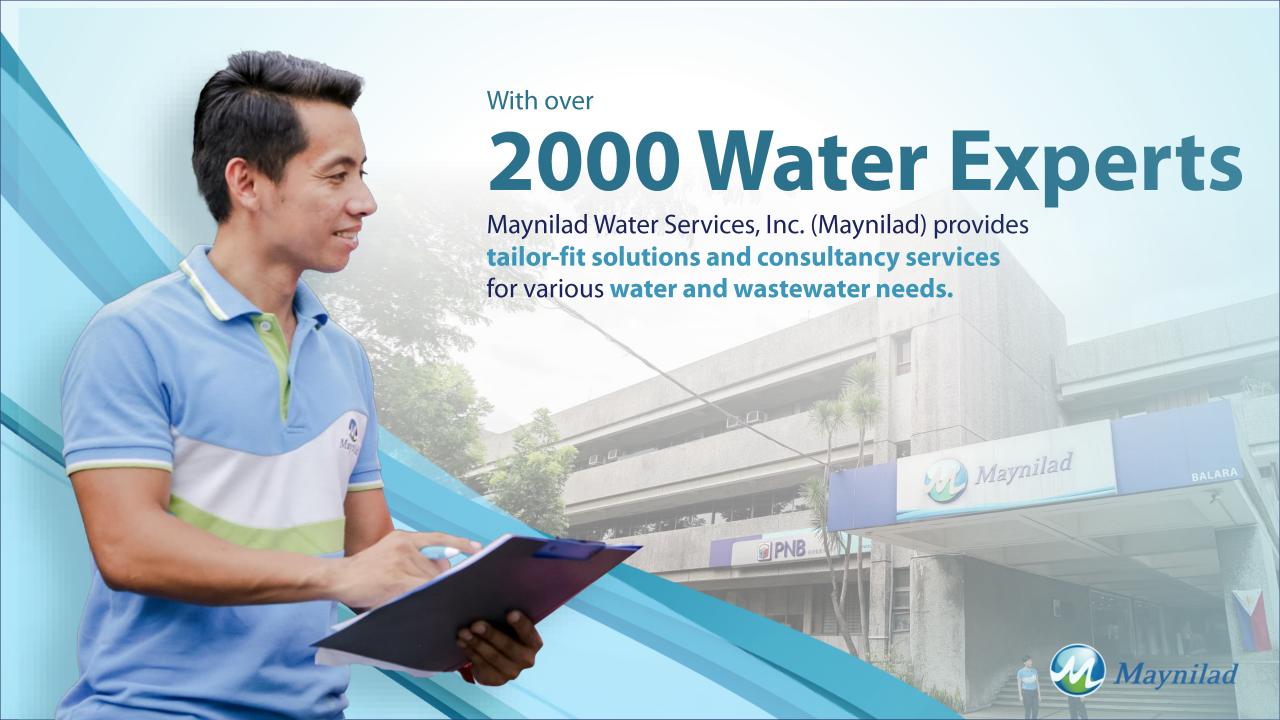


### **UTILITY MANAGEMENT SYSTEM**

"Developed By A Utility... For Utilities"

**Abigail L. Ho - Torres** 





### **UTILITY MANAGEMENT SYSTEM**

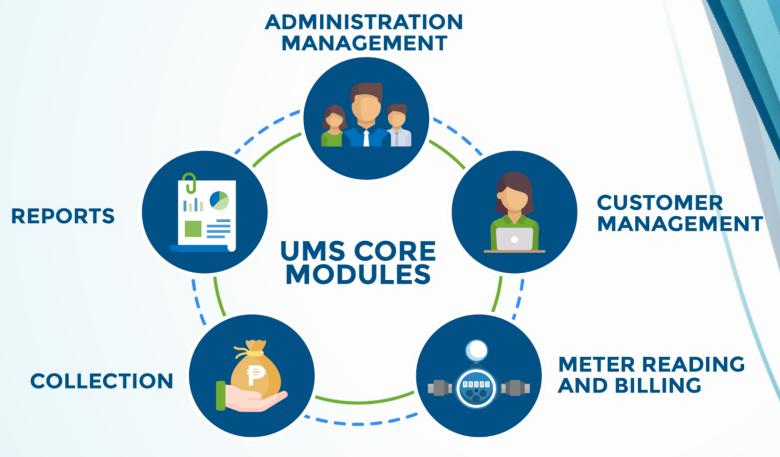
A *utilities-specific solution* which has been developed to support the core operations of:

- ✓ customer master data management,
- √ meter reading and billing, and
- ✓ customer collections and subsidiary ledger.

### the best way to manage your utilities...



# Utility Management System Module Components





### UMS Core Components Admin Management

#### **Used to create & update the following:**

- **✓** Meter reading rules
- **✓** Billing rules and rate structure
- **✓** Tariff
- **✓ Payment Posting and Allocation Rule**
- **✓ Master Data Selection Configurations**

#### **IT Admin:**

- ✓ User account maintenance
- ✓ Profile Administration
- **✓ Audit Trail**





### UMS Core Components Customer Management

Used to create & update the following:

- **✓** Business Partner
- **✓** Connection Object
- **✓ Contract Account**
- **✓ Technical Installation**





### UMS Core Components Meter Reading and Billing

#### Used to perform the following functions:

- ✓ Meter Reading entry, update and display
- **✓** Billing and invoicing
- ✓ Meter Reading and Billing Adjustment
- **✓ Bill Printing**





### UMS Core Components Collection

#### Used to perform the following functions:

- **✓ Customer Ledger Display**
- **✓ Manual Document Creation and reversal**
- **✓ Payment Posting**
- **✓ FI Documents Extraction**





### UMS - Meter Reading and Billing On-Site Billing (OSB)

Front-End Meter Reading and Billing solution aimed at providing read and bill functionality on-site with the use of portable handheld terminal and portable printer.

#### **Hand Held Terminal:**

- ✓ Automate bill calculation
- **✓ Capture Image**
- **✓ GPS-capable**
- **✓** On-screen signature

# 10:00

Zebra TC26

#### **Portable Printer:**

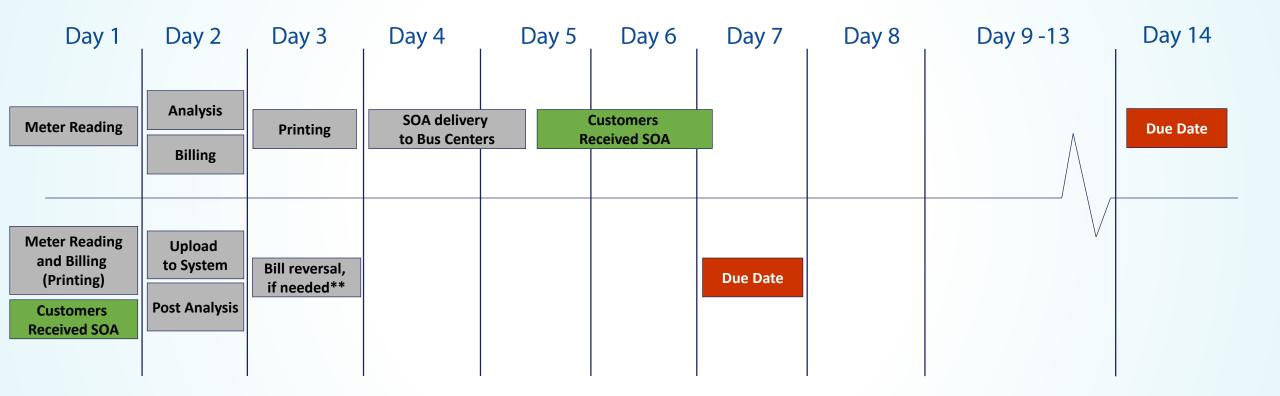
- **✓** Bluetooth connectivity
- **✓ Thermal printing**



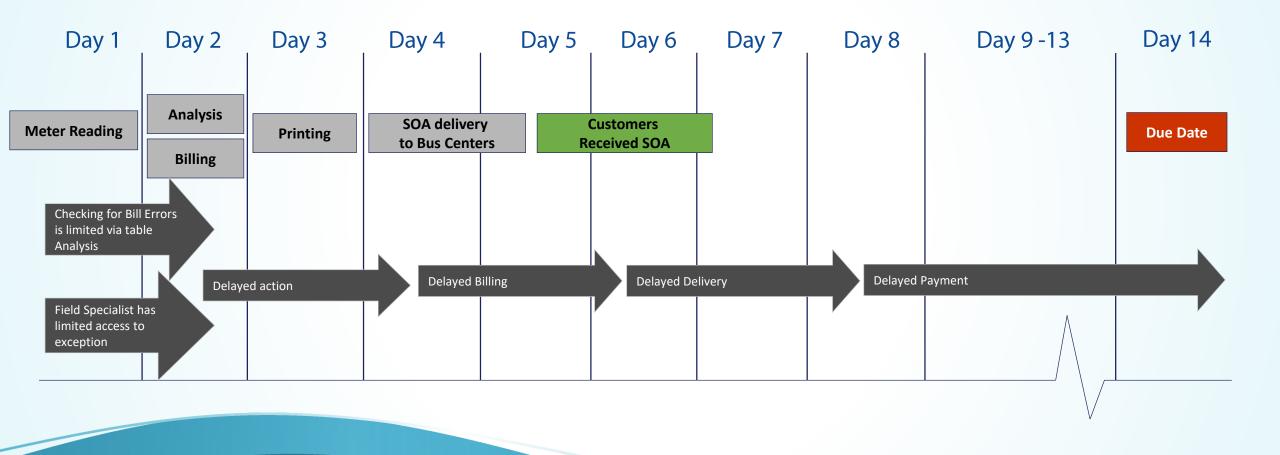
Zebra ZQ5



### Process Comparison Non - OSB vs OSB



### Process Comparison Non - OSB



### Process Comparison with On-Site Billing



	Conventional	UMS
Infrastructure	<ul> <li>It's not scalable. This will be very disadvantageous if you want to upgrade or improve the versions and functionalities.</li> </ul>	✓ Fully scalable, adding additional resources can be done to accommodate from small to a very large customer base
	On-premise, localized or stand-alone	✓ Flexible (On-premise or cloud)
	<ul> <li>Limited capability to interface with other applications</li> </ul>	✓ Interface-capable/ready
	<ul> <li>Only allows one function to be done at a time. No multi-tasking.</li> </ul>	✓ Web-based, and thus even allows multiple tabs to be opened at any given time for one user.
	Office based set up only	✓ Applicable for both office based and work from home set up
	<ul> <li>Some DOS-based application allowed the continuous usage of old PCs. Boot faster due to a very simple and minimal lines of codes.</li> </ul>	<ul> <li>✓ Developed with the best practices in application development as well as security guidelines to ensure efficient maintainability and protection against vulnerabilities.</li> <li>-three-tier architecture (separate DB, application and web layer)</li> </ul>

	Conventional	UMS
Full Visibility & Audit Trail	<ul> <li>Most conventional programs does not record historical transaction logs.</li> </ul>	<ul> <li>✓ All transactions are captured with full accountability (who did what)</li> </ul>
	<ul> <li>Most conventional programs does accommodate role-based access provision. Generic privileges are assigned to end users.</li> </ul>	✓ Role-based access provision. Users are only allowed privileges based on their approved function. Enhances accountability and deters fraud.
	<ul> <li>Separate stand-alone systems for meter reading and customer's billing and payments.</li> </ul>	✓ Full visibility of the whole life cycle: meter reading -> billing -> collection
	<ul> <li>Manual, pen and paper meter reading.</li> <li>Possibly of "reading under</li> </ul>	✓ GPS locator and tracking of HHT (can be used for tracking meter readers)
	<ul> <li>Account creation and privileges setting are within the system.</li> </ul>	✓ Can be integrated with Active Directory for Single Sign- On; thus enhancing ease of log-in (only one password to be remembered) but with added layer of access security.

	Conventional	UMS
•	<ul> <li>Traditional meter reading and billing system requires manual analysis of consumption before allowing the printing of Statements of Accounts for delivery. This is prone to error as analysis is highly dependent and is performed by the Revenue Analyst.</li> </ul>	✓ With UMS and the full integration to Read and Bill, all meter reading and billing rules, outsorting rules (abrupt increases/decreased, averaging, null reading) are incorporated and automated into the system. There is no manual intervention; thus maintaining objectivity and consistent application of rules.
Process Efficiency	<ul> <li>Manual proof of delivery and on-site investigation is needed even for minor validation.</li> </ul>	✓ Hand Held Terminal allows photographic evidence for field findings and capture customer's signature as proof of delivery
	<ul> <li>Pen and paper meter reading. No digital capture of locations.</li> </ul>	<ul> <li>✓ GPS locator for contract accounts (can be uploaded in GIS)</li> </ul>
	<ul> <li>Not user friendly, user is usually prompted with a black screen</li> </ul>	✓ User friendly, with hot keys and tool tips to guide the users in their navigation

	Conventional	UMS
Improved Customer Service	<ul> <li>Meter reading → billing → delivery cycle takes time.</li> </ul>	✓ With UMS and the Read and Bill implementation, Statement of Accounts are delivered on-site immediately after reading.
	<ul> <li>Courier handling the bills are different from those who read it. Customers do not get the chance to have 1<sup>st</sup> level inquiry/checking upon receipt of their bills</li> </ul>	✓ Customers can immediately check for accuracy; and thus, no further complaint can be expected.
	<ul> <li>Receipt of bills have no captured/documented proof</li> </ul>	✓ Proof of delivery are digitally captured, which again minimizes future non-receipt of bills complaints

	Conventional	UMS
	<ul> <li>Meter reading and SOA delivery were done by a separate person or a separate day.</li> </ul>	✓ Savings in eliminating courier cost
Increased Revenue	Commercial cycle with a minimum of 14 days	✓ Reduced commercial cycle. Faster meter reading and billing turn-around time.
	<ul> <li>Long days in conversion of revenue/sales to cash (Days Sales Outstanding – DSO).</li> </ul>	✓ Faster and better collection

# **Utility Management System**

All-in-one system for billing, collection and customer management, perfect for small and medium size enterprises.

The system can be fully customized to fit the needs of utilities like Water, Electricity, Liquified Petroleum Gas, and Solid Waste Management.









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