

Who's holding the bag? Accountability in the criminal justice system

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Abstract (Required)

Lack of accountability and transparency are major impediments in efforts to minimize delays, ensure due process of law and reduce backlogged cases in the criminal justice system of Pakistan. Existing oversight mechanisms to track cases through physical files and archives are prone to tampering and damage. The problem is particularly acute since there is little or no coordination between police, prosecution, and courts. There is no meaningful consolidation of crime and prosecution analytics and a total absence of transparency in the process. The current system makes it difficult to see who's holding the proverbial bag. This paper presents results from a first of its-kind survey of our criminal justice system in Pakistan. We highlight the importance and policy implications of our work by presenting empirical data from 750 prosecution vouchers using the results to motivate a case-flow design that integrates and maps the case-management practices of all three institutions involved.

Keywords (Required)

E-justice, transparency, automation.

Introduction

E-Justice as a manifestation of a larger policy of e-governance has thus far remained elusive in Pakistan. The National Judicial Policy 2009 specifically called for an improvement in the processing of cases to overcome delays and pendency issues and establishment of IT-enabled systems to facilitate performance monitoring of courts. A small step was recently taken in this direction with the pilot launch of a smart case tracking system that tracks and automatically flags cases experiencing abnormal delays and enables monitoring judges to review the performance of judges in lower courts (Rahman et al, 2014). Although the system has improved visibility and provided a degree of transparency, it enables monitoring judges to quickly identify potential problems only after they have occurred during the trial. We believe that many of the problems in a case that are an outcome of corrupt practices, especially in a criminal case, surface well before the first hearing in a court. For example, a case that is being deliberately delayed either by one of

the parties or the judge is likely to have reached the court under difficult circumstances to begin with. More alarmingly perhaps, there are many incidents that are recorded but not registered for a hearing in a timely manner. Therefore, for effective, long-term reforms, there is a need to develop a system that can systematically track a case from the point that it is first reported to the point that it is eventually heard in a court and a decision is made.

In criminal cases in particular, this lack of visibility and transparency in the early stages of the process undermine the foremost consideration of inspecting judges – that of assigning responsibility and holding relevant parties accountable as a result of negligence and misconduct. Unlike, civil cases, criminal trials go through a lifecycle in which the Police Service, the Public Prosecution departments, and the lower judiciary have well defined but interdependent roles to play. During the normal case lifecycle in criminal trials, case proceedings are initiated through a FIR (First Incident Report) that is registered by the police and delivered to respective prosecution offices and courts in the jurisdiction of those police stations within strict deadlines. After delivering these FIRs, police investigation officers are required to prepare and submit case vouchers (called 173 Reports) to prosecutors who scrutinize these vouchers and pass them onto trial as case files with recommendations of whether cases are fit or unfit for trial. Throughout the investigation, scrutiny, and trial phase, the only consolidated record of all proceedings are the case vouchers which are reproduced in physical paper format. At any given time, these single copy vouchers are transferred back and forth between the investigators, prosecutors, and trial judges. In addition, cardboard file binders are prepared for prosecutors with cataloguing templates onto which the details of case vouchers have to be entered by hand. These case binders are prone to damage and disintegration over time. The oversight of this process is further complicated by three obstacles. First, case records are maintained in ledgers and indexed in archives which make file retrieval a cumbersome and time consuming task. Second, case details recorded by the police, prosecutors, and courts are typically relevant only to their own functions in the workflow. Third, consolidation of such data from three different case catalogue systems results is likely to result in discontinuous and contradictory case timelines. This is largely an effect of non-uniform case management formats across the three institutions, even in a manual case cataloguing system. Consequently, it is immensely difficult to identify which stage is causing judicial delays. Added to that is the difficulty in discerning where responsibility lies in causing those delays since misconduct and/or negligence are often passed onto different stages of the criminal justice process during a normal case lifecycle.

Therefore, in this paper we study the current process of case management and propose a case flow management system that integrates and consolidates records from different stages involving all three institutions of the criminal justice process in Pakistan. The proposed intervention is designed to improve visibility, transparency and accountability in the overall process. It also provides summary statistics on anomalies in the process with respect to the Police, the Prosecution Service, and/or the Judiciary.

The paper is organized as follows. First, we review the present literature on the use of ICT based e-government and e-justice interventions in reducing corruption in various countries. In the next section , we discuss empirical findings from the current case management system along with challenges in data collection and methodology which result from its nature. Next, we focus on some design considerations to maximize information accuracy and minimize the duplication of work practices for prosecutors using our system. We conclude with limitations and implications for change in policy directions.

Related Work

In recent year there has been an increase in the literature on the importance of ICT interventions within the context of better governance through e-government and e-justice polices and tools. We focus on cases studies highlighting the successful experiences of different countries with ICT implementation in e-justice initiatives. Along with this, we also briefly look at theoretical perspectives on e-government institution in terms of facilitating reform policies and ICT interventions dealing with different expectations from institutional and bureaucratic business processes in case management.

Case management systems have been used in various settings to provide basic case administration services such as file tracking, transcription of court proceedings, creating evidentiary records, etc (Velicogna 2007; Clarke and Cabral 2012; Potter et al. 2009; Malik 2002; Halachmi and Greiling 2013). More sophisticated systems offer meaningful analytics by tracking courtroom performance of judges and policy relevant statistics of crime figures, etc (Potter et a. 2009). Specifically, we have surveyed literature

which has highlighted a successful experience of ICT implementations to move beyond support for clerical function and make substantive contributions in driving policy imperatives (Potter et al. 2009; Paul 2007). In Bosnia and Herzegovina, ICT interventions have facilitated not only the administrative functions of the courts, but also to battle judicial corruption (McMillan 2009). The BiHCCMS platform achieves by creating a random judge assignment and recusal generator, event task timelines set automatically, document accuracy and verification procedures, event non-entry and data tampering notifications (McMillan 2009). Similarly, in South Africa, ICT interventions have been deployed to reduce corruption and official misconduct in the case of the dispersion of government finances and e-procurement procedures (Habtemichael and Cloete 2009). The recommendations of the literature on South Africa seems to be that a greater transparency will lead to better self-governance restraints on the part of public servants and will help facilitate inter-organizational cooperation to expand the use of ICT based transparency tools to combat corruption. ICT Platforms that focus on transparency to increase accountability have also made up the bulk of the e-governance initiative in India where the focus on combating corruption has not been as great in the Judiciary as in other governmental organizations which involve public financing, housing, and tender notices (Paul 2007). India's courts do, however, have a comparatively high usage and innovation rate of ICT in the courts systems, especially in administrative and case management systems (Rahman et al, 2014).

There are two further themes in the literature on the use of ICT is case management and organization that we would like to briefly discuss. Firstly, the use and role of technology as an enabler and carrier of government policies for long term development. This stream requires us to look at ICT and e-government approaches as carriers of reform goals by governments. In the e-government framework, such a perspective creates an appreciation of using successful ICT implementation as a tool for re-examining reform priorities and looking at the role of ICT as an enabler for future improvements and innovations in e-governmental tools (Cordella and Contini 2010). The innovation of ICT systems for case management in Australia and India offer some empirical insights into the merits of such a theoretical approach (Potter et al. 2009; Paul 2007). Both countries have taken the leap from simple ICT applications for administrative processes to creating new systems that aid in greater digitization and access to case materials, decision support systems, and performance indicators that make pattern based recommendations on efficient judicial practices. Secondly, along with the relationship between the nature of ICT interventions and institutional organization which ultimately affect whether such implementations would be successful or not (Contini and Cordella 2009). Literature on reactions of ICT implementations in Italian courts illustrates this theoretical perspective well. Contini and Cordella have discussed this in relation to the nature of tight or loose coupling of ICT systems deployed in courts.

There is a dearth of literature of not only the potential and need for ICT implementations in our courts, but also the current state of case management systems being used. The use of technology remains close to non-existent in all three institutions involved in the criminal justice system. Our research specifications and design considerations address an important lacuna in the e-justice literature in this regard. We also build on the latter of the two theoretical perspectives discussed above in relation to the particular nature of the Pakistan criminal justice process and optimal ICT considerations for reducing workflow requirement, thereby creating greater conditions of possibility for compliance with new ICT based case management practices, and the integration of different record systems.

Data Collection

Our data collection is novel insofar as it is the first systemic effort to quantify the magnitude and causes of delays in the criminal justice process. The only previous attempt was undertaken by a Reform Commission Report in 1967, on the orders of the Supreme Court of Pakistan (Rahman et al, 2014). However, the findings in the report were based on a very small sample and did not capture the dynamics of the problem. We adopted a more comprehensive and structured approach towards data collection. First we selected a district that was representative of an average to above-average case-load (per judge) in the country. Sheikhpura ranks in the top 15 districts in terms of pendency, disposal and newly instituted cases according to the High Court Annual report, 2013. Second, data from all criminal courts in the district was collected. The law stipulates that for every new FIR registered, a copy of the FIR is sent to the court where it is recorded in a register. A team of research assistants photocopied all the registers, transcribing the FIR#, police station information and the date of the FIR during the process. Since FIR numbers follow a sequence, in the absence of data from the police stations, this data became the authentic

record for all the FIRs registered within a single calendar year (2013). Similarly, the local police station interfaces with the prosecution department to provide all the FIR's registered along with all the 173 Reports. A similar data collection scheme was adopted to record all the transactions from the prosecution department registers.

The data collected during this process was understood through interviews conducted over several visits to the courts and prosecutors offices. During the process, detailed flow charts for case-processing, were created by our team of operations analysts. This involved documenting all court processes like filing and disposition, reflecting the requirements of Criminal Procedure and Court Rules. In light of this understanding, the criminal investigation of a typical case was divided into a four-stage process: registration of FIR at the police station, Investigation of the incident by Inspecting Officer, scrutiny by the Public Prosecutor, and court trial. This work flow is illustrated in Figure 1.

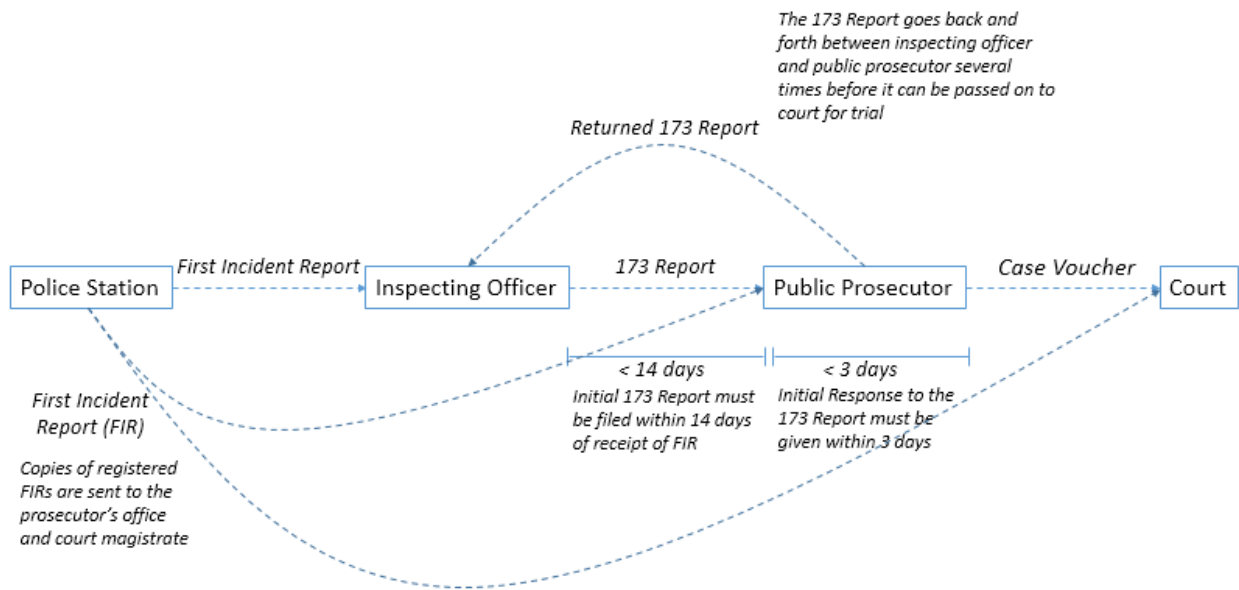


Figure 1: Workflow of a typical case from first incident report to arrival in court

The FIR registration takes place at the police station which is bound to deliver copies of this document as a starting point of the criminal trial process to assigned prosecutors and court magistrates. According to National Judicial Policy regulations, investigating officers have to submit a 173 Report on an FIR to a public prosecutor within 14 days (*National Judicial Policy 2009*). The public prosecutor has 3 days to decide whether to submit the case voucher for trial with the court, or to recommend objection to the case to the investigating officer (*National Judicial Policy 2009*). To remove objections and pass on the case file as complete for trial, prosecutors may assign as much time as is necessary on their discretion. Therefore, case files move multiple times back and forth between the second and third stages of the case lifecycle. While examining records from the selected Public Prosecution files, we recorded the following information: FIR number, date of FIR, report 173 prepared by Investigating Officer and report 173 received by Public Prosecutor.

There are several important fields of information that are not recorded in prosecutor records anywhere except the actual case files. These include, any objections raised by the prosecutor regarding the case, time allocated to resolve objections, number of times objections were raised, and how many objections were second degree objections which were not resolved the first time. Another complication is the fact that case information is recorded onto this ledger on the basis of date of receipt for 173 Reports. This means that to examine records of all FIRs initiated in calendar year 2013, prosecutor records for 2013, 2014, and possibly later had to be examined. We restricted our data collection to prosecutor records received from January to June, 2014. On the other hand, court records are arranged on the date of on which the FIR was received by the prosecutor. In this case we recorded the following data from all FIRs received in 13 criminal courts from 1 January 2013 to 31 December 2013: FIR number, date on which the FIR was

registered, receipt of 173 Report, date of first hearing, date of previous hearing, date of next hearing and current status (Decided or In progress).

For court records, our sample size was 4400 FIRs entries. Records obtained from the public prosecutor had a sample size of 1500 after excluding 173 Reports for FIRs registered before or after 2013. In order to eliminate bias in selection of cases we selected a random sample of 750 cases for more in-depth analysis.

Analysis and Discussion

Our analysis indicates that in the pre-trial phase, significant delays occur due to the late submission of 173 Report to prosecutors. In our sample, not a single 173 Report had been submitted within the stipulated 14-day period. Among the reasons for excessive delays in submission of 173 Reports were: delay in preparation of reports by investigating officers (IO), delay in registration of prepared reports by IOs, and delay in delivery of reports by the IO to the public prosecutor. Summary statistics on submission timelines are produced in Table 1.

Time Taken	Percentage of Cases
14 days	0%
0-50 days	7.7%
50-100 days	22.1%
100-200 days	33.8%
200-300 days	19.6%
1 + years	16.8%

Table 1. Summary statistics on time taken to submit 173 Report.

Within the three step process through which these case vouchers are prepared (preparation, registration, and delivery) only 20% of were prepared within the first 14 days. This means that even if significant delays do not exist in the registration and delivery process, completed case vouchers carry on delays from the preparation process. Delays are compounded when late 173 Reports are registered and delivered in bulk to prosecutors. Of a total of 157 days on which these reports could be submitted to prosecutors, in our sample, case reports were submitted on only 92 days. Within these 92 delivery dates, a 30% sample included more than 15 reports delivered per day. This frequency distribution is illustrated in Figure 2 below.

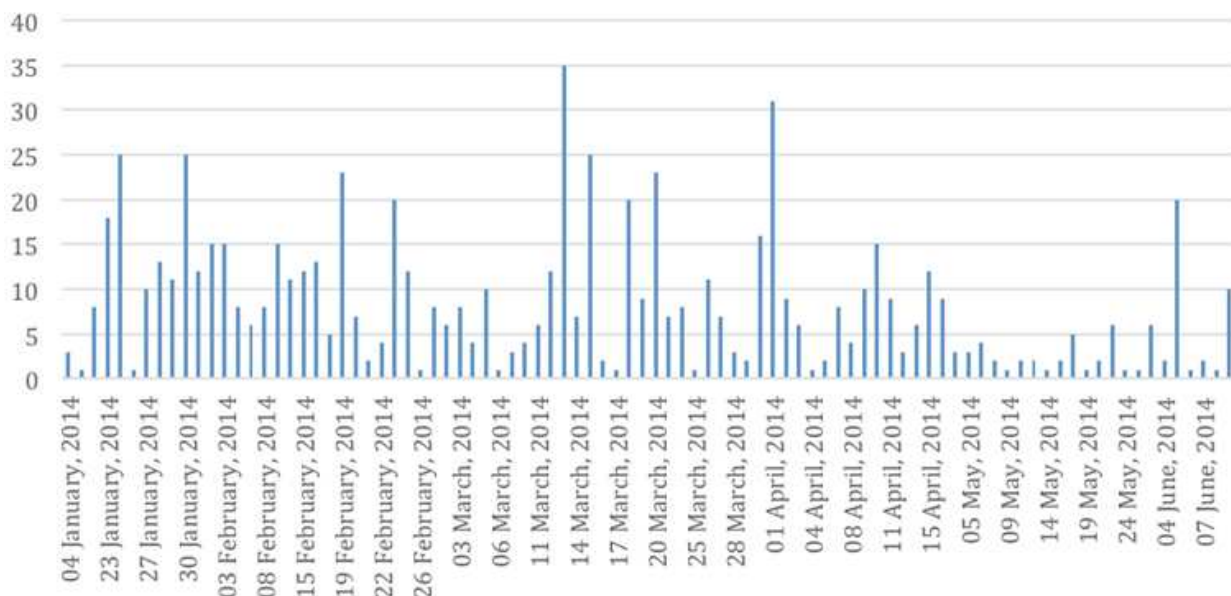


Figure 2: Frequency distribution of receipt dates of 173 Reports by Public Prosecutors

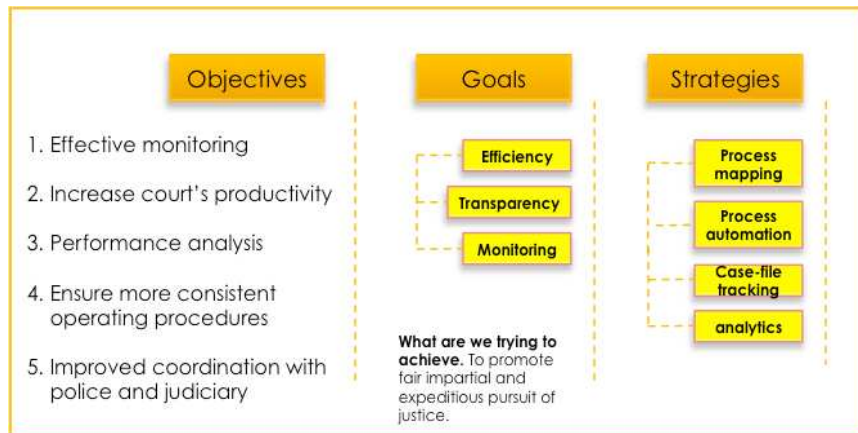
An implication of these numbers is that apart from the clear process violations, the prosecution department gets swamped with work every now and then and has little time to prepare individual cases leading to ineffective prosecution. Also, the law stipulates that the prosecutor can actually coordinate with the police and the investigation officer to better focus and direct investigations. In the prevalent model, there is little or no oversight leading to weaker investigations.

We examined case hearing records that corresponded to 4400 FIRs delivered to the court in 2013 to compare the accuracy and contiguity of prosecutor records. Against these FIRs, the prosecutors had received only 1500 (34%) case vouchers that could be processed for trial. Among those cases that had entered the trial stage, only 29% had been decided while the remaining cases were pending. In the trial phase, significant delays occurred due to a) non-service of summons on defendants on multiple occasions, b) applications and objections against defective police investigations, c) violations of bail by absconded defendants, and d) non-availability of misplaced evidence during police investigations.

We also determined that to a certain extent both the prosecutor and court records omitted information that could identify them as major sources of delay. A telling case in point is the record maintained by the public prosecutors, which catalogues all the details of the different processes undertaken by the investigating officers, is missing information on a number of actions undertaken by the prosecutors themselves which include but are not limited to, a) recommendations and timelines including follow up on the removal of objections in the 173 Report, b) details of when prosecutors submit the case vouchers to the court, and c) prosecutor recommendations whether cases are fit or unfit for trial indicating the quality of police investigations.

Most of these problems stem from the lack of an integrated information management system. The procedural flaws and/or deliberate misconduct further compounds the overall set of problems. In the following section, we propose an integrated case management system to address these problems.

System Design and Rollout



The main goal behind the project was to facilitate effective, transparent and efficient dispensation of justice. We designed our system with three essential requirements in mind. First, a robust, scalable and secure case tracking mechanism that requires minimal changes to the existing workflows. Second, a tamper-proof record management system that allows greater visibility into the current systems. Our analysis suggests that due to the involvement of various government departments, improving the institutional handshakes involved in the process and streamlining data-sharing can provide transparency in the system. Such a system can also facilitate monitoring responsibilities of existing bodies to help improve the quality of investigations, prosecutions and judgments.

In view of the nature of involvement of the three institutions, our primary design consideration was to identify a key node that acts as a strategic enabler of integration from both ends. This node is also the point of data entry to ensure conformity for data recall purposes. In our proposed intervention, this key

node is the public prosecutor. There are a number of reasons why this proves to be the optimal choice as a key integrator. The public prosecutor is the common denominator in both the pre-trial and trial stages and acts as a liaison between the police and the judiciary. Due to this, only the prosecutor has access to case materials at both stages of the criminal process. Case vouchers in the pre-trial process are prepared with the consultation of the prosecutors and during the trial, with recommendations regarding whether a case is fit or unfit for trial. Similarly, since a prosecutor is intimately involved with case hearing in the trial process, it seems optimal to assign this case management responsibility to this institution. Furthermore, since data entry and record cataloguing is assigned to the prosecutor, in the case of non-compliance on the part of the courts and the police, which remains a possibility, shortfalls in case management through non-entry will be minimized. Finally, a case management system with adequate security placed under the responsibility of one key node in the workflow also provides safeguards against data tampering and/or misplacement of records.

Data entry requirements imposed on the prosecutors are minimal in our system. We do not record all the lengthy details already present in case files and simply focus on checking key business processes. We felt that significant data entry requirements would only serve to increase institutional inertia to change. In our current model, data entry, which takes place in various stages that correspond to the actual movement of case files, would take an average of 30-60 seconds per case.

The system is designed based on a client-server architecture on a using PHP/Mysql with a JQuery based front-end. The server is currently running on a Dell PowerEdge T110 with 32 GB RAM running Ubuntu. Server-side php scripting is used to provide a user-friendly dashboard. Careful role-based access control mechanisms have been implemented in place to ensure read-only access to the database. A tamper-proof audit trail mechanism is also implemented in software to ensure complete visibility into who changes what and when. A bio-metric based login-verification system is planned for the next iteration. The current production system is also working on a 4 hour differential data back-up schedule to ensure reliability and integrity of the data.

Each prosecutor records a time-stamp as an FIR first enters the system. Every subsequent transaction or hand-shake between departments that happens for this particular FIR gets reported using the same interface. While improving the efficiency of case-tracking, the system also doubles as an anti-corruption mechanism since it reduces the space for personal discretion and a monitoring entity sitting remotely with the right access credentials can ensure compliance. While most transactional reforms are not typically adopted as anti-corruption tools, this is typically an incidental one coming from greater transparency and visibility of data. Performance based incentives can also be built into the system based on this data. The system provides complete visibility into the life of an FIR from the date of institution to the date of submission into a court. The system interfaces nicely with our court-automation system which allows us to track the current progress of every individual FIR from the police department up to the current status of the case in a particular court..

Key performance indicators The overall performance of a prosecutor can be divided up into four main components according to the American prosecution association guidelines. This includes a) offenders held accountable, b) Case disposition appropriate for offender and offense, c) Timely and efficient administration of justice and d) service delivery to victims and witnesses. An important goal of the system was to develop a framework to identify useful measures in order to assess the work and performance of the prosecutorial staff and to help bring transparency and accountability to the overall criminal justice system.

Also essential to fair effective and efficient prosecution is the time it for a case to get to the various stages of prosecution. While our system is very effective in time-stamping all such activities and reporting anomalies, such a simplistic measure does not capture the nuances of the changing role of prosecution. Along with conviction and disposition rates, the role of an effective prosecutor also involves directing the investigation at the initial stages, recommending charges preparing witnesses etc. Our system logs every such hand-shake between the various departments and generates fact-based reports of all of these key performance indicators that can ultimately be correlated with the outcome of the cases.

Limitations and Future work

There are three major limitations of our approach towards the ICT based intervention: compliance, accuracy and overestimation problem of self-reported data, and general organizational inertia as barriers to change.

As is the case in most interventions to rectify low-participation in discharge of public office, compliance remains a potential limitation that could pose a serious impediment to the short term efficiency and long term effectiveness of our whole research design. Added to this could be institutional and bureaucratic resistance to impose an ICT system in work environments that are loosely coupled. We go some way in minimizing this by our identification and assignment of the Prosecution service as the key node that integrates and consolidates our case management system. However, given a myriad of operational problems and realities, even our approach is not an all encompassing answer to this limitation. We feel that understanding the factors that act as barriers to organizational change can have a long term impact. Having data visibility and bringing much needed transparency to the transactions between various stakeholders involved, creates just the right incentives to motivate people since non-compliance would clearly be highlighted by the system. We also feel that effective change can only be brought if there is buy-in from the users and service delivery can be significantly improved by motivating and incentivizing high performance.

Another potential stumbling block to the effectiveness and accuracy of our system lies in the fact that most of the data is self reported. As we saw in the two sets of records, there was a high degree of wilful negligence in data entry in which inaccurate data was often entered on purpose. This meant that in comparison, the prosecutor and court records were often contradictory. Overall the anomaly rate was higher in the prosecution records, with an anomaly rate of around 15%. Also, as we noted earlier, records were maintained in such a manner to shift responsibility and accountability to other parties in the business process. Since we rely on the public prosecutors as the central node in the integration process, it could potentially create an incentive for prosecutors to overestimate the burden of misconduct on other parties and underreport their own negligence and malfeasance. Though, it would be disingenuous to not indicate that throughout our investigations, clerical staff, public prosecutors and judges were all very cooperative and did not harbour any apprehensions regarding our ICT intervention in a pilot program. Therefore, it would not be unrealistic to expect accurate data for case management.

Much of the adoption decisions are dependent upon an expectation of future value and costs of the technology. Before we move on, let us examine our technology adoption setting in a bit more detail. Pakistan has one of the lowest literacy rates in the region and between our three partner departments there is a huge skill-set disparity among users. New technology integration typically goes hand-in-hand with an extended period of professional development where people have time to acquire technology skills, learn about best practices and the potential pitfalls of using such technology. Not paying enough attention to these issues and not being aware of the problems can lead to serious problems.

A key insight from our work is that not enough attention is paid to having effective user trainings and having safeguards in place when adopting newer technologies, especially when critical data is involved. There is a strong need to invest in strategic learning initiatives rather than keeping operating costs low. Taking a few e-govt initiatives as an example, provenance of archival record data such as police and judicial records, academic records, land records etc. is critical in determining its validity, authenticity and hence usefulness. Ensuring the reliability and accreditation of such data is therefore essential. While there is an emphasis on automation, very few government institutions for instance, have any time built into the workday for professional development in terms of learning technology skills, training courses etc. In order to have effective IT solutions, we feel that the current technology landscape requires a re-think of the existing curriculum for law-enforcement agencies and judicial officers such as prosecutors, court-room staff etc to inculcate good usage habits and processes from onset.

Despite these limitations, we feel that our empirical findings and research design opens up other areas of research in the social sciences and ICT based e-government policy areas. A major component of research has been the use of data for performance evaluation analysis by the judiciary charged with oversight. Our system provides a unique vantage point in the life-time of a case that opens up the possibility of integrating oversight activities among several departments as well especially the Prosecution Service and the Police. Using ranking data to analyse crime patterns and geographical distributions may lead to deeper research on re-prioritizing state resources for better governance. Finally, the empirical collection of further data on judicial delays may be used for more constructive discussions for change in policy direction.

Conclusion

In this paper we have discussed expanding the scope of ICT based interventions to create better integration, transparency, and accountability in the criminal justice process. We have highlighted that in the current criminal trial process, three different institutions interact and while our previous system would be suitable in creating a transparent case management system, our research design in this paper highlights that it would not allow for integration of three different case management techniques. By proposing our integration, which is pending a pilot deployment, we hope to create a business process that allows for locating where delays take place in the different stages of the pre-trial and trial criminal justice process. Empirical data on the current state of case management systems indicates that there is a dire need for both these outcomes. Finally, we have argued for the assigning case management system responsibilities to one crucial node in the workflow, the public prosecutors, since they represent the tightest coupling of our ICT intervention with judicial procedure and practices. This is to ensure that there is a higher degree of accurate reporting and compliance and a lower chance of disingenuous reporting in our ICT based intervention.

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