

UTILITY MANAGEMENT SYSTEM

"Developed By A Utility... For Utilities"



Utility Management System ("UMS")

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.



UMS Module Components



UMS Core Modules

The following functionalities are covered:

ADMIN MANAGEMENT		CUSTOMER MANAGEMENT		METER READING AND BILLING		ON-SITE BILLING (OSB)			COLLECTION
Used to create, update, & deactivate the following:		Used to create, update, & deactivate the following:		Us fol	ed to perform the lowing functions:	o perform the Front-End Meter ng functions: Reading and Billing Solution		Use foll	ed to perform the lowing functions:
	Meter reading rules Billing rules and rate structure Tariff Payment Posting and Allocation Rule Master Data Selection Configurations		Business Partner Connection Object Contract Account Technical Installation		Meter Reading entry, update and display Billing and invoicing Meter Reading and Billing Adjustment Bill Printing	Ha D D Po D	nd Held Terminal: Automate bill calculation Capture Image GPS-capable On-screen signature rtable Printer: Bluetooth connectivity Thermal printing		Customer Ledger Display Manual Document Creation and reversal Payment Posting FI Documents Extraction
	User account								
	Profile Administration Audit Trail								Maynilad

On-Site Billing (OSB)

A solution aimed at providing read and bill functionality on-site with the use of portable handheld terminal and portable printer.



Zebra TC26

- Automated billing calculation based on specific meter reading and billing rules of the company
- ✓ Image capture (reference for field findings)
- ✓ GPS-capable (tracking of meter readers)
- ✓ On-screen signature for proof of delivery



Zebra ZQ521

- ✓ Bluetooth connectivity
- ✓ Thermal printing



Process Comparison



On-Site Billing High Level Process



	Conventional	UMS
	• It's not scalable. This will be very disadvantageous if you want to upgrade or improve the versions and functionalities.	 ✓ 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)
	 Limited capability to interface with other applications 	✓ Interface-capable/ready
Infrastructure	 Only allows one function to be done at a time. No multi-tasking. 	 ✓ 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
	 Some DOS-based application allowed the continuous usage of old PCs. Boot faster due to a very simple and minimal lines of codes. 	 Developed with the best practices in application development as well as security guidelines to ensure efficient maintainability and protection against vulnerabilities. -three-tier architecture (separate DB, application and web layer)

	Conventional	UMS
	 Most conventional programs does not record historical transaction logs. 	 All transactions are captured with full accountability (who did what)
Full Visibility	 Most conventional programs does accommodate role-based access provision. Generic privileges are assigned to end users. 	 Role-based access provision. Users are only allowed privileges based on their approved function. Enhances accountability and deters fraud.
& Audit Trail	 Separate stand-alone systems for meter reading and customer's billing and payments. 	 Full visibility of the whole life cycle: meter reading -> billing -> collection
	 Manual, pen and paper meter reading. Possibly of "reading under 	 ✓ GPS locator and tracking of HHT (can be used for tracking meter readers)
	 Account creation and privileges setting are within the system. 	 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			
Process	 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. 	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.			
Efficiency	 Manual proof of delivery and on-site investigation is needed even for minor validation. 	 ✓ Hand Held Terminal allows photographic evidence for field findings and capture customer's signature as proof of delivery 			
	 Pen and paper meter reading. No digital capture of locations. 	 ✓ GPS locator for contract accounts (can be uploaded in GIS) 			
	 Not user friendly, user is usually prompted with a black screen 	 ✓ User friendly, with hot keys and tool tips to guide the users in their navigation 			



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



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





<u>Utility Management System:</u> Developed By A Utility... For Utilities

- Robust solution for billing, collection and customer management on a smaller scale primarily to cater small- to medium- enterprises.
- Manage Operations
 - o Water
 - Electricity
 - Liquified Petroleum Gas
 - Solid Waste Management

All in One system!!!





Maraming Salamat!

