

ICT in the Judicial System: Promising Yet Challenging? Part I

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ABSTRACT

Drawn from a doctoral research, the first part of this paper aims at discussing the concept of ICT adoption in the judicial system by discussing the different applications of ICT in the courts of Malaysia and other selected jurisdictions such as the United States of America, Spain, Italy, Singapore and Australia. Apart from the concept, the benefits and advantages that could be derived from these technologies would also be reviewed. Being a double-edged sword, at one end the adoption of ICT provides considerable potentials to improve the delivery of justice. However, at the other end it raises numerous practical and administrative hurdles, as well as the issue of the acquisition of skills and readiness of the court officials, legal practitioners and litigants in embracing the technologies.

Keywords: *ICT in the Courts, Judicial Business, E-Court, Promises, Challenges.*

Introduction

In many parts of the world, information and communication technologies (ICT) have connected people in a way never before envisaged (Bhatt, 2005) and recently have paved its way to the courtrooms. In relation to this, Fabri and Contini (2001) believe that the adoption of these technologies will change the way the judicial business is conducted. In many jurisdictions, the technology applications are increasingly being adopted within the courts system as it is believed that technologies will benefit not only the courts system, but also to the legal practitioners and the

public as a whole. In the process, users begin to rely on these technologies for their everyday business. This is rightly so as pointed out by Lederer (1997) that increasingly, for many cases, technology will not be an option but a necessity. For the purpose of this paper, review will be made on the different applications of courtroom technologies adopted in Malaysia and some other selected jurisdictions such as the United States of America, Spain, Italy, Spain, Singapore and Australia, highlighting some of the benefits that could be derived from these technologies. This paper will conclude by discussing some of the challenges facing the adoption of such technologies within the judicial system.

ICT in the Courtroom of Selected Jurisdictions

This part will describe the relevant concept of ICT adoption and the different technologies in the courtrooms of selected jurisdictions, namely Malaysia, United States of America, Spain, Italy, Singapore and Australia.

Courtroom Technologies

The working draft of the Courtroom 21 Court Affiliates Protocols for the Use By Lawyers of Courtroom Technology (2004) defines the term 'courtroom technology' as the technology installed or used in a courtroom by or for counsel or *pro se* parties. Therefore, such technology inherently suggests courtrooms and trials (Lederer, 2004) and the minimum applications for courtroom technologies include electronic filing, assistance to persons with disability, foreign language translation, multimedia court records, information and evidence retrieval, access to legal materials, high technology information and evidence display systems, teleconferencing, video conferencing, and the public's access to court information via the worldwide web (Lederer and Solomon, 1997).

In this context, Narkiewicz (2004) points out that the technologies are used to draw attention to particular points, to emphasise certain aspects of the evidence and to make visible that which otherwise might only exist as a mental picture formed when words are spoken by an advocate or witness. In support of this statement, Bailenson et al. (2006) presume that technologies are used primarily by attorneys for presentations to the triers of fact either in preparation for or at trial. Lederer (2004a) classifies modern trial courtroom technology into information (evidence) presentation, remote appearances, court record, 'counsel communications'

(for instance, Internet access from counsel table), assistive technology (including interpretations), jury deliberations and appellate matters.

ICT Adoption by the Malaysian Courts

In its effort towards implementing ICT in the courts, Malaysia currently adopts the integrated court system (ICS) in both the courts in Peninsular Malaysia and in Sabah and Sarawak. The ICS includes applications for electronic filing, queue management system, case management system; court recording and transcription, e-cause list, e-monitoring, audio and video conference system, community and advocates portal and court advocate resource engagement system (Justice Zaki Tun Azmi, 2010; Mageswari, 2010). The judiciary, the legal practitioners and the government of Malaysia had expressed their support for the ICS, as it is believed that ICT will help in the judiciary's endeavour to reduce the backlog of cases, and to dispose cases in a more timely manner (Kuching High Court Document, 2010; Veera, 2010; Nais, 2010).

Position in the United States of America

The United States of America is described as having the most advanced and sophisticated courtroom technologies compared to other jurisdictions. On this note, Wiggins (2004) reviews the extent to which technology is available in both the civil and criminal matters in its courts system as including evidence camera, digital projector and projection screen, wiring to connect laptop computers, monitors built in the jury box, monitor at the bench, monitor at the witness stand, at counsel table or at the lectern, screens targeted at the audience, colour video printer, annotation equipment, sound reinforcement system, telephone or infrared interpreting system, a kill switch and control system, an integrated lectern, audio-conferencing equipment, videoconferencing equipment, real-time software for use by court reporters, real-time transcript viewer annotation system, and digital audio recording.

Spanish Judiciary and ICT Adoption

The ICT adoption in the Spanish judiciary is developed in four areas of action. The first area is the management and processing of information, such as databases and data exchange, while the second area is the management processes, including the allocation and management of

cases. The third area includes the tools for judicial decision support, such as computer-aided decisions. And the fourth is to enable communication and interaction between the public and the court officers, especially in the field of automatic notifications and electronic filing of pleadings (Cerrillo, 2009). In this context, Delgado and Oliver (2007) outline the recent developments of courtroom technologies in Spain, being the setting up of computer systems incorporating tools for recording, sharing, document management and communication between parties, video conferencing, recording systems and various legal portals.

The Italian Context

In Italy, ICT is argued to having not yet been the enabler of change expected of it, as technology has not really challenged the actual judicial organisational structures (Barely, 1986) and the procedures or the micro-ecology of actions (Bateson, 1972). In this respect, Fabri (2009) examined a number of technology applications adopted by the Italian courts within the criminal and civil matters, including case tracking system, tracking of the execution of sentences, e-filing system of injunctive orders, provision of database of courts and law documents via the internet portal.

The Singapore Position

Within the South East Asian region, the ICT adoption within the courts of Singapore has been described as the most advance and sophisticated compared to other countries in the same region. Evidently, the other countries are taking steps towards adopting technologies in their respective courtrooms by learning from the experience of Singapore. The thrusts for the adoption of technologies in the Singapore courts are the delivery of virtual court services and applications, computerisation of court management processes, co-development of multi-agency systems, and computerisation of court administration and corporate services (Magnus, 1999). Within the context of courtroom technologies, the virtual court services adopted in the Singapore courts include electronic filing services, automated traffic offence management systems, justice online system and video-conferencing. For criminal cases, the Singapore Case Recording and Information management System enable the court to receive case information from prosecuting agencies, register the criminal charge online, update the case outcome and culminate in the automatic

generation of the warrant of commitment in the event of a conviction when an imprisonment term is imposed (Justice Wong Peck, 2008).

ICT in the Australian Courts

Macdonald and Wallace (2004) review the ICT applications in Australia as comprising of a networked computer operation providing electronic document management and exhibit handling and display, equipped with sophisticated storage, imaging, searching, and retrieval capabilities, as well as real-time electronic transcript and electronic communications facilities. Intranet and Internet technology is used to establish secure networks for the parties to access court documents, files, and transcripts and also communicate by e-mail. Transcript analysis tools are provided for the parties and the judge. In addition to documentary evidence in electronic form, these systems also allow the addition of video and audio evidence in digital format. An electronic courtroom is also equipped with facilities enabling it to receive evidence by video link, and in some cases, to broadcast a hearing itself. According to Wallace (2009), a number of courts in Australia have experimented with the use of technology such as discussion boards or bulletin boards, in conjunction with secure e-mail systems to handle pre-trial hearings in systems which are generally referred to as e-courts.

Promises and Advantages of ICT Adoption in the Courtroom

It is believed that there are many benefits that could be derived from the adoption of courtroom technology. A number of literatures suggest that the technologies will make the courtrooms geographically accessible anywhere and anytime – omnipresent and available to all (Bhatt, 2005) in particular to introduce more efficiency into the judiciary (Kiskis and Petrauskas, 2004), reducing delay, improving the economy, and the more general objective of promoting confidence in the justice system through the use of technologies (Velicogna, 2007).

In addition to this, Carnevali (2009) believes that these technologies will contribute towards improving the quality of justice. On the same notion, writers advocate that technologies would lead to a more efficient and effective judicial system, improved transparency of the way the judiciary works, increase in the citizen's level of access to the judiciary

and increase in the confidence of the citizens and business in the judicial system (Cerrillo and Fabra, 2009). In addition, ICT may also provide tools for increasing transparency and openness of the judiciary in the way that it increases trial speed without sacrificing thoroughness of investigation. ICT may also improve the quality of the trial proceeding by ensuring efficient allocation of judicial resources, access and exchange of judicial information, uniformity of judicial practices and interpretation of the law (Kiskis and Petrauskas, 2004). In this context, Velicogna (2007) contends that ICT is used to enhance efficiency, access, timelines, transparency and accountability.

Within the Malaysian context, efficiency of the judiciary could be seen and disposal of cases has sped up compared to before the adoption of the technologies (Gnanalingam, 2010). In this respect, the Chief Justice of the Federal Court of Malaysia His Right Honourable Tun Dato' Seri Zaki Bin Tun Azmi (2010) believes that technology plays an important role in reducing the problem of backlog of cases which has been haunting the Malaysian courts over the years. In support of this, column 3 of Table 1 shows the number of backlog of cases as at 31 December 2008, and after less than two years later, as at 30 September 2010, the number is reduced to that stated in column 4.

Table 1: Comparison of Number of Backlog Cases as at 31 December 2008 and 30 September 2010

COURT	CASES	As at December 2008	As at September 2010
High Court	Civil	93,523	38,267
	Criminal	4,544	3,345
Sessions Court	Civil	94,554	44,921
	Criminal	8,750	7,267
Magistrates Court	Civil	156,053	93,267
	Criminal	65,221	42,874
Total		422,645	229,941

Source: Chamber of the Chief Justice of the Federal Court, Putrajaya

One of the ICT applications adopted at the High Court of Kuala Lumpur is the case management system (CMS) which allows the court officers to experience a more efficient work routine with an unprecedented ease in carrying out their daily activities, from pre-registration of cases to scheduling of cases and as well the sharing of

information across agencies and also collaboration among the various stakeholders (Briefing on CMS, 2010). The rate for disposal of cases has doubled within one month of the adoption of CMS compared to the position prior its adoption. Column 2 of Table 2 shows the number of cases disposed each in May, June and July 2009 which is prior to the implementation of CMS. After the implementation of CMS, the number of cases disposed is increased to that stated in column 4 for each September, October and November 2009. With this high increase in the rate of disposal of cases, the backlog of cases has been considerably reduced.

Table 2: Comparison of Number of Cases Disposed at the Kuala Lumpur High Court (Civil) Before and After the Implementation of CMS

Month	Disposal before CMS	Month	Disposal after CMS
May '09	242	Sept '09	793
June '09	347	Oct '09	682
July '09	508	Nov '09	637
Total	1,097	Total	2,112

Source: High Court of Kuala Lumpur, Kuala Lumpur Courts Complex, Jalan Duta

On the other hand, the audio and video conferencing technologies which are adopted in Sarawak have proven to be beneficial to the court officials and legal practitioners of the courts of four districts within the state, which are Kuching, Miri, Bintulu and Sibul (ICS Briefing, 2010). The technologies reduce travel time and budget expenses. This is rightly so that conventional hearings would involve two days travelling time and one day for hearing. By resorting to the audio and video conferencing technologies, the time taken is only 30 minutes for the hearing.

From the above data, one will appreciate that ICT holds great promises and advantages for the improvement of the delivery of justice in Malaysia. ICT provides ample opportunities for communication and new ways of doing things at the court, which in turn would benefit the users, including the court officials, the legal practitioners and the litigants.

Practical and Administrative Hurdles in ICT Adoption

Being a double-edged sword, ICT also generates novel uncertainties and insecurities (Hamin, 2009). It is admitted that for the courts, there is

hardly immunity from the ‘technology for technology’s sake’ syndrome as technologies are adopted to facilitate the justice process, at the same time, there are issues involved (Fabri and Contini, 2001). In this respect, the courts are faced with a number of practical and administrative hurdles, as well as issues on the acquisition of skills and readiness of the court officials, legal practitioners and litigants in embracing technologies.

Budgeting and Financial Aspects

The setting up full electronic trials would inevitably mean the involvement of additional costs, and it may prove to be a factor inhibiting their more widespread use of ICT in the courtrooms (Macdonald and Wallace, 2004; Weibel, 2002). In Sarawak alone, the Federal Government has spent RM1.9 billion in upgrading the ICT systems of the courts (Nais, 2009), while in West Malaysia, the setting up of the computerised system at the courts costs about RM69 million (Veera, 2009). Commentators, such as McMillan (2002), Weibel (2002) and Reach (2004) all agreed that the costing could in fact become a barrier to the full implementation of ICT systems. Given the high costs involved, it is therefore imperative that budgeting and financial aspects in building up the whole ICT system in the courts would need to be managed properly (Justice Wong Peck, 2008). In addition, Justice Wong Peck (2008) suggests that adherence to time schedules in developing and implementing the ICT systems would need to be particularly viewed as important in order to ensure the long term benefits to be reaped from the technologies.

Written Rules to be in Place to Accommodate ICT Adoption

Written rules are believed needed to be in place to accommodate the adoption of ICT by the courts (Working Draft of the Courtroom 21 Court Affiliates Protocols for the Use By Lawyers of Courtroom Technology, 2004; Oorjitham, 2009). In this regard, it is noted that the Australian courts have found a need to establish protocols and procedures to address the preparation of cases for trial in an electronic courtroom. In fact, McDonald and Wallace (2004) have identified a number of courts which have, on their own initiative, published practice directions and rules to guide the parties and to encourage early consideration of the use of technology, for instance the Federal Court of Australia, Practice and Procedure, Practice Note No. 17 and S. Austl. Courts, Guidelines for the Use of Technology, Practice Direction No. 52.

Acquisition of Skills and Readiness of the Court Officials and Legal Practitioners

Transforming from a conventional system of judiciary into the adoption of modern courtroom technologies inevitably raises the issue of acquisition of skills and readiness of the court officials and legal practitioners. In this regard, Wong Peck (2008) contends that the successful implementation of the technologies requires the concerted effort of judges, court administrators, court users, system developers and information technology experts. There is definitely the need for effective training for judges, court staff and practitioners hence the need for a close liaison and good communication between courts and law firms towards the implementation of courtroom technologies (McDonald and Wallace, 2004).

Bhatt (2005) agrees that it is a major judicial issue on the lack of training available to the members of the judiciary on the latest gadgetry, applications and services. Further, many senior members of the judiciary may not have the opportunity nor time to familiarise themselves with these new applications. In addition, the availability of trained manpower, the available hardware and software applications and courtroom facilities will also need to be considered. However, it is suggested that effectively operating technologically advanced courtrooms may require a large commitment of time and expertise by the judges' staff. This, in turn, can impact the court's overall resources (McDonald and Wallace, 2004). This is another concern in the process of adopting ICT in the courtrooms. Apart from that, there is also specific need for the lawyers to get careful training and practice to use the technology efficiently and effortlessly expected of them by judges (Bennet, 2004). However, Epstein (2004) claims that on part of the legal practitioners, they are notoriously slow in adapting technology into their practice and in fact, many technology experts opine that lawyers were never in the race to adopt technologies within their practice.

Conclusion

The ICT has made tremendous transformation in the way the courtrooms operate all over the world. The courtrooms in many countries have adopted the technologies, bringing about significant changes in the way the judicial business works and the way in which legal practitioners and

litigants are coping to adapt to these changes. Nevertheless, being a double-edged sword, on one hand ICT provides such great potentials, at the other hand there are issues and challenges facing the adoption of the technologies. To date, there is lack of research being done in Malaysia to study the concept of ICT adoption in the courtrooms, the extent of the benefits of the technology applications, or the practical and administrative issues associated with the use of ICT in the courtrooms. These are the issues that this paper is focusing on.

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In Memory of Professor Dr. Philip M. Taylor (1954-2010)

The Center for Media and Information Warfare Studies (CMIWS), Faculty of Communication and Media Studies, Universiti Teknologi MARA and the Advisory Board of the Journal for Media and Information Warfare (JMIW) would like to express our deepest gratitude and appreciation to Professor Dr Philip M. Taylor who had served on the Advisory Board for three consecutive years, 2008 till 2010. Professor Taylor was an internationally renowned scholar of International Communications, Public Diplomacy and Propaganda at the University of Leeds in Britain. He was the founding Deputy Director of the Institute of Communications Studies at the University of Leeds in 1990, and served as its Director for four years from 1998-2002.

In 2005, he was appointed as the Distinguished Visiting Professor at CMIWS and later its Adjunct Professor from 2006 till his untimely death on 6th December 2010. Professor Taylor had devoted his entire time in Malaysia to contribute valuable, intuitive and insightful ideas for the academic advancement of CMIWS and JMIW. His passing was a great loss to the Centre, the academic world and everyone who had crossed his path in this life. Phil will always be remembered and most dearly missed. The Centre would like to dedicate the 3rd Volume of this Journal to the memory of Professor Philip M. Taylor. May his soul rest in peace.

**Associate Professor Mohd Rajib Ab Ghani
Director, CMIWS, UiTM**