

## Investigative Case Management System for Digging and Fire Related Accident Investigations



### INVESTIGATIVE CASE MANAGEMENT FOR MICROSOFT DYNAMICS 365

MERP Systems, Inc. has developed an Investigative Case management system, enabling the efficient management of complaints, from receipt through resolution and reporting.

INVESTIGATIVE CASE MANAGEMENT

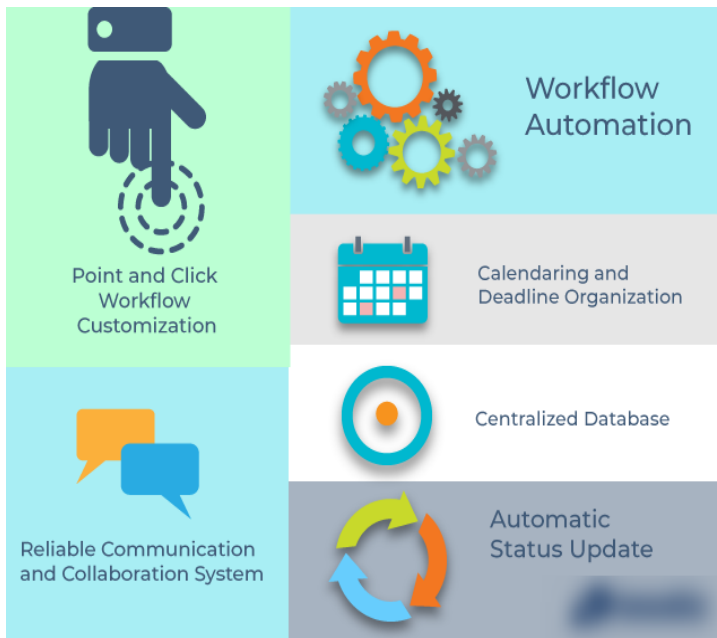
MERP Systems Inc

## CHALLENGES

The independent body required a new solution to replace a legacy complaint/case management system using both paper and a Microsoft Access database. Core client requirements were that complaints could be handled via an internal workflow system that was adept at managing permissions, had the functionality to view and add comments, insert media files or PDFs to existing cases, develop customized fields for data entry as well as displaying the status of each complaint/Case. Staff needed functionality to assign cases to appropriate case workers as well as gain access to specific documents on case files. On top of this, the client required an efficient reporting mechanism for submitting reports that allowed for measurement against key performance indicators.



## SOLUTION



MERP Systems developed a comprehensive case management solution leveraging the power of the customized **Dynamics 365** using SharePoint, XpertDocs and DocuSign. The complaint comes through XML into the Dynamics 365 mailbox directly, which will be detected by the system and gets converted into triage automatically.

**SharePoint** is an excellent document management and team collaboration tool. Moreover, SharePoint offers substantially more storage space than Dynamics 365.

**XpertDocs** is a third-party solution used to create word templates by getting data from Dynamics and merging multiple documents including attachments such as images, word files, TTF files, PDF's and many more.

**DocuSign** allows sending reports for digital signatures to multiple participants very quickly, from almost anywhere in the world, on practically any device.

The processed XML's are logged into Dynamics and notifications are sent at the time of exception and duplications are recorded.

Name	* CUFSEB XML Feed 2020-10-26 Incident D2030000...
IsProcessed	No
Duplicate	No
Created On	10/26/2020 8:29 AM
Reason	A validation error occurred. The length of the 'me...
Owner	* SYSTEM

**Timeline** + 🔍 📄 ⋮

Search timeline

Enter a note...

**DS** Email from dsbcmsadmin svcAccount

CUFSEB XML Feed 2020-10-26 Incident D203000001 Process XML Logs 10/26/2020 8:29 AM : Failed CRM:0015100

**XML Feeds Process Failure logs:-**

Is XML Process :- No

Process Date :- 10/26/2020 8:29 AM

Reason :- A validation error occurred. The length of the 'merp\_worktype' attribute of the 'merp\_triage' entity exceeded the maximum allowed length of '80'.

[Click Here For More Information](#)

10/26/2020 8:29 AM ^

Closed

Triage will be editable for all the supervisors present into the system. Once review triage is reviewed/updated, The supervisor can close or convert Triage to the Case from Disposition tab.

**D2029AAAAA**

Triage

- Ticket Entry
- GPS Coordinates
- Member List
- Reporter Information
- Alleged Violator Information
- Complaint/Incident Information
- Disposition**
- Description
- Case Creation

<p>Notification Status <b>Case</b> <span style="float: right;">▼</span></p> <hr/> <p>Disposition Code ---</p> <hr/> <p>Reason for closure ---</p> <hr/> <p>Other Closure Reason Detail ---</p> <hr/> <p>Priority * <b>High</b></p> <hr/> <p>Priority Reason * <b>Injuries</b></p> <hr/> <p>Other Priority Reason Detail ---</p>	<p>Description * <b>Injuries</b></p> <hr/> <p>Region * <b>North</b></p> <hr/> <p>Case description * <b>Case - Injury</b></p> <hr/> <p>Comments ---</p>
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All the changes made by the supervisor will be recorded into the system and can be seen into the **Audit History Report**.

# Audit History

D2029AAAAA						Search
Export to Excel						
Changed Date	Changed By	Event	Changed Field	Original Value	New Value	
11/6/2020 1:43 PM		Update	Case		20SA01288	
11/6/2020 1:43 PM		Update	Case number	CAS-01576	20SA01288	
11/6/2020 1:42 PM		Update	Notification Status	Triage	Case	
11/6/2020 1:42 PM		Update	Priority		High	
11/6/2020 1:42 PM		Update	Priority Reason		Injuries	
11/6/2020 1:42 PM		Update	Triage Actions Description		Injuries	
11/6/2020 1:42 PM		Update	Case Description		Test Case - Injury	
11/6/2020 1:37 PM	SYSTEM	Create	Status	Active		


Once the triage will be converted to the case, all the information will be copied to the case and additional information fields will be available for the assigned supervisor and investigator.

Evidences are stored in the Evidence entity which is connected with SharePoint where all the attachments will be stored. All the case related documents will also be stored into the SharePoint.


In Case, the investigator can start case plan and add all the parties involved into the case such as Subject, Witness, Victim, Project Owner, Multiple Contractors, Excavator, Operator, Locator, Investigator OR Others.

The **Contact Hierarchy** of the parties involved into the case, can be viewed anytime into the case. This hierarchy is exportable in .pdf format.

Export



**Organization Name: Comcast**  
 Name: Comcast  
 Role: Operator  
 Phone: undefined  
[View Detail](#)



**Organization Name: UtiliQuest**  
 Name: Steve French  
 Role: Locator  
 Phone: 5104605115  
[View Detail](#)

After all of the parties and evidences are included. **Report of Investigation** will be created by the investigator by a single click which includes all the case information, party information. The evidences will be automatically pulled from the systems and will also attached into the Report of Investigation word file. The report can be edited by the supervisor when it will be submitted for review by the investigator. A digital copy of report will be sent to the supervisor and investigator for digital signature to their email addresses. The signed copy will be automatically be synced into the systems once the report will be signed by both the users. The whole transmission will be made through automated email notifications.

Document Associated Grid

Documents on Default Site 1

✓	Name	Modified	Modified by	Location	Path	Source
	Evidence.docx	10/14/2020 1:38 PM	MerpAdmin	Documents on Default Site 1	20SA01286_2C7037B05C0EEB11A81200...	SharePoint
	Merged ROI.pdf	10/14/2020 1:41 PM	MerpAdmin	Documents on Default Site 1	20SA01286_2C7037B05C0EEB11A81200...	SharePoint
	ROI.docx	10/14/2020 1:38 PM	MerpAdmin	Documents on Default Site 1	20SA01286_2C7037B05C0EEB11A81200...	SharePoint
	Sign ROI.pdf	10/14/2020 1:40 PM	MerpAdmin	Documents on Default Site 1	20SA01286_2C7037B05C0EEB11A81200...	SharePoint

Along with that other reports like **Report of Interview, Information Report, Advisory Letter, Informal Closing Report, Closing Report, Notice of Probable Violence, Referral** can be created and digitally signed by the corresponding users.

## Dashboards

Separate **Dashboards** are created for the attorney, chief investigators, supervisors and investigators, here they can see all the pending tasks for them.

The screenshot displays a 'My Tasks Dashboard (Investigator)' with a top navigation bar containing 'Save As', 'New', 'Set As Default', and 'Refresh All'. The dashboard is divided into four quadrants, each representing a different task type:

- Cases:** Features a search bar, filters for Case Number, Incident Co..., Priority, Case Status, Investigator, and Created On. It shows 'No data available' and a status of '0 - 0 of 0 (0 selected)'. A '+ New Case' button is present.
- ROI:** Features a search bar, filters for Case Number (Reg...), Subject, Case Status (Regar...), and Created On. It shows 'No data available' and a status of '0 - 0 of 0 (0 selected)'. Buttons for 'Task', 'Delete', and a menu are visible.
- Report of Interview:** Features a search bar, filters for Case, Report Name, Status, Investigator Name, and Created On. It shows 'No data available' and a status of '0 - 0 of 0 (0 selected)'. Buttons for 'New', 'Delete', and a menu are visible.
- Closing Report:** Features a search bar, filters for Case, Report Name, Status Reason, Investigator Name, and Created On. It shows 'No data available' and a status of '0 - 0 of 0 (0 selected)'. Buttons for 'New', 'Delete', and a menu are visible.

# Timesheet and Time entry

The time spent on the cases can be entered into the **Time entries** by investigators and supervisors which will be approved by their managers. Report for the month can be downloaded by the managers.

**Time Sheet of # [REDACTED] for November 2020**  
Time sheet

6.10 Total Time | 10/27/2020 Date Submitted | Submitted Status

General | Timeline | Related

Month: November | Year: 2020  
User Name: [REDACTED] | Supervisor: [REDACTED]  
Submission/Approval: ---  
Comments: ---

+ New Time Entry | Refresh | Run Report

Entry	Date	Category	Case	Duration	Duration (In Minutes)	Description	Created On
ETR-01040	10/27/2020	Investigations	20LA01195	2.00	120	---	10/27/2020 7:02 AM
ETR-01041	10/22/2020	My Cases	20SA01286	4.10	250	Description	10/27/2020 7:03 AM

**ETR-01040**  
Time Entry

General | Related

Category	Investigations	Description	---
Case	20LA01195	Case Comments	---
Commodity Type	Unknown	Duration	02 : 00 HRS MIN
Date	10/27/2020		

## Time Sheet of # [REDACTED] for November 2020

Investigator: # [REDACTED]  
Month: November  
Year: 2020  
Supervisor: # [REDACTED]

Status: Submitted

Entry Number	Category	Case	Duration	Date
ETR-01040	Investigations	20LA01195	2.00	10/27/2020
ETR-01041	My Cases	20SA01286	4.10	10/22/2020

**Total time Spent: 6.10**

## SSRS Reports

Some reports are built on SQL Server Reporting Services, which can be exportable in any formats like PDF, Word, Excel, PPT, CSV, MHTML etc.

*Information to CPUC upon Board Action:* Report based on Commodity Type, Start Date, End Date to get Subject and Excavator Information.

Commodity Type  Start Date  End Date

1 of 1 100% Find | Next

### Information to CPUC upon Board Action

#### Subject Information

Organization Name	Case Number	Incident Date	Incident Location	Incident Place	Incident County	Factual Synopsis	Number of Injuries	Number of Fatalities	Outage: Number Affected
ABC Constructions - Dev Test	20LA01285	10/12/2020 5:38:00 PM	GAS LINE WAS DAMAGED	MACFARLAN	Kern	Factual Synopsis for Test	0	0	0

#### Excavator Information

Organization Name	Case Number	Street 1	Suite/Unit #	City	State	Zip Code	Phone Number	Notification Made	Ticket Number
BOND Consultancy	20LA01285								W028600131

*Investigations Overview:* Fetch all the cases reported in a date range

Start Date  End Date

1 of 2 ? 100% Find | Next

## Investigations Overview

Case #	Facility Type	Reason for Investigation	Brief Description	Status
20LA01193			Exposure	Pending
20LA01195	Unknown	Excavating without 811 ticket	EXCAVATION	Pending
20LA01242			desk	Pending
20LA01245			20LA1087	Pending

*Metrics for Case Management:* A report which provides a matrix of all the cases including how many cases assigned, how many cases closed, how many cases currently open, average length of open cases, Average length of closed cases..

Navigation bar with icons for back, forward, refresh, and zoom. Includes a page indicator '1 of 1', a zoom dropdown set to '100%', and a save icon.

**Metrics for Investigator Progress**

Metrics	Info for the last month	Info from the beginning of the year to current month
How many cases assigned	4	92
How many cases closed	1	1
How many cases currently open	4	93
Average length of open cases	44.5	51.62
Average length of closed cases	0	0
Length of oldest case still active	53	53
Length of oldest case (opened or closed)	53	53

Enforcement Jurisdiction	Info for the last month	Info from the beginning of the year to current month
Board	2	3

**Other Metrics to be Tracked**

Utility Type	Info for the last month	Info from the beginning of the year to current month
Unknown	0	1
Natural Gas	0	2
Empty	4	90
Sewer	1	1

*Time spent on a user defined case by multiple users:* Gives report of the time spent by a user on a particular case between a date range.

Report configuration interface showing Start Date (1/1/2020), End Date (11/30/2020), and Case (20LA01285). Includes navigation and zoom controls.

**Time spent on a user defined case by multiple users**

Time Spent (In Hours)	# of Users
2.08	2



*Time Matrices Report*: Combination of Report wizard and SSRS report with non-mandatory filter criteria, provides the time spent on a particular category by the user between a date range.

**Timesheet Metrics**

Category	Time Spent (In Hours)	# of Cases	# of Users
My Cases	6.25	2	2
Investigations	2	1	1

**Report Filtering Criteria**

**Time Entry**

Created On: On or After 1/1/2020  
 Created On: On or Before 11/30/2020

Category: Equals BreakCase Management/Su...

Select

Time Sheet

User Name: Equals Enter Value

Select



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