10 Goodhue DL (1995) Understanding User Evaluations of Information Systems.

11
12 *Management Science* 41(12): 1827–1844. DOI: 10.1287/mnsc.41.12.1827.
13
14

15 Goodhue DL and Thompson RL (1995) Task-Technology Fit and Individual

16
17 Performance. *MIS Quarterly* 19(2): 213–236. DOI: 10.2307/249689.
18
19

20 Guimarães TDA, Odelius CC, Medeiros JJ, et al. (2011) Management Innovation at the

21
22 Brazilian Superior Tribunal of Justice. *The American Review of Public*

23
24 *Administration* 41(3): 297–312. DOI: 10.1177/0275074010380449.
25
26

27 Hays JM and Hill A V. (2006) Service Guarantee Strength: The key to service quality.

28
29 *Journal of Operations Management* 24(6): 753–764. DOI:

30
31 10.1016/j.jom.2005.08.003.
32
33

34 Heeks R and Renken J (2018) Data justice for development. *Information Development*

35
36 34(1): 90–102. DOI: 10.1177/0266666916678282.
37
38

39 Hernández Sampieri R, Fernández Collado C and Baptista Lucio M d. (2010)

40
41 *Metodología de La Investigación*. Quinta. México DF: McGraw-Hill.
42
43

44 Infobae (2017) Contrapunto entre Garavano y Lorenzetti por las reformas en el Poder

45
46 Judicial - Infobae. Available at:

47
48 [https://www.infobae.com/politica/2017/11/02/contrapunto-entre-garavano-y-](https://www.infobae.com/politica/2017/11/02/contrapunto-entre-garavano-y-lorenzetti-por-las-reformas-en-el-poder-judicial/)
49
50

51
52 lorenzetti-por-las-reformas-en-el-poder-judicial/ (accessed 13 November 2017).
53
54

55 Jiménez-Gómez CE (2017) Hacia el estado abierto: Justicia abierta en américa latina y

56
57 el caribe. In: Naser A, Ramírez-Alujas Á, and Rosales D (eds) *Desde El Gobierno*

58
59 *Abierto Al Estado Abierto En América Latina y El Caribe*. Comisión Económica
60

1
2
3 para América Latina y el Caribe (CEPAL), pp. 231–251. DOI:
4
5 10.18356/34034156-es.
6
7

8 Joia LA (2008) The impact of government-to-government endeavors on the intellectual
9 capital of public organizations. *Government Information Quarterly* 25(2): 256–
10 277. DOI: 10.1016/j.giq.2007.06.004.
11
12
13
14

15 Joia LA (2009) Governo eletrônico e capital intelectual nas organizações públicas*.
16 *Revista de Administração Pública* 43(6): 1379–1405. DOI: 10.1590/S0034-
17 76122009000600008.
18
19
20
21
22

23 Kim D and Ammeter T (2014) Predicting personal information system adoption using
24 an integrated diffusion model. *Information and Management* 51(4). Elsevier B.V.:
25 451–464. DOI: 10.1016/j.im.2014.02.011.
26
27
28
29

30 Kositanurit B, Ngwenyama O and Osei-Bryson K-M (2006) An exploration of factors
31 that impact individual performance in an ERP environment: an analysis using
32 multiple analytical techniques. *European Journal of Information Systems* 15(6):
33 556–568. DOI: 10.1057/palgrave.ejis.3000654.
34
35
36
37
38
39

40 Kraemer KL, Danziger JN, Dunkle DE, et al. (1993) The Usefulness of Computer-
41 Based Information to Public Managers. *MIS Quarterly* 17(2): 129. DOI:
42 10.2307/249798.
43
44
45
46

47 Kumar R, Sachan A and Mukherjee A (2017) Qualitative approach to determine user
48 experience of e-government services. *Computers in Human Behavior* 71. Elsevier
49 B.V.: 299–306. DOI: 10.1016/j.chb.2017.02.023.
50
51
52
53

54 Lapointe L and Rivard S (2005) A multilevel model of resistance to information
55 technology implementation. *MIS Quarterly* 29(3): 2005. DOI: 10.2307/25148692.
56
57
58
59

60 Lezcano JM and Olivera N (2009) The Electronic Ombudsman. In: *Proceedings of the*

1
2
3 *3rd International Conference on Theory and Practice of Electronic Governance -*
4
5 *ICEGOV '09*, New York, New York, USA, 2009, p. 218. ACM Press. DOI:
6
7 10.1145/1693042.1693086.
8
9

10 Luarn P and Huang K-L (2009) Factors Influencing Government Employee
11
12 Performance via Information Systems Use: an Empirical Study. *Electronic Journal*
13
14 *of e-Government* 7(3): 227–240. Available at:
15
16 [http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&autht](http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=1479439X&AN=47435128&h=UNFktf5Kat81MgoTfscGax+2qb6UHkIFZZ3L4q4z9cWKKufr9E8tYKqM2wV22v6r+TadRVoP7Ejr1qgE2ElncA==&crl=c&resultNs=AdminWebAuth&resultLocal=)
17
18 [ype=crawler&jrnl=1479439X&AN=47435128&h=UNFktf5Kat81MgoTfscGax+2](http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=1479439X&AN=47435128&h=UNFktf5Kat81MgoTfscGax+2qb6UHkIFZZ3L4q4z9cWKKufr9E8tYKqM2wV22v6r+TadRVoP7Ejr1qgE2ElncA==&crl=c&resultNs=AdminWebAuth&resultLocal=)
19
20 [qb6UHkIFZZ3L4q4z9cWKKufr9E8tYKqM2wV22v6r+TadRVoP7Ejr1qgE2Elnc](http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=1479439X&AN=47435128&h=UNFktf5Kat81MgoTfscGax+2qb6UHkIFZZ3L4q4z9cWKKufr9E8tYKqM2wV22v6r+TadRVoP7Ejr1qgE2ElncA==&crl=c&resultNs=AdminWebAuth&resultLocal=)
21
22 [A==&crl=c&resultNs=AdminWebAuth&resultLocal=](http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=1479439X&AN=47435128&h=UNFktf5Kat81MgoTfscGax+2qb6UHkIFZZ3L4q4z9cWKKufr9E8tYKqM2wV22v6r+TadRVoP7Ejr1qgE2ElncA==&crl=c&resultNs=AdminWebAuth&resultLocal=) (accessed 4 April 2016).
23
24
25
26

27 Luzuriaga JM and Cechich A (2011) Electronic notification of court documents. In:
28
29 *Proceedings of the 5th International Conference on Theory and Practice of*
30
31 *Electronic Governance - ICEGOV '11*, New York, New York, USA, 2011, p. 45.
32
33 ACM Press. DOI: 10.1145/2072069.2072077.
34
35

36
37 Luzuriaga JM, Martínez R and Cechich A (2009) Design and implementation of an
38
39 electronic signature solution in the Justice Area. In: *Proceedings of the 3rd*
40
41 *International Conference on Theory and Practice of Electronic Governance -*
42
43 *ICEGOV '09*, New York, New York, USA, 2009, p. 299. ACM Press. DOI:
44
45 10.1145/1693042.1693104.
46
47

48
49 Martinez-Villa BA and Machin-Mastromatteo JD (2016) Four theories to improve
50
51 justice in Latin America. *Information Development* 32(4): 1284–1288. DOI:
52
53 10.1177/02666666916658588.
54
55

56 Muslimin I, Hadi SP and Nugroho E (2017) An Evaluation Model Using Perceived
57
58 User Technology Organization Fit Variable for Evaluating the Success of
59
60

1
2
3 Information Systems. *Scientific Journal of Informatics* 4(2): 86–94.
4

5
6 Myers MD (1997) Qualitative Research in Information Systems. *MIS Quarterly* 21(2):
7
8 241–242. Available at:

9
10 http://www.misq.org/skin/frontend/default/misq/MISQD_isworld/index.html.
11
12

13 Pang M-S, Lee G and DeLone WH (2014) In public sector organisations: a public-value
14
15 management perspective. *Journal of Information Technology* 29(3): 187–205.

16
17 DOI: <http://dx.doi.org/10.1057/jit.2014.2>.
18
19

20
21 Park EG and Oh W (2019) Developing a Government Openness Index: The case of
22
23 developing countries. *Information Development* 35(1): 121–134. DOI:

24
25 10.1177/0266666917731946.
26
27

28 Park MJ, Dulambazar T and Rho JJ (2015) The effect of organizational social factors on
29
30 employee performance and the mediating role of knowledge sharing: focus on e-
31
32 government utilization in Mongolia. *Information Development* 31(1): 53–68. DOI:

33
34 10.1177/0266666913494908.
35
36

37
38 Petter S, DeLone W and McLean ER (2013) Information systems success: The quest for
39
40 the independent variables. *Journal of Management Information Systems* 29(4): 7–
41
42 61. DOI: 10.2753/MIS0742-1222290401.
43
44

45 Raine JW (2000) Modernising courts or courting modernisation? *International Journal*
46
47 *of Public Sector Management* 13(5): 390–416. DOI:

48
49 10.1108/09513550010350788.
50
51

52 Raine JW and Willson MJ (1996) Managerialism and beyond: the case of criminal
53
54 justice. *International Journal of Public Sector Management* 9(4): 20–33. DOI:

55
56 10.1108/09513559610128672.
57
58

59
60 Sandoval-Almazán R (2017) Open Justice in Latin America? An Assessment

1
2
3 Framework for Judiciary Portals in 2015. In: Jiménez-Gómez CE and Gascó-
4 Hernández M (eds) *Achieving Open Justice through Citizen Participation and*
5 *Transparency*. Hershey PA, USA: IGI Global, pp. 232–252. DOI: 10.4018/978-1-
6 5225-0717-8.ch012.
7
8
9

10
11
12 Sandoval-Almazán R and Gil-Garcia JR (2015) Understanding judicial websites: An
13 exploration of portals in the states of Mexico. *Proceedings of the Annual Hawaii*
14 *International Conference on System Sciences 2015-March*: 2106–2114. DOI:
15 10.1109/HICSS.2015.253.
16
17
18
19

20
21
22 Sandoval-Almazán R and Valle-Cruz D (2016) Open Justice in Latin America:
23 Judiciary Websites Under Scrutiny. In: *ICEGOV '15-16*, Montevideo, Uruguay,
24 2016, pp. 287–290. DOI: 10.1145/2910019.2910088.
25
26
27
28

29
30 Serrano C and Karahanna E (2016) The Compensatory Interaction Between User
31 Capabilities and Technology Capabilities in Influencing Task Performance: An
32 Empirical Assessment in Telemedicine Consultations. *MIS Quarterly* 40(3): 597–
33 621.
34
35
36
37

38
39 Silva RAF, Guimaraes TA and Sousa MM (2019) What judges think about the meaning
40 of their work. *International Journal for Court Administration* 10(1): 59. DOI:
41 10.18352/ijca.258.
42
43
44
45

46
47 Sousa M de M and Guimarães T de A (2017) The adoption of innovations in Brazilian
48 labour courts from the perspective of judges and court managers. *Revista de*
49 *Administração* 52(1). Departamento de Administração, Faculdade de Economia,
50 Administração e Contabilidade da Universidade de São Paulo - FEA/USP: 103–
51 113. DOI: 10.1016/j.rausp.2016.09.008.
52
53
54
55
56

57
58 Stake RE (2003) Case Studies. In: *Strategies of Qualitative Inquiry*.
59
60

- 1
2
3 Stake RE (2005) Qualitative Case Studies. In: *Handbook of Qualitative Research*.
4
5
6 Sun H, Fang Y and Zou H (Melody) (2016) Choosing a Fit Technology: Understanding
7
8 Mindfulness in Technology Adoption and Continuance. *Journal of the Association*
9
10 *for Information Systems* 17(6): 377–412. Available at:
11
12 <http://aisel.aisnet.org/jais/vol17/iss6/2> (accessed 1 September 2016).
13
14
15 Tan C-W, Benbasat I and Cenfetelli RT (2013) IT-Mediated Customer Service Content
16
17 and Delivery in Electronic Governments: An Empirical Investigation of the
18
19 Antecedents of Service Quality. *MIS Quarterly* 37(1): 77–109. Available at:
20
21 [http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&](http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJRK+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&)
22
23 [%5Cnscope=site&profile=ehost&](http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJRK+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&)
24
25 [%5Cnscope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=](http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJRK+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&)
26
27 [NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJR](http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJRK+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&)
28
29 [K+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&](http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&nauthtype=crawler&njrn=02767783&nAN=85634540&n=NGff2FsSQogKKPCN8jOs/uTeBuQxHjltWjJRK+weB8LIXMq6lsrOxrKIymIQ/43dQ7t0yNk2iVy8sQWYYA11fA==&)
30
31
32 The New York Times (2017) President Temer of Brazil Dodges Corruption
33
34 Prosecution, Again. Available at:
35
36 [https://www.nytimes.com/2017/10/25/world/americas/brazil-michel-temer-](https://www.nytimes.com/2017/10/25/world/americas/brazil-michel-temer-corruption.html?rref=collection%2Ftimestopic%2FBrazil&action=click&contentCollection=world®ion=stream&module=stream_unit&version=latest&contentPlacement=5&pgtype=collection)
37
38 [corruption.html?rref=collection%2Ftimestopic%2FBrazil&action=click&contentC](https://www.nytimes.com/2017/10/25/world/americas/brazil-michel-temer-corruption.html?rref=collection%2Ftimestopic%2FBrazil&action=click&contentCollection=world®ion=stream&module=stream_unit&version=latest&contentPlacement=5&pgtype=collection)
39
40 [ollection=world®ion=stream&module=stream_unit&version=latest&contentPl](https://www.nytimes.com/2017/10/25/world/americas/brazil-michel-temer-corruption.html?rref=collection%2Ftimestopic%2FBrazil&action=click&contentCollection=world®ion=stream&module=stream_unit&version=latest&contentPlacement=5&pgtype=collection)
41
42 [acement=5&pgtype=collection](https://www.nytimes.com/2017/10/25/world/americas/brazil-michel-temer-corruption.html?rref=collection%2Ftimestopic%2FBrazil&action=click&contentCollection=world®ion=stream&module=stream_unit&version=latest&contentPlacement=5&pgtype=collection).
43
44
45
46 Torkzadeh G and Doll WJ (1999) The development of a tool for measuring the
47
48 perceived impact of information technology on work. *Omega* 27(3): 327–339.
49
50
51 DOI: 10.1016/S0305-0483(98)00049-8.
52
53
54 Velicogna M, Steigenga E, Taal S, et al. (2018) Connecting EU Jurisdictions. *Social*
55
56 *Science Computer Review*: 1–21. DOI: 10.1177/0894439318786949.
57
58
59 Venkatesh V, Thong J and Xu X (2016) Unified Theory of Acceptance and Use of
60

1
2
3 Technology: A Synthesis and the Road Ahead. *Journal of the Association for*
4
5 *Information Systems* 17(5). Available at: <http://aisel.aisnet.org/jais/vol17/iss5/1>
6
7 (accessed 1 September 2016).
8
9

10 Wang YS and Liao YW (2008) Assessing eGovernment systems success: A validation
11
12 of the DeLone and McLean model of information systems success. *Government*
13
14 *Information Quarterly* 25(4): 717–733. DOI: 10.1016/j.giq.2007.06.002.
15
16
17

18 Wang YS, Wang H-Y and Shee DY (2007) Measuring e-learning systems success in an
19
20 organizational context: Scale development and validation. *Computers in Human*
21
22 *Behavior* 23(4): 1792–1808. DOI: 10.1016/j.chb.2005.10.006.
23
24

25 Yildiz M (2007) E-government research: Reviewing the literature, limitations, and ways
26
27 forward. *Government Information Quarterly* 24(3): 646–665. DOI:
28
29 10.1016/j.giq.2007.01.002.
30
31

32 Yin RK (2001) *Estudo de Caso: Planejamento e Métodos*. 2^a. Porto Alegre: Bookman.
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 1. Definitions.

Term	Definition	Author
Task characteristics	Perceived characteristics and requirements of the tasks that the user must perform using ICT.	Goodhue (1995)
Individual characteristics	Perceived attributes related to the individual that could affect how he or she utilizes ICT.	Goodhue (1995)
Task-technology fit	Perceived degree to which a technology assists an individual in performing his or her portfolio of tasks.	Goodhue (1995)
Individual performance	Perceived extent to which a particular IS enables an employee to effectively and/or efficiently execute his or her tasks.	Goodhue and Thompson (1995)
Public service quality	Perceived degree to which an IS facilitates the competent delivery of efficient services to help citizens, businesses and agencies in achieving their governmental transactions.	Tan et al., (2013); Alanezi et al., (2012)

Table 2. Interviewees.

Code	Country	Code	Country
ICTM1	Argentina	ITM8	Brazil
ICTM2	Argentina	PE9	Brazil
PM3	Argentina	PE10	Brazil
PM4	Argentina	PE11	Brazil
ICTM5	Argentina	PE12	Brazil
PM6	Argentina	PE13	Argentina
PM7	Brazil	PE14	Argentina

Table 3. P1: Task characteristics influence users' evaluations of TTF.

Sub-dimension	Evidence	Relation
Agree	PE10: <i>“Everything that is related to the flow, notifications, separate requests... the process comes and goes several times, it suffers from “n” movements... it involves much more technology... much more automation... It has a series of tools in the process, if that happens, what is going to happen next? That it is automatized... [On the other hand, in] the final analysis of the process to be judged... it is less useful... The process moves very little... we analyse the pieces of the process to make the sentence, only one document... That is totally personal, totally human, without technology.”</i>	High
	PE9: <i>“The software includes all the support activity and all the primary activity.”</i>	Medium
	PM6: <i>“It depends on the objective pursued by the use of technology... the system should not be evaluated in the same way... because the functionality that that part of the system is going to have is another... As the objective is different, the conceptualization of the system to achieve this goal will be completely different and the evaluation... will also be different.”</i>	Low

Partially agree	-	-
Disagree	<p>PE14: <i>“If the technology is well oriented for everyone’s task... it is useful for all of them; for the person at the service desk to search for a file; for the one who is going to notify something because it is done through the system, so it is much more... agile than going out and driving; for the judge’s assessor who is writing, he can correct, save, paste... while writing he is looking for jurisprudence”</i></p>	Medium

Table 4. P2: *Individual characteristics influence users' evaluations of TTF.*

Sub-dimension	Evidence	Relation
Agree	PE12: <i>“whenever IS people say “from this moment on you will have to use this system” ... many were like “...are they going to change systems again? Do we have to do it again? I'm used to doing it this way.” ... being open to adapting, adaptability is fundamental.”</i>	High
	ICTM5: <i>“Individual characteristics clearly change... at their age... although there are many people who are capable of learning regardless of their age... because learning about technology is an intelligence.”</i>	Medium
	ICTM1: <i>“In the public sector you often have what you have and you do not dismiss the person, the person remains. Then individual characteristics obviously condition work. If the person is no longer or is not properly committed to the service, technology does not matter; we are talking about something else... It has to do with issues related to incentives and human profiles.”</i>	Medium

Partially agree	PM3: <i>“In informatics, there is a paradigm that it is harder for older people than for younger ones. However, many young people are very reactive to informatics also, or at least, they are very reactive to informatics at work, although perhaps in their personal lives they use social media and Google... On the other hand, older people, in general, have more difficulty with informatics, but many old people have been very innovative. Therefore, we do not allow ourselves to work under that kind of statements because it does not usually work that way.”</i>	Low
Disagree	-	-

Table 5. P3: TTF influences individual performance.

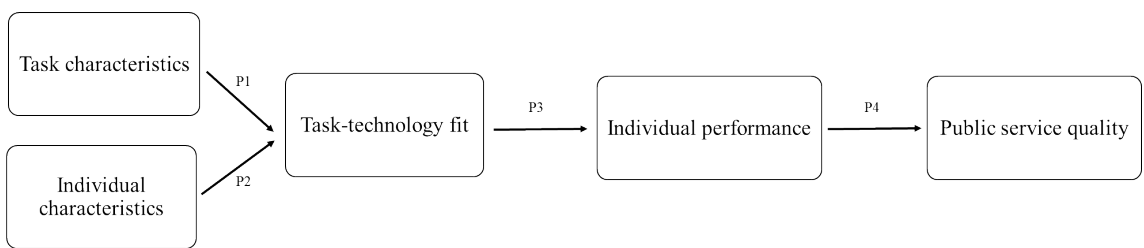
Sub-dimension	Evidence	Relation
Agree	ICTM8: <i>“TTF allows you to automate more or establish the workflow in a clearer way, which will end up reflecting on his performance because it will help him to perform his functions in a clearer and more objective way, without so much interference from the individual... by having a better orientation, he will achieve a better performance”</i>	High
	PE13: <i>“The technology that is going to be applied to... a certain task... cannot be imported, it has to be created specifically for that task... the fit of the technology to the task... obviously improves the performance”</i>	Medium
	PM4: <i>“there must be permanent feedback between the system user and the analysts... to make the changes or the improvements that are required in that sense”</i>	Medium
Partially agree	PE9: <i>“people still experience internet crashes, slowness in the system... As there are many more people using the internet, and much more information circulating, the internet ends up being slower, the system crashes”</i>	Low
Disagree	-	-

Table 6. P4: Individual performance influences public service quality.

Sub-dimension	Evidence	Relation
Agree	PM7: <i>“public service quality is inherently associated with me as a public servant”</i>	High
	PE12: <i>“He can work faster, more efficiently, research better, better assist the judge... I think it helps quality”</i>	Medium
	PE11: <i>“quality and productivity, the two are allied. Because in a courtroom, for example, where there is heavy workload, the public servant can do 80 dispatches per day. Here I do not have that workload, the employee does 1, 2, 3 dispatches per day, it takes a week to make a sentence, but the complexity is much greater.”</i>	Low
Partially agree	PM3: <i>“within quality management, a fundamental element is education or permanent training of employees and civil servants... not only in technological aspects but also in the aspects of the specific legal task”</i>	Low
Disagree	-	-

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 1. Proposed research model.



For Peer Review

APPENDIX A – Interview Script

1. Do you think that individual performance of the employee using the electronic lawsuit can improve public service quality?
2. Do you think that the fit between the functionalities of the electronic lawsuit and the tasks to be developed with it allows obtaining a better individual performance?
3. Do you think that individual characteristics affect the evaluations made of the fit between the functionalities of the electronic lawsuit and the tasks developed with it?
4. Do you think that tasks characteristics affect the evaluations made of the fit between the functionalities of the electronic lawsuit and the tasks developed with it?