

# Obligation-Driven Use and Digital System Success in a Developing-Country Court: Evidence from the Belize Family Court Information System

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## Abstract

*How should information system success be understood in public institutions where technology use is mandated rather than voluntary? In many Global South judicial contexts, digital systems are introduced within resource-constrained organisations where employees must integrate new technologies into established administrative routines. This study examines the factors shaping the success of a judicial information system in Belize, using an extended DeLone and McLean Information Systems Success Model that incorporates Training Adequacy and Workload Fit. Survey data were collected from the full population of 32 employees who use the system in the Belize Family Court, a workforce that is predominantly female, includes many older staff, and reflects the diverse educational backgrounds common in developing-country public sectors.*

*Reliability and multiple regression analyses were conducted using PSPP\*. The results show that Workload Fit predicts System Use, while System Quality and Information Quality predict User Satisfaction. Perceived Net Benefits are driven by User Satisfaction rather than by System Use. Although Net Benefits are rated relatively high, system use is largely obligation-driven and user satisfaction more moderate. The findings highlight how institutional mandates, workforce characteristics, and organisational routines mediate information system success in Global South judicial environments, contributing to ICT4D debates on digital government beyond simple use-based measures of success.*

**Keywords:** ICT4D, digital government, public sector information systems, sociotechnical systems, mandatory system use, workload fit, user satisfaction, global South governance, Belize

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\*PSPP is the open-source alternative to SPSS used at the University of Belize

## **Introduction**

Digital transformation is frequently presented as a means of improving efficiency, accountability, and service delivery within public institutions. In practice, however, the introduction of information systems in many Global South contexts occurs within organisations that face persistent resource constraints, uneven infrastructure, and deeply embedded bureaucratic routines. Research in information systems and ICT for development has long cautioned that technology initiatives in developing-country public sectors are shaped not only by system design, but by institutional capacity, organisational culture, and contextual realities that mediate how systems are implemented and used (Heeks, 2002; Avgerou, 2010). These dynamics are particularly evident in small-state governance environments, where administrative units operate with lean staffing structures and limited technical support, and where digital systems must be integrated into existing procedures rather than replacing them outright (Walsham, 2017).

The Belize Family Court implemented its information system within this broader context of constrained public-sector digitalisation. As a small judicial institution operating in a developing-country environment, the Court relies on a limited administrative workforce and functions within national ICT and telecommunications conditions that influence the reliability and sustainability of digital services. The system was introduced to strengthen administrative coordination, support case processing, and improve internal efficiency in an increasingly digitised justice environment. Yet prior research suggests that such objectives are realised not solely through technical capability, but through how systems are experienced and enacted by employees within their everyday work practices, particularly in contexts characterized by persistent resource constraints, uneven infrastructure, and deeply embedded bureaucratic routines that shape how technologies are adopted, adapted and integrated into organizational processes (Orlikowski, 2000; Fountain, 2001).

Information systems research has consistently shown that system success cannot be understood through technical performance alone. Rather, success emerges through the interaction between system characteristics, organisational context, and user perceptions. In public institutions, employees often engage with digital systems as part of formal job requirements rather than discretionary choice, particularly in bureaucratic settings where compliance with procedures is central to organisational functioning (Seddon, 1997; Petter et al., 2013). In judicial institutions, clerks, case officers, and administrative staff operate within tightly structured routines defined by legal processes, deadlines, and documentation standards. In such environments, system use may be frequent because it is required, even when satisfaction is limited or when the system is perceived as poorly aligned with work demands. Distinguishing between use driven by obligation and use associated with positive experience is therefore essential for understanding what “system success” means in institutional contexts.

To examine these dynamics, this study draws on the revised DeLone and McLean Information Systems Success Model, which conceptualises success through the interrelated dimensions of system quality, information quality, service quality, use, user satisfaction, and net benefits (DeLone & McLean, 2003). Subsequent research has demonstrated the model’s value across a range of public-sector and e-government settings, while also emphasising that its relationships are shaped by organisational and contextual conditions rather than operating uniformly across environments (Petter, DeLone, & McLean, 2008; Urbach & Müller, 2012). These constructs reflect conditions common in developing-country public institutions, where formal ICT training may be uneven and where alignment between digital systems and everyday tasks plays a critical role in shaping engagement and experience (Goodhue & Thompson, 1995; Tarhini et al., 2017).

The COVID-19 pandemic further intensified reliance on digital systems within public institutions worldwide, accelerating the integration of information systems into core administrative processes (Dwivedi et al., 2020). In Belize, as in many developing countries, this shift highlighted both the potential value of digital tools and the organisational challenges associated with their use. Evaluating system success in this context therefore requires attention not only to functionality and support, but also to how systems are embedded within existing routines, how employees adapt to mandated digital practices, and how perceptions of reliability and usefulness develop over time (Cordella & Bonina, 2012).

This study investigates the success of the Belize Family Court information system using survey data collected from the full population of 32 employees who use the system in their daily work. By analysing the relationships among workload fit, training adequacy, system and information quality, system use, user satisfaction, and perceived net benefits, the study seeks to clarify how digital system success is experienced within a small Global South judicial institution. In doing so, it contributes to ICT4D and digital government research by illustrating how institutional mandates, workforce characteristics, and organisational routines shape the meaning of system success beyond simple measures of use.

## **Literature Review**

Information systems research has a long-standing tradition of examining what constitutes “system success” and how it should be conceptualised and measured across organisational contexts. Early work emphasised the multidimensional nature of success and the need to move beyond single outcome indicators toward more integrated evaluative frameworks (Seddon, 1997; Sabherwal, Jeyaraj, & Chowa, 2006). The DeLone and McLean Information Systems Success Model emerged as one of the most influential approaches in this regard, originally proposed in 1992 and refined in 2003 to incorporate six interrelated dimensions: system quality, information quality, service quality, intention to use, user satisfaction, and net benefits (DeLone & McLean, 2003). Subsequent scholarship has reinforced the value of this model as a flexible and empirically robust framework for assessing IS performance across sectors, while also highlighting the importance of contextual and organisational mediators in shaping the relationships among these dimensions (Petter, DeLone, & McLean, 2008; Urbach & Müller, 2012). Together, this body of work establishes a theoretical foundation for understanding IS success as an outcome of both technical artefacts and the social environments in which they are embedded.

Although the DeLone and McLean model provides a widely adopted framework for assessing information system outcomes, later research has emphasised that the relationships among its constructs are shaped by organisational context, work practices, and institutional environments rather than operating as universal or deterministic patterns. Studies have shown, for instance, that system use is often influenced by organisational mandates, task constraints, and institutional expectations, particularly in public-sector environments where technology engagement may be embedded in formal procedures rather than driven by individual choice (Seddon, 1997; Petter et al., 2013). From a sociotechnical perspective, information systems are not neutral tools but are enacted through everyday routines, power structures, and role expectations within organisations (Orlikowski, 2000; Bostrom & Heinen, 1977). This implies that high levels of use do not necessarily reflect positive evaluation or meaningful integration, and may instead arise from procedural obligation or limited alternatives a pattern documented in several studies of e-government, digital administration, and bureaucratic information systems in developing-country contexts (Heeks, 2002; Cordella & Bonina, 2012).

Applications of the DeLone and McLean model in public-sector and e-government environments have further highlighted the importance of contextualising system success within the organisational and institutional settings in which digital initiatives are implemented. Empirical studies in government service platforms, social protection systems, and administrative information systems have shown that factors such as role expectations, bureaucratic workflows, citizen service pressures, and institutional accountability structures mediate how users perceive quality, satisfaction, and benefit (Wang & Liao, 2008; Rana, Dwivedi, & Williams, 2015). Research in developing-country administrations has similarly demonstrated that public employees frequently engage with information systems as part of mandated procedures, where frequency of use may be high but satisfaction or perceived value more uneven, particularly when systems do not align well with existing work practices or organisational capacity (Khalil, 2011; García-Sánchez, Mordeniz, & Prado-Lorenzo, 2012). These findings reinforce calls within ICT4D and digital government scholarship for more situated analyses of how IS success unfolds within specific institutional contexts, rather than assuming uniform outcomes from model-based relationships.

Within the justice sector, information systems have been adopted to support case management, records processing, judicial scheduling, and administrative coordination, yet research on their implementation and performance remains comparatively limited when compared with other public-service domains. Existing scholarship has documented both the potential benefits of court digitalisation, including improved

information accessibility, process standardisation, and timeliness of case handling, and the tensions that arise when digital tools intersect with deeply institutionalised legal and procedural traditions (Contini & Lanzara, 2014; Reiling, 2009). Studies of digital courts in Europe, Latin America, and Asia have shown that information systems are often layered onto existing bureaucratic routines rather than replacing them, resulting in hybrid work practices where paper based and digital processes coexist (Velicogna, 2017; Fabri, 2016). These findings suggest that the success of judicial information systems depends not only on their technical capabilities, but also on how well they integrate with work tasks, professional roles, and organisational constraints, themes that remain underexplored in small-state and developing country judicial contexts.

Prior research in public-sector and ICT4D environments has highlighted the importance of institutional capacity, digital literacy, and skills development in shaping how employees engage with information systems, particularly where formal ICT training opportunities are unevenly distributed or concentrated among specific occupational groups. Studies have shown that inadequate or narrowly focused training can limit user confidence, restrict the depth of system utilisation, and exacerbate perceptions of misalignment between digital tools and everyday work practices (Janssen & Dwivedi, 2011; Tawileh, Hilton, & Johnson, 2013). At the same time, scholarship on technology task fit and organisational alignment has demonstrated that information systems are more likely to generate positive outcomes when they integrate smoothly with the structure, pace, and division of labour characterising users' routine activities (Goodhue & Thompson, 1995; Strong, Dishaw, & Bandy, 2006). These insights are particularly relevant in developing-country public institutions, where workload pressures, staffing constraints, and role specialisation intensify the significance of whether systems are perceived as supporting, or complicating, the completion of core tasks (Heeks, 2002; Cordella & Bonina, 2012). Building on this literature, the present study incorporates Training Adequacy and Workload Fit as additional constructs to better capture the sociotechnical conditions under which judicial information systems are adopted and experienced in small-state Global South contexts.

Although Workload Fit is informed by the broader Task-Technology Fit (TTF) tradition, it represents a conceptually distinct construct within this study. Traditional TTF emphasizes the extent to which a system's functional capabilities align with the requirements of specific job tasks, proposing that closer alignment improves individual performance and technology utilization (Goodhue & Thompson, 1995). By contrast, Workload Fit focuses on whether a system enables employees to effectively manage the volume, pace, and complexity of their work within the organizational conditions in which those tasks are performed. This distinction is particularly important in resource-constrained public sector environments, where staffing shortages, administrative burdens, and institutional routines may limit effective system use even when the technology itself adequately supports task completion. Consequently, Workload Fit extends beyond functional task alignment by recognising that employees' perceptions of system usefulness are shaped not only by what the technology can do, but also by whether it accommodates the practical demands of their everyday workload. Whereas Task Technology Fit primarily evaluates the compatibility between technological capabilities and specific task requirements, Workload Fit captures a broader organisational perspective by recognising that employees must simultaneously manage multiple responsibilities within resource constrained institutional settings. In obligation driven public organisations such as the Belize Family Court, successful information systems therefore depend not only on supporting individual tasks but also on enabling employees to manage overall workload efficiently without increasing administrative burden. This distinction extends existing Information Systems Success research by demonstrating that workload alignment represents a critical organisational capability beyond traditional measures of task-technology compatibility.

Taken together, prior research demonstrates that information system success in public institutions is shaped by the interaction between technical system characteristics, organisational environments, and the sociocultural conditions under which employees engage with digital tools. However, there remains a need for more empirically grounded analyses of how these relationships unfold in judicial workplaces in developing-country and small state contexts, where system use is frequently embedded in mandated procedures and institutional capacity constraints shape both adoption and experience. Existing applications of the DeLone and McLean model in public administration offer valuable insights into system quality, satisfaction, and perceived benefits, but they provide limited attention to how training adequacy and workload alignment influence use and satisfaction in obligation-driven environments such as courts.

Addressing this gap, the present study examines the Belize Family Court information system through an extended IS success framework that incorporates Training Adequacy and Workload Fit in addition to the core constructs of system quality, information quality, service quality, system use, user satisfaction, and net benefits. This approach contributes to ICT4D and digital government scholarship by offering a context-sensitive analysis of how information systems are adopted, experienced, and valued within a Global South judicial institution.

## Methodology

The methodology for this study was designed to empirically examine the sociotechnical factors influencing information system success within the Belize Family Court, using an extended version of the DeLone and McLean Information System Success Model. Consistent with prior ICT4D and digital government research, the study adopts a model-driven quantitative approach to analyse how technical, organisational, and perceptual dimensions interact in a resource constrained public-sector environment (DeLone & McLean, 2003; Petter et al., 2008). The research model retains the six core constructs of the IS Success Model, System Quality, Information Quality, Service Quality, System Use, User Satisfaction, and Net Benefits, while integrating two context-specific extensions: Training Adequacy and Workload Fit. These additions reflect the importance of user competence and task alignment in judicial workplaces where technology use is embedded in mandated work routines and institutional procedures.

The model specifies directional relationships among these constructs, leading to a set of hypotheses that link system characteristics, user perceptions, and organisational outcomes. The conceptual framework guiding the study is presented in Figure 1, followed by the corresponding hypotheses and construct definitions.

This model was tested using survey data collected from all 32 employees who use the information system in the Belize Family Court, enabling whole population analysis of system perceptions in a small-scale Global South judicial institution.

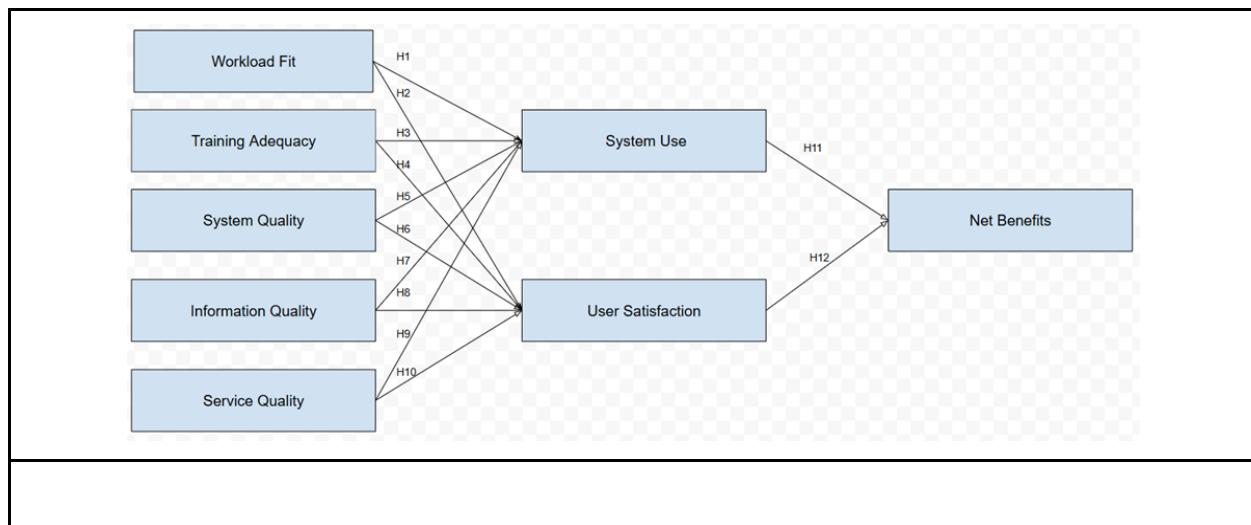


**Figure 1**  
*Modified Research Model*

## Hypotheses

Based on the extended Information Systems Success Model, the study examines how system quality, information quality, service support, workload alignment, and training preparation influence system use, user satisfaction, and perceived organisational benefits in the Belize Family Court.

Accordingly, the following hypotheses were specified:

#### Workload Fit and Training Adequacy

H1: Workload Fit is positively associated with System Use.

H2: Workload Fit is positively associated with User Satisfaction.

H3: Training Adequacy is positively associated with System Use.

H4: Training Adequacy is positively associated with User Satisfaction.

#### System, Information, and Service Quality

H5: System Quality is positively associated with User Satisfaction.

H6: Information Quality is positively associated with User Satisfaction.

H7: Service Quality is positively associated with User Satisfaction.

#### System Use and User Satisfaction

H8: System Quality is positively associated with System Use.

H9: Information Quality is positively associated with System Use.

H10: Service Quality is positively associated with System Use.

#### Organizational Outcomes

H11: System Use is positively associated with Net Benefits.

H12: User Satisfaction is positively associated with Net Benefits.

### ***Research Design***

This study employed a quantitative, model-driven research design to empirically examine the relationships among system quality, user perceptions, usage, and organisational outcomes within the Belize Family Court information system. Consistent with prior applications of the DeLone and McLean IS Success Model in public-sector environments, the study adopts a cross sectional survey approach to test hypothesised relationships among the model constructs under real institutional conditions (DeLone & McLean, 2003; Petter et al., 2008). The research design is particularly well suited to the Belize Family Court context, where information system use is embedded in mandated workflows, and where the objective is not to predict future adoption behaviour, but rather to understand how perceptions of quality, fit, and competence shape satisfaction and perceived benefits in an obligation driven environment.

The study focuses on the entire population of employees who use the Court's information system in their day-to-day work. This allows for whole population analysis rather than inference based on a partial respondent group, which is especially important in small Global South institutional settings where organisational units are relatively small and the experiences of each user directly influence overall system outcomes.

### ***Revised Instrumentation and Measures***

Data were collected using a structured questionnaire designed to operationalise the constructs in the extended IS Success Model. The instrument included validated multi item Likert type scales for System Quality, Information Quality, Service Quality, System Use, User Satisfaction, and Net Benefits, adapted from prior IS success and e-government research to ensure conceptual consistency while maintaining contextual relevance to judicial administrative work. Two additional constructs Training Adequacy and Workload Fit were operationalised using items adapted from prior studies on institutional capacity, user competence, and task technology alignment in public-sector and ICT4D contexts. Table 1 presents representative survey items used to operationalise the two context-specific constructs introduced in this study. These sample items are provided to improve methodological transparency and to illustrate how Workload Fit and Training Adequacy were measured within the Belize Family Court context.

### ***Sampling and Participants***

The study adopted a census sampling strategy rather than a probabilistic or convenience sampling approach. At the time of data collection, the Belize Family Court employed 32 staff members who regularly used the information system as part of their routine work responsibilities, including clerical officers, case management staff, supervisors, and administrative personnel. All 32 system-using employees were invited to participate in the study, and full participation was obtained, resulting in a 100% response rate and complete coverage of the system-using workforce.

This census approach strengthens the internal validity and organisational relevance of the findings, as the results reflect the perceptions of every system user in the institution rather than a sample subset. It also aligns with methodological recommendations for research in small public-sector organisations, where unit size, role interdependence, and institutional decision-making structures make whole-population analysis both feasible and analytically appropriate.

**Table 1**  
*Background Information*

| Gender            |           | Age           |           | Education                      |           |
|-------------------|-----------|---------------|-----------|--------------------------------|-----------|
| Male              | 5         | < 25 years    | 6         | Secondary School               | 11        |
| Female            | 26        | 25 - 34 years | 12        | Vocational/ Technical Training | 1         |
| Prefer Not to Say | 1         | 35 - 44 years | 10        | Associate's Degree             | 14        |
|                   |           | 45 - 54 years | 4         | Bachelor's Degree              | 2         |
|                   |           |               |           | Master's Degree                | 4         |
| <b>Total</b>      | <b>32</b> | <b>Total</b>  | <b>32</b> | <b>Total</b>                   | <b>32</b> |

The participant group reflects the full system-using workforce of the Belize Family Court and is characterised by notable diversity in age, tenure, and educational background, alongside a strongly gender-skewed composition. The majority of system users are women, many of whom have been employed in the Court for several years and occupy administrative and clerical roles that are central to case processing. Formal educational attainment ranges from secondary qualifications to tertiary degrees, reflecting the heterogeneous skills base typical of public-sector administrative units in small developing-country states. This workforce composition is analytically important because differences in age, tenure, and training exposure shape how employees experience digital systems, adapt work routines, and interpret organisational change.

### ***Data Collection and Analysis Procedures***

The survey was administered in person at the Court during scheduled working hours to maximise accessibility and minimise participation burden. Participation was voluntary, confidentiality was assured, and no personally identifying information was collected, ensuring that responses reflected genuine perceptions rather than supervisory or institutional reporting expectations.

Data were analysed using a series of quantitative procedures designed to assess the reliability of the measurement instrument and to test the hypothesised relationships in the research model. Descriptive statistics were first generated to summarise respondent characteristics and construct means, providing an overview of how Court employees evaluated the system across the different model dimensions. Internal consistency of each construct was assessed using Cronbach's alpha, with all scales meeting conventional thresholds for acceptable reliability.

Bivariate correlations were examined to explore initial associations among the constructs, followed by multivariate regression analyses to test the hypothesised relationships between system quality, workload alignment, training adequacy, system use, user satisfaction, and net benefits. Given that the dataset represents a complete census of all systems using staff, the analysis focuses on interpreting the observed relationships within the organisational population rather than on statistical generalisation beyond the Court. The results are therefore read as institutionally meaningful patterns that reflect how information system success is experienced within this specific judicial workplace.

## **Results**

Data were obtained from 32 employees of the Belize Family Court who use the information system in their daily work, representing the full system-using workforce. The sample was predominantly female (26 female, 5 male, 1 prefer not to say) and largely composed of mid career staff. Most respondents had either secondary level or associate-level education, with a smaller number holding bachelor's or graduate degrees. This demographic profile reflects a workforce that is mostly female, older, and characterised by relatively modest formal educational attainment, a pattern consistent with public-sector administrative staffing in many developing country judicial institutions.

### ***Reliability Analysis***

Internal consistency of the study constructs was assessed using Cronbach's alpha to evaluate the reliability of the measurement scales.

**Table 2**  
*Reliability of Constructs*

| Construct    | Cronbach's $\alpha$ |
|--------------|---------------------|
| Workload Fit | .81                 |

|                     |     |
|---------------------|-----|
| Training Adequacy   | .84 |
| System Quality      | .85 |
| Information Quality | .89 |
| Service Quality     | .88 |
| System Use          | .90 |
| User Satisfaction   | .91 |
| Net Benefits        | .92 |

Table 2 reports the internal consistency of all constructs in the extended IS Success Model. Cronbach's alpha coefficients ranged from .81 to .92, exceeding conventional thresholds for acceptable reliability. This indicates that all scales performed robustly within the Court context and were suitable for further analysis

### ***Descriptive Statistics and Correlations***

Descriptive statistics and Pearson correlations were examined to provide an overview of how employees evaluated the system across the model constructs and to assess the initial associations among them. Table 3 presents the intercorrelations among all eight constructs in the extended IS Success Model.

**Table 3** *Descriptive Statistics and Correlations*

| <b>Variable</b>               | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1. System Quality (SYSQ)      | —        |          |          |          |          |          |          |          |
| 2. Information Quality (INFQ) | .741**   | —        |          |          |          |          |          |          |
| 3. Service Quality (SERQ)     | .519**   | .596**   | —        |          |          |          |          |          |
| 4. Training Adequacy (TRNA)   | .553**   | .697**   | .780**   | —        |          |          |          |          |
| 5. Workload Fit (WOLF)        | .608**   | .833**   | .609**   | .757**   | —        |          |          |          |
| 6. System Use (SYSU)          | .310     | .594**   | .478**   | .589**   | .779**   | —        |          |          |
| 7. User Satisfaction (USAT)   | .604**   | .728**   | .705**   | .681**   | .782**   | .826**   | —        |          |
| 8. Net Benefits (NETB)        | .612**   | .768**   | .693**   | .821**   | .761**   | .636**   | .722**   | —        |

The majority of constructs demonstrated strong and statistically significant positive correlations. In particular, Workload Fit, Training Adequacy, and Information Quality were highly correlated with both User Satisfaction and Net Benefits, indicating that employees who perceived the system as well aligned with their work responsibilities and who felt adequately trained were also more likely to report positive organisational outcomes from system use. Similarly, Information Quality showed strong associations with both satisfaction and benefit perceptions, underscoring the importance of accurate and reliable information in the judicial administrative environment.

The only non-significant correlation was between System Quality and System Use ( $p = .09$ ), suggesting that technical performance alone does not determine whether employees use the system. This pattern is consistent with work environments in which system engagement is shaped more by work processes and institutional requirements than by perceptions of technical functionality.

Taken together, the correlations indicate conceptually coherent relationships among the constructs and provide empirical justification for subsequent multivariate analysis.

### ***Regression Analysis Results***

Multiple regression models were estimated to test the hypothesised relationships in the extended IS Success Model. Separate models were run for System Use, User Satisfaction, and Net Benefits as dependent variables. Table 4 summarises the regression coefficients, significance levels, and explained variance for each model.

**Table 4**  
*Regression Analysis Results*

| <b>Dependent Variable</b>       | <b>Predictor</b>           | <b><math>\beta</math></b> | <b>t</b> | <b>p</b> | <b>R<sup>2</sup></b> |
|---------------------------------|----------------------------|---------------------------|----------|----------|----------------------|
| <b>System Use (SYSU)</b>        | Workload Fit (WORF)        | .51                       | 2.81     | .009**   | .61                  |
|                                 | Training Adequacy (TRNA)   | .12                       | 0.68     | .501     |                      |
|                                 | System Quality (SYSQ)      | .09                       | 0.47     | .642     |                      |
|                                 | Information Quality (INFQ) | .19                       | 1.12     | .271     |                      |
|                                 | Service Quality (SERQ)     | .06                       | 0.38     | .708     |                      |
| <b>User Satisfaction (USAT)</b> | Workload Fit (WORF)        | .14                       | 0.89     | .382     | .75                  |
|                                 | Training Adequacy (TRNA)   | .10                       | 0.64     | .526     |                      |
|                                 | System Quality (SYSQ)      | .26                       | 2.01     | .048*    |                      |
|                                 | Information Quality (INFQ) | .28                       | 2.17     | .039*    |                      |
|                                 | Service Quality (SERQ)     | .11                       | 0.71     | .484     |                      |
| <b>Net Benefits (NETB)</b>      | System Use (SYSU)          | .19                       | 1.09     | .285     | .67                  |

|  |                          |     |      |        |  |
|--|--------------------------|-----|------|--------|--|
|  | User Satisfaction (USAT) | .53 | 3.10 | .004** |  |
|--|--------------------------|-----|------|--------|--|

### ***Predictors of System Use***

In the first model, Workload Fit emerged as the only significant predictor of System Use

$$\beta = .51, p < .01$$

None of the other predictors, Training Adequacy, System Quality, Information Quality, or Service Quality, showed significant effects.

This indicates that employees are more likely to use the system when it aligns well with their day-to-day tasks and work routines, rather than because they perceive it as technically strong or well supported. The model explained 61% of the variance in System Use ( $R^2 = .61$ ), suggesting that alignment with work demands is a central driver of use in this setting.

### ***Predictors of User Satisfaction***

In the second model, two predictors were statistically significant:

#### *System Quality*

$$\beta = .26, p < .05$$

#### *Information Quality*

$$\beta = .28, p < .05$$

Workload Fit, Training Adequacy, and Service Quality were not significant.

These results suggest that satisfaction depends primarily on whether the system functions reliably and produces accurate, useful information for case processing, rather than on levels of training or support services. The model accounted for 75% of the variance in User Satisfaction ( $R^2 = .75$ ), indicating a strong explanatory fit.

### ***Predictors of Net Benefits***

In the final model, User Satisfaction was a strong and significant predictor of Net Benefits

$$\beta = .53, p < .01$$

By contrast, System Use was not significant

$$\beta = .19, p = .29$$

This pattern indicates that perceived organisational benefits arise not merely from using the system more frequently, but from feeling satisfied and confident in relying on it in everyday work. The model explained 67% of the variance in Net Benefits ( $R^2 = .67$ ). Overall, the regression models demonstrated substantial explanatory power, with  $R^2$  values ranging from .61 to .75 across the three dependent variables. Although these values indicate that the selected predictors account for a considerable portion of the variance in system use, user satisfaction, and net benefits, they may also reflect the close operational interdependence characteristic of a small judicial institution. Within the Belize Family Court, employees perform highly coordinated and complementary roles within a shared administrative environment, which may contribute

to stronger relationships among organisational and technology- related factors that would be expected in larger or more heterogeneous organizations.

### ***Summary of Findings***

Across all models, the results reveal a clear distinction between behavioural engagement and experiential evaluation:

System Use is driven by Workload Fit, rather than by technical or training factors.

User Satisfaction is driven by System and Information Quality, rather than by workload or training.

Net Benefits are driven by User Satisfaction, not by frequency of use.

This pattern shows that obligation-driven organisational environments, where employees use systems because their work requires it, derive perceived value only when the system is reliable and produces trustworthy information.

### ***Hypothesis Testing***

Table 5 summarizes the set of hypotheses and indicates which were supported by the regression models.

| <b>Table 5. Summary of Hypothesis Testing</b> |                                         |               |
|-----------------------------------------------|-----------------------------------------|---------------|
| Hypothesis                                    | Description                             | Results       |
| H1                                            | Workload Fit → System Use               | Supported     |
| H2                                            | Workload Fit → User Satisfaction        | Not Supported |
| H3                                            | Training Adequacy → System Use          | Not Supported |
| H4                                            | Training Adequacy → User Satisfaction   | Not Supported |
| H5                                            | System Quality → System Use             | Not Supported |
| H6                                            | System Quality → User Satisfaction      | Supported     |
| H7                                            | Information Quality → System Use        | Not Supported |
| H8                                            | Information Quality → User Satisfaction | Supported     |
| H9                                            | Service Quality → System Use            | Not Supported |
| H10                                           | Service Quality → User Satisfaction     | Not Supported |
| H11                                           | System Use → Net Benefits               | Not Supported |
| H12                                           | User Satisfaction → Net Benefits        | Supported     |

The hypothesis testing results provide partial support for the extended IS Success Model in the Belize Family Court context. Among the workload and training-related constructs, only Workload Fit → System

Use (H1) was supported, indicating that employees are more likely to engage with the system when it aligns with their day-to-day responsibilities. In contrast, Training Adequacy did not significantly predict either System Use or User Satisfaction (H3–H4). Among the quality constructs, System Quality → User Satisfaction (H6) and Information Quality → User Satisfaction (H7) were supported, while their relationships with System Use (H8–H10) were not. Finally, for the outcome relationships, User Satisfaction → Net Benefits (H12) was strongly supported, whereas System Use → Net Benefits (H11) was not.

Taken together, the pattern of supported and unsupported hypotheses highlights a context in which system use is shaped primarily by work processes and task alignment, rather than by technical quality or training, and where perceived organisational benefits flow from satisfaction rather than from use itself. These findings suggest that in obligation driven public sector environments, behavioural engagement with digital systems may occur even when satisfaction is moderate, but meaningful benefit is realised only when employees trust the system and perceive it as reliable and informative.

## ***Discussion***

The findings of this study provide new insight into how information system success is experienced and produced within a small judicial institution in a developing country context. Although the Belize Family Court information system is widely used and perceived as beneficial, the results reveal important distinctions between behavioural engagement, perceptual evaluation, and organisational value. In particular, the study shows that system use is driven primarily by workload alignment, while perceived benefits are driven primarily by user satisfaction rather than by frequency of use. These dynamics reflect a sociotechnical environment in which technology is embedded in mandated administrative routines rather than adopted through discretionary or voluntary choice.

A key contribution of the study concerns the role of Workload Fit. The regression results indicate that Workload Fit is the only significant predictor of System Use, suggesting that employees engage with the system when it supports the flow of case processing, document handling, and clerical coordination that structure their daily work. This pattern aligns with prior research emphasising that digital systems in public institutions are often adopted as extensions of existing routines rather than as transformative substitutes, and that alignment with established work practices is central to sustained engagement. In the Belize Family Court, where case management responsibilities are distributed across a relatively small group of administrative staff, the degree to which the system reduces duplication, supports task sequencing, and fits within procedural constraints appears to matter more for use than technical or service support characteristics. This helps explain why neither System Quality nor Training Adequacy significantly predicts use, despite their conceptual importance in IS success models.

The lack of significant relationship between System Quality and System Use should also be understood in relation to the mandatory nature of information system use within the Belize Family Court. Unlike voluntary technology adoption contexts, where users may choose whether to engage with a system based on perceptions of functionality, convenience, or performance, court employees are required to interact with the system as part of their assigned responsibilities and administrative procedures. Consequently, baseline system use may occur regardless of variations in perceived system quality, reducing the extent to which technical characteristics alone explain behavioural engagement. In this context, System Quality appears to influence how users evaluate their experience with the system rather than whether they use it, as reflected in its significant relationship with User Satisfaction.

In contrast, User Satisfaction is shaped by System Quality and Information Quality rather than by workload or training factors. Employees report greater satisfaction when the system operates reliably and produces accurate, complete, and useful information for case handling. This finding is consistent with the nature of judicial administrative work, where information accuracy, record integrity, and procedural consistency carry high organisational and legal significance. Even in a context where system use is partially obligation-driven, satisfaction depends on whether the system performs in ways that support confidence, trust, and reliability in daily operations. The fact that Service Quality and Training Adequacy do not significantly influence satisfaction suggests that users evaluate the system less in terms of support infrastructure and more in terms of whether it helps them produce credible and dependable work outputs.

Perhaps the most notable finding is that User Satisfaction, not System Use, predicts Net Benefits. Although staff report regular engagement with the system, perceived organisational benefits arise only when users feel satisfied and confident in relying on it. This reinforces an important distinction between use as a behavioural requirement and benefit as a perceptual outcome. In environments such as the Belize Family Court, where information systems are integrated into mandated procedures, employees may continue to use the system even when satisfaction is moderate; however, the system generates meaningful institutional value only when it is trusted, dependable, and aligned with expectations of record accuracy and administrative efficiency. This pattern offers empirical support for ICT4D arguments that digital success in public institutions is not guaranteed by use alone, but depends on how systems reshape, or fail to reshape, the quality and meaning of work.

These findings should also be interpreted in relation to the composition of the Court workforce. The system-using staff are predominantly female, many are mid to late-career, and formal educational attainment is mixed, with several employees holding secondary or associate level qualifications. Such workforce characteristics are typical of administrative units in many developing country public institutions, where employees frequently develop technology related competence through experience, institutional memory, informal peer support, and repeated engagement with routine work processes rather than through formal ICT training alone. Consequently, Training Adequacy did not emerge as a significant predictor of either System Use or User Satisfaction because employees relied primarily on experiential learning and collaborative problem solving to develop confidence in using the system. These findings reinforce the importance of embedding learning opportunities within everyday work practices through structured peer mentoring, work-integrated learning, and continuous organisational support. This finding may also be understood in relation to the digital literacy dynamics present within small, interdependent public-sector teams. Where employees develop technology related confidence through repeated exposure, informal assistance from colleagues, and shared problem solving practices, the influence of formal training may become less visible as a direct predictor of system use or satisfaction. Additionally, differences in individual digital literacy levels may shape how employees compensate for variations in training exposure, with more experienced users informally supporting colleagues and reinforcing collective knowledge of system practices. In such tightly connected institutional environments, social influence and peer based learning mechanisms may therefore moderate the relationship between formal training adequacy and technology engagement. Furthermore, the non-significance of Training Adequacy may be partly explained by the influence of social learning within a small, interdependent team environment. In such settings, employees may rely on colleagues, shared experiences, and informal knowledge exchange to overcome gaps in formal training, reducing the extent to which perceived training adequacy independently predicts system use or satisfaction. This highlights the need for system design approaches that recognise diverse skill bases and support learning through embedded, work-integrated forms of practice rather than one-off training encounters.

More broadly, the results contribute to ongoing debates in ICT4D and digital government research regarding the nature of obligation driven use in public organisations. The Belize case demonstrates that high levels of system use should not automatically be interpreted as evidence of successful adoption or positive user engagement. Instead, use in small institutional settings may be sustained by procedural mandates, limited alternatives, or role expectations, while satisfaction and benefit perceptions vary according to the reliability and informational value of the system. This suggests that standard IS success indicators may obscure meaningful organisational distinctions between using a system because one must and benefiting from a system because it improves work. Recognising this distinction is especially important in judicial and legal administrative contexts, where digital systems are deeply intertwined with institutional authority, due process, and accountability requirements.

Overall, the findings illustrate that information system success in the Belize Family Court is best understood as the outcome of interactions among task alignment, technical and informational reliability, and the everyday work experiences of staff within a small, resource constrained public institution. Rather than viewing success as a linear progression from system quality to use and benefit, the results point to a more layered relationship in which alignment drives use, reliability drives satisfaction, and satisfaction drives benefit. These dynamics offer a nuanced understanding of how digital systems operate in Global South judicial settings and provide a foundation for rethinking how success is conceptualised, assessed, and pursued in similar public-sector environments.

From a practical perspective, these findings suggest that judicial institutions should prioritise improving workload alignment before investing in additional technical functionality. Managers should regularly evaluate whether digital workflows match employees' day-to-day responsibilities, encourage collaborative problem-solving among experienced staff, and integrate peer supported learning into routine operations. Such work-integrated approaches are likely to produce greater organisational value than relying exclusively on conventional ICT training programmes, particularly in resource constrained public sector environments where employees frequently develop expertise through experience and informal knowledge sharing.

## **Conclusion**

This study examined the success of a judicial information system in the Belize Family Court by extending and empirically testing the DeLone and McLean IS Success Model in a small Global South public-sector institution. Using a census of all 32 employees who use the system in their daily work, the study provides a rare whole-population account of how information systems are experienced within a judicial administrative environment characterised by lean staffing structures, diverse educational backgrounds, and obligation driven patterns of technology use.

The findings demonstrate that information system success in this context does not follow a simple linear pathway from system quality to use and benefit. Instead, three key dynamics shape outcomes. First, system use is driven primarily by Workload Fit, indicating that employees engage with the system when it aligns with task flow and case-processing routines, rather than because of technical quality, training, or support. Second, User Satisfaction is shaped by System Quality and Information Quality, reflecting the central importance of reliability, accuracy, and informational credibility in judicial administrative work. Third, Net Benefits are predicted by User Satisfaction rather than by System Use, meaning that organisational value emerges not from using the system more frequently, but from being confident in relying on it.

Together, these patterns highlight an important distinction between using a system because work requires it and perceiving a system as beneficial because it improves the quality and integrity of work. This distinction is especially salient in public institutions where technology use is embedded in mandated processes. Information Systems success in obligation driven judicial environments should therefore be supported through practical organisational interventions rather than relying solely on periodic technical upgrades or formal training programmes. Judicial administrators should establish structured peer mentoring programmes in which experienced system users provide ongoing guidance to newer or less confident employees during routine case processing activities. Designating experienced staff as departmental "system champions" can facilitate knowledge sharing, encourage work-integrated learning, and strengthen user confidence through daily practice rather than isolated classroom instruction. Regular workflow reviews should also be conducted to ensure that the information system continues to align with changing administrative responsibilities and workload demands. These practical interventions are likely to enhance user satisfaction, strengthen organisational benefits, and improve the long term sustainability of digital transformation initiatives within resource constrained judicial institutions. These interventions provide a practical implementation framework for judicial administrators seeking to improve digital system success in resource constrained courts and may serve as a model for similar public-sector institutions across other small developing states facing comparable organisational and technological challenges. These findings therefore extend Information Systems Success theory by demonstrating that obligation-driven technology use should be examined as a distinct behavioural context in which mandatory system engagement and perceived organisational benefit are influenced by different mechanisms. The Belize case therefore contributes to ICT4D and digital government scholarship by showing that high levels of use may coexist with more moderate satisfaction, and that meaningful benefit depends on whether systems reinforce trust, accuracy, and reliability rather than simply enabling procedural compliance.

The study also offers practical implications for the design and governance of information systems in judicial and similar administrative settings. Efforts to improve success should prioritise strengthening task alignment and workflow integration, as these shape everyday engagement, while simultaneously enhancing technical performance and information accuracy, which underpin satisfaction and institutional value. Formal training alone may be insufficient in contexts where experiential learning, tenure, and procedural familiarity play a strong role; support approaches that embed learning within daily work practices, such as on-the-job peer mentoring, collaborative problem solving, and ongoing user support within existing workflows, may better reflect how staff develop competence with digital systems.

As with all case based institutional research, the findings should be interpreted with sensitivity to context. The results reflect the realities of a single court within a small state and do not claim statistical generalisability beyond this setting. However, because the analysis covers the entire system-using workforce, the findings provide a robust and internally valid account of how digital systems are experienced within a real organisational environment. Future research could extend this work by conducting comparative studies across courts or agencies, incorporating qualitative inquiry into work practices, or examining how obligation driven use evolves over time as digital systems mature.

Overall, the study shows that information system success in developing country judicial institutions is shaped not only by technology design, but by how systems intersect with work routines, institutional expectations, and perceptions of reliability and trust. Recognising these dynamics is essential for advancing more context-sensitive and meaningful approaches to digital transformation in the public sector.

Beyond extending the DeLone and McLean Information Systems Success Model, this study contributes to ICT4D scholarship by demonstrating that obligation driven technology use should be conceptualised

separately from satisfaction driven organisational benefit. By introducing Workload Fit as a context-sensitive organisational construct, the research provides a theoretically grounded extension to Information Systems Success theory that is particularly relevant for small state judicial institutions and other resource constrained public sector organisations throughout the Global South

### ***Limitations and Future Research***

While this study provides a comprehensive whole population analysis of information system use within a single judicial institution, several limitations should be acknowledged. First, the findings are drawn from one organisational setting and are therefore context specific. Although this reflects the institutional realities of the Belize Family Court, the patterns identified may differ in larger courts, alternative governance structures, or environments with different staffing capacities and digital maturity. The study focuses on self-reported perceptions rather than direct observation of work practices, and while perceptions are central to understanding satisfaction and benefit, future research could complement this approach with qualitative or ethnographic inquiry into how employees adapt routines and negotiate obligation driven use in practice.

The cross sectional design also captures system experience at a single point in time. As digital systems in public institutions evolve, patterns of use, satisfaction, and perceived value may shift with institutional reform, new workflow demands, or changes in workforce composition. Longitudinal research would therefore be valuable for examining how the relationships identified here develop as the system becomes further institutionalized (Avgerou, 2010) . Finally, comparative studies across courts or public agencies both within Belize and across other small state or developing country contexts would help assess the extent to which the dynamics observed in this case represent broader features of obligation driven digital transformation in the public sector.

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