



## QMBTIS Case Management System with EDMS

Mark Cribbe, Garry De Leon, Adrian Libiran, Tyrone Lim and Renato Jose Molano  
*IT Department, College of Computer Studies*  
*De La Salle University, 2401 Taft Avenue, 1004, Manila*  
*rene.molano@delasalle.ph*

**Abstract:** Law firms are responsible for creating and receiving different types of information and data used in the different cases of their clients. Given the amount of information, documents and data being managed by law firms, problems occur in terms of the inability to properly manage the different case documents. Some of the problems include misplaced or loss of documents; difficulty in sharing of case files; and slow retrieval of case documents. Through the use of Information and Communication Technologies (ICT), a well-designed case management system helps law firms in addressing these problems and aids in the effective performance of their different processes.

Through the study and integration of a case management system, the system serves as a solution to provide an efficient avenue of managing and organizing the different cases handled by the law firm.

The purpose of this study is to discuss and present the solution of a case management system integrated into the law firm, specifically for the processes of Quiason Makalintal Barot Torres Ibarra and Sison (QMBTIS). The case management system contains eight different modules which are case management and tracking, scheduling & calendaring, dockets management, digitizer, electronic document management system (EDMS) component, evidence management, report generation and mobile accessibility. These modules were designed considering the workflow of QMBTIS in handling their legal cases.

It is hoped that through this study, law firms will further see value in integration of Information and Communication Technologies (ICT), specifically a case management system in order to assist with the company's business processes.

**Key Words:** ICT; Case Management System; Electronic Document Management System



## 1. INTRODUCTION

A case management system as defined by Matt Ryan creates an electronic equivalent of the paper (or physical) file and provides firm management and staff both quick access to case-level details and a big-picture perspective on trends, caseloads and other productivity metrics (Ryan, n.d.) According to Richard Slowes, a well-designed CMS will deliver core functionality that provides meaningful ancillary benefits to the courts such as more efficient data entry, more effective data retrieval, better tools and enhanced bar and public access. (Slowes n.d.)

Law firms integrate the usage of case management systems in order to provide them an efficient way of managing their cases as well as organize them to keep up with the different deadlines and schedules. It is also important for them to use a system to coordinate the whole company to effectively transfer the information needed by each employee, making them work efficiently but also costing less for the management. Some of the CMS general components are case management, contact management, time tracking, calendaring and docketing, time and billing and document assembly. (American Bar Association, n.d)

The main reason why the team chose a law firm as its domain is due to the interest and potential that ICT can contribute to law firms and their processes. Law firms are heavy in terms of data processing and data storage which is why the team wanted to get involved with one.

Quiason Makalintal Barot Torres Ibarra & Sison law firm gave us the avenue and access in order to investigate, design and develop a system catering to their processes and problems. The team believes having this system in place will be of benefit to the different clients, employees, and lawyers. The system will be able to improve the processes and avoid the current problems that are being encountered.

## 2. METHODOLOGY

The team chose the Incremental Model of Systems Development Life Cycle as the methodology because this is the methodology the team believes is best for the members and the project. With the incremental

model, there are certain steps to be followed and accomplished and these are the establishing of requirements, design, develop, test then implement. In line with the methodology diagram, this process will be done in eight iterations in order to complete the development of the system.

For the requirements phase, it basically involved the backbone of the entire project such as the Ishikawa diagram, the conceptual framework, the data flow diagrams, the processes and all information needed to develop the system. The information was gathered by observation of processes, interviewing the key people, researching and benchmarking on other case management systems.

After having the requirements gathered, the design phase is next. This is where the creation of screen prototypes were done based on the requirements established. After having the design in place, actual development can now proceed where the actual system will be worked on. From the developed prototype, testing is then done. When that iteration happens, it is done again as aforementioned this was done eight times.

## 3. RESULTS AND DISCUSSION

The figure below is the conceptual framework the team designed for the Quiason Makalintal Torres Ibarra & Sison. This conceptual framework contains the eight modules that the team covered during the development of the system. Those eight are the following: case management & tracking, scheduling and calendar, dockets management, digitizer, EDMS Component, evidence management, report generation, mobile access. Under the EDMS component there are four sub-parts which are the following: a centralized document storage, search and indexing, document review and the versioning. The modules that are presented also address the different problems that was investigated thoroughly. The different modules addresses to solve a problem as seen in the framework.

The users of the system will be the clients, employees and lawyers. From there they will be involving the different technologies such as Java, SQL, Web 2.0, scanners and mobile technology to properly translate their document and information processing from hardcopies and from the database to an accessible

system. The inputs that need to be run through the system are the client information, case information, case file and evidences. From those inputs and the modules and features of the system, the team aims to produce outputs such as reports, notifications, proper reminders for schedules and deadlines and case document updates.



### 3.1 Case Management and Tracking

Case Management and Tracking allows the users to create, edit, and close a virtual “case”, which include its basic information, important notes on the case, documents on the case, and a tracking feature that allows the lawyers to see at what part of the litigation process the case is in. This module will be linked to the dockets management module, the EDMS component of the system and the evidence management module. The way this module works is that whenever a document has been received and a soft copy has been made, the dockets management module will be able to put the case document to its corresponding case file. After it has been filed, the lawyer will be notified (through the notification log) that a new case document has been added to the case file, and the “virtual” tracking sheet (which includes the date, deliverable, the lawyer and notes) can be updated to further update the client. Also in this module, the user has the ability to put all the necessary information about the case. This will include the general information on the case such as the case number, when it is opened, the lawyers handling the case, etc. It will also include the contact information of the people involved in the case, these may be the judge assigned to the case, the witnesses,

the opposing lawyer, etc. Lastly, the lawyer will also be able to view all the pleadings of the case, the evidences on the case and the witnesses as listed in the case file.

The problem being addressed in this module is the difficulty in tracking case information.



Figure 1.0 Create Virtual Case

### 3.2 Digitizer

The digitizer is the component which is responsible in transforming the hard copies of the documents and files into a digital copy where then can be store in the database for better security and improved accessibility. This component simply aims to add soft copies of all the case documents such as court orders, motion, including the annexes and exhibits etc.

The problem being addressed in this module is that there are no back-up files.



Figure 2.0 File Upload Success

### 3.3. Scheduling and Calendaring

Scheduling and Calendar allows the user to manage their schedule and have an overview of the matters that he/she needs to attend. This module is linked to the Dockets Management module, wherein at the docketing process, the date indicated in the document will automatically be added to the calendar of the lawyer. Notifications and alerts are included to remind the lawyer of upcoming deadlines. This module will be linked to the dockets management module. The way this module works is that when a new court order arrives in the firm and a soft copy of it has been made, the dockets management module has the ability to let the dockets clerk specify if it is a court order. If it is a court order, the user will be required to put the date of the deadline, and once the docket has been filed, the lawyer will be notified that a new court order has arrived and simultaneously be added to his/her calendar. The system will also notify the lawyer as events in the calendar nears its deadline. In addition, the lawyer will also be able to manage his/her own schedule, events such as meeting with the client, document draft deadlines, etc., can be added to the calendar. Any conflict in the schedule will be alerted to the lawyer.

The problem being addressed in this module is the missed deadlines.



Figure 3.0 Dockets Clerk – Scheduling and Calendaring

by creating various reports that aim to help the organization. These reports are then created as to suite the different users of the system. The data presented to them vary based on what they need. For example, as a head partner, being the one to choose who will be working alongside a case, he can see the so called “case load report” as to give the different amounts of case handled by each lawyer. Another report which the head lawyer/partner can make use of is the case types handled per lawyer. With the different civil litigation cases, the head lawyer/partner can be able to somewhat pin point which among the associates is the most adept at a certain civil litigation case type through this reports. The other reports which the partner can then base decisions off of are the case types handled by all lawyers, a report indicating the count of cases in line with the different types of civil litigation cases. There’s also a report which is the case outcome report indicating the win-loss record of a lawyer within a certain range of the user’s choosing. The dockets clerk on the other hand view other reports also such as the status update reports, status update report of all cases, recently closed cases, cases opened report, list of cases and list of clients. These reports can vary in terms of the duration of data presented. The list of clients, cases opened, cases closed, status update reports data are displayed through monthly, quarterly and yearly formats. The status report of all cases and list of cases are then presented through a range which can be selected from a certain date to another.

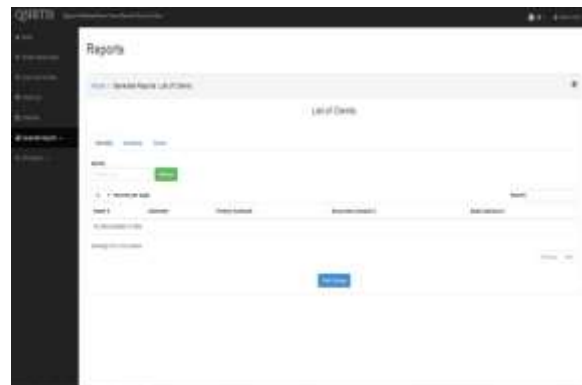


Figure 4.0 Report Generation

### 3.4 Report Generation

Report Generation component of the system takes advantage of the information stored in the database

### 3.5 EDMS Component

The EDMS component comprises of a centralized document storage, search and indexing, document review, and versioning. It provides the lawyers access to documents they need for research on their cases and for backtracking cases, especially the long ones.

- Centralized Document Storage – Using a centralized database will give the lawyers access to all the digitized case documents.
- Search and Indexing – Searching and indexing will assist the lawyers in finding the document that they want to view. The documents will be indexed to aid them in searching.
- Document Review – This will provide the lawyers the ability to view the case documents that they have searched.
- Versioning - This will give the users the ability to view and compare different versions of the case documents that has been filed. Versioning will be applied in terms of the different drafts of the pleadings. Upon uploading a draft it serves as version one. When a new draft is then again uploaded it serves as version two and the progression continues as the pleading is continuously updated

The problem being addressed in this module is the difficult access to case documents.

### 3.6 Evidence Management

The system will also allow the lawyers to manage all the evidence involved in the case. This module will be linked to the case management and tracking module of the system. The evidences may go beyond text or documents; it will give the user the ability to upload pictures, sound clips, and videos related to the case. Through the evidences compiled in this module and the information from the case management and tracking module, the lawyer will be able to have an overview of the state of the case, and of course be able to develop an appropriate approach for the case.

### 3.7 Dockets Management

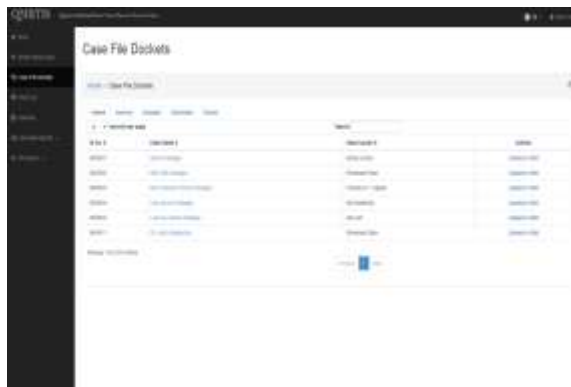


Figure 5.0 Dockets Clerk – Case File Dockets - Details

The Dockets Management module provides the dockets clerk the ability to store the soft copies of incoming documents to their respective cases, which will then send a notification to the respective users involved that a document has been added to the case. This module will also include an automated way of collating the documents in accordance to the court procedure. Through the system, certain documents were made as a trigger in order to group the documents under one procedure before moving on to the next procedure in court.

The problem being addressed in this module is the mishandling of case dockets.

### 3.8 Mobile Access



Figure 6.0 Mobile Access Homepage

A way to access the software via mobile is made possible through the mobile access module. Accessibility by definition is the capability to be reached. The software can be reached and accessed

through an internet browser. The mobile access is somewhat a mirror of the system for mobile phones. For mobile access to fully function though there is the need for internet connection. This module will then be able to use all modules aforementioned with the use of their mobile phones.

#### 4. CONCLUSION

Based on the the thorough investigation and requirements established, the group was able to identify six different problems which led to one main problem. The six problems in the fishbone diagram are the following: tendencies of misplaced dockets which then leads to missed deadlines, difficult access to case documents and the tracking sheet is not always followed which leads to the difficulty in tracking case information lastly the lack of back up files all of which contribute and add up to the main problem which is the **inability to properly manage the case documents**. To summarize, the table below contains the different problems alongside its proper solution counterparts. Having established this, the proponents were able to achieve the objective of developing a Case Management System for the law firm of Quiason Makalintal Barot Torres Ibarra & Sison in order to properly manage the case documents.

Problem	Solution
Difficulty Tracking Case Information	Case Management & Tracking
Missed Deadline	Scheduling & Calendaring
Mishandling of Case Dockets	Dockets Management
No backup files	Digitizer
Difficult access to case documents	EDMS Component

#### 5. ACKNOWLEDGEMENTS

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