

# **FINANCIAL SUSTAINABILITY THRU ENHANCED TAX REVENUE ASSESSMENT AND COLLECTION SYSTEM (ETRACS) OF ALTAVAS, AKLAN TITLE**

## **EXECUTIVE SUMMARY:**

The Municipality of Altavas is a fourth class municipality in the Province of Aklan. Geographically, it is a small mountainous town in the eastern part of the province and a gateway from the Province of Capiz and Iloilo. It connects Aklan to Capiz along the road network leading towards Iloilo Province now a Strong Nautical Highway which also cater the RORO from Manila going to the Provinces of Panay. Therefore, it has potential financial viability in terms of economic and tourism development.

The Enhanced Tax Revenue Assessment and Collection System (ETRACS) is an AusAID funded project developed under the Local Governance Development Project (LGDP) through the expertise and dedication of Rameses Systems Inc. implemented ETRACS in the Province of Aklan in the year 2012 choosing two (2) pilot areas, namely, the Municipality of Kalibo and the Municipality of Malay. However, it only caters to the collection system and failed to adopt linkage in the Assessment Office.

The Municipality of Altavas adopted the ETRACS on August 2015 with linkages to four major departments involving Revenue Generation and Resource Mobilization. More advanced and more enhanced than the two (2) pilot municipalities because of its total linkages of revenue assessment and collection system with the four (4) offices, to wit: Municipal Treasurer's Office, Municipal Assessor's Office, Municipal Accounting Office and Business Permits and Licensing Office-Office of the Mayor, thus making the municipality the first to implement fully the ETRACS in the Province of Aklan.

The Local Government Unit (LGU), grasping the great opportunities envisioned to attain financial sustainability by increasing its revenue collection by 120% at the end of the year 2015 and sustain at least a 10% increase every year thereafter. The administration believed that by upgrading its public services with fast and more advance technology will accomplish its desire of sustainability to fund projects without relying to the Internal Revenue Allotment. Correspondingly, the Revenue Generation Team performed a better, easy and fast service to its client because of the impact of the automation coupled by attaining taxpayers/stakeholders satisfaction.

## **PROJECT DESCRIPTION:**

Enhanced Tax Revenue Assessment and Collection System (ETRACS) is a software system designed and developed by Rameses Systems Inc. (Rameses). The primary goal of the system is to automate real property assessments, business permits licensing and revenue collection operations of local government units (LGU). Through automation, the LGU should become more efficient and improve its reporting accuracy. The system controls the processes through carefully designed business workflows which are based on the standard operating procedures and guidelines of LGUs. In effect, it also promotes transparency and good governance since it applies controls for check and balance and audits each transaction being made making it difficult to do fraudulent activities.

The standard system can be configured according to the needs of the municipality and is composed of three modules as follows:

- Collection (Treasury Revenue Operations)
- Real Property Assessment
- Business Permits and Licensing

Later, ETRACS can now be configured also for satellite offices of the LGUs like barangays, bus terminals, hospitals, water works, market etc. which targeted in the year 2018. This is called micro installations and is basically a stripped-down version of ETRACS. The objective is to allow transactions to be collected where the transaction happens to reduce data capture in the main office and ensure on-time collection and remittance.

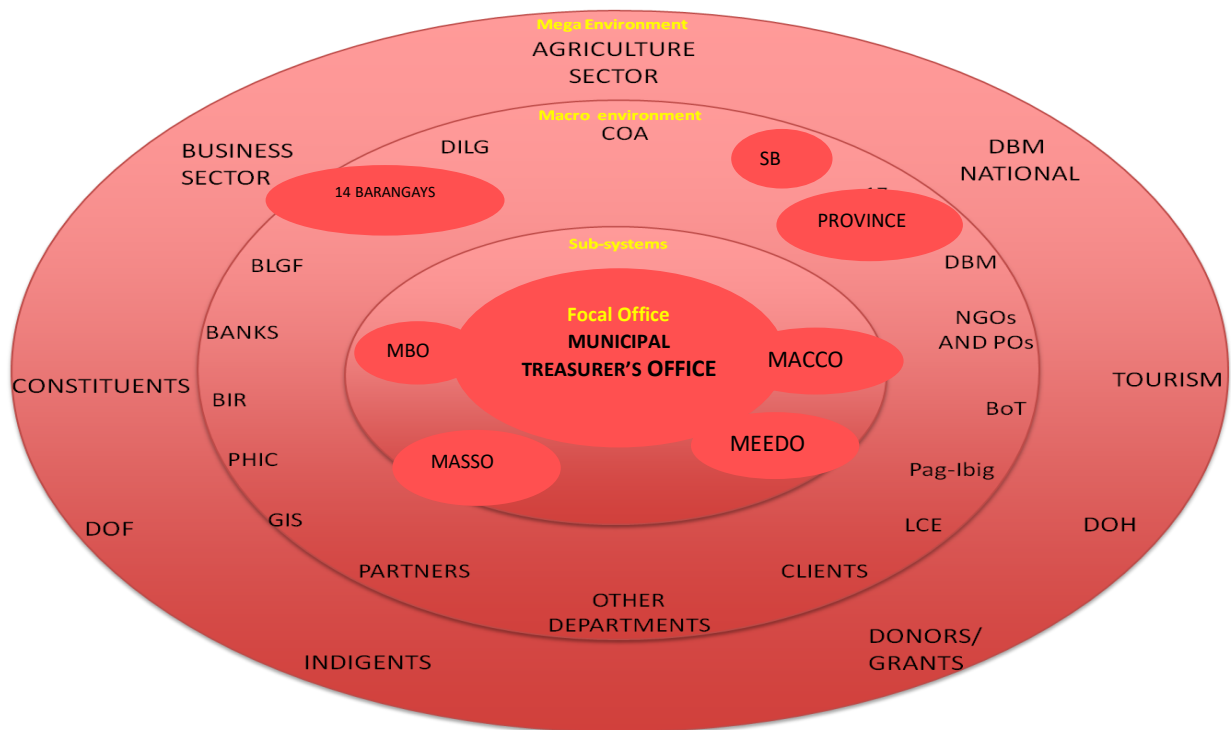
The system is an AUSAID Project piloted two (2) municipalities of the Province of Aklan, namely: Municipality of Kalibo and Municipality of Malay, however this is adopted by the Municipality of Altavas and successfully piloted the linkages with four (4) major departments that linked core functions in the Revenue Generation.

The project aims to elevate innovation in the field of tax revenue collection to provide an efficient and transparent transaction with fastest delivery of public service and to answer the mandate of Republic Act No. 9485 known as Anti-Red Tape Act, and Republic Act No. 7160 known as Local Government Code of the Philippines, **“A Transparent and Accountable Fund/Expenditure Management”**.

### IMPLEMENTATION PROCEDURES

The implementation of ETRACS requires extensive technical skills and broad knowledge of business processes. An agile strategy will be adopted in implementing the project. This strategy advocates continuous development and refinement of procedures based on lessons learned, problems encountered and newly discovered techniques.

The municipality made a thorough study by using a System Map to provide comprehensive analysis and scope of advantage the ETRACS can provide. These are the LGU clientele interacting with each other.



**SYSTEM MAP**

**STEPS OF IMPLEMENTATION:**

**STEP 1.** Signing of Memorandum of Agreement between the Provider of the System, Rameses, Inc. and Local Chief Executive.

**STEP 2:** The implementation and maintenance of ETRACS requires both 10-day technical and skills training:

DAY	ACTIVITY/OUTPUT	WHO ATTENDED	SOURCE OF FUND
1	End Users Training: ETRACS v2.5 Tax -Collection Module -TC Masterfile Management -Accountable Form Management -Collection (AF 51, 52, CT5, etc) -Remittance -Liquidation -Deposits	Personnel from the Treasury, BPLO, IT Offices	GENERAL FUND
2	Handling SubCollectors and Field Collections -Report Management -Completion of Master Files -Batch collection, cash ticket, and remote collection Introduction to Business Permit -Assessment Module -BP Master File Management -Introduction to Rule Authoring -Authoring of Business Tax Rules	Personnel from the Treasury, BPLO, IT offices	
3	Introduction to Business Permit -Assessment Module -BP Master File Management -Introduction to Rule Authoring -Authoring of Business Tax Rules	Personnel from the Treasury, BPLO, IT offices	
4	Authoring of Regulatory Fees -Authoring of Other Charges and Fees -Capturing of Business Applications -New/Renewal of Business Applications -Business Transactions -Authoring of Business Billing Rules and Billing Generation	Personnel from the Treasury, BPLO, IT Offices	
5	Collection of Business Taxes and Fees -Releasing of Business Permits -Business Report Management	Personnel from the Treasury, BPLO, IT Offices	

6	Introduction to Real Property Assessment Module -Capturing of Land FAAS -Capturing of Building FAAS -Capturing of Machinery FAAS -Capturing of Plant/Tree FAAS -Capturing of Miscellaneous FAAS	Assessor's Office, Land Tax and IT Personnel	
7	FAAS Transactions : Transfer, Correction, Reassessment, etc. -Subdivision -Consolidation -General Revision -Annotations	Assessor's Office, Land Tax and IT personnel	
8	Issuance of Certifications -Report Generations -Open Forum / Q & A / Clarifications Giving of Certificates	Assessor's Office, Land Tax and IT personnel	
9	Approval of Realty Tax Ledger -Authoring of Real Property Tax Computation Rules Testing rules and troubleshooting -Collection of Realty Taxes	Assessor's Office, Land Tax and IT personnel	
10	Real Property Transactions e.g -Transfer of Ownership, Reassessment, Correction of Entry, Subdivision, Consolidation, etc. -Issuance of Certifications Report Generations	Assessor's Office, Land Tax and IT personnel	

## STEP 2:

### Acquiring Software and Hardware requirement for initial installation and data capturing and banking.

- Downloading Software by Rameses, Inc.

The minimum hardware requirements are:

- Application/Database Server:
  - Intel Xeon Quad-Core Processors or equivalent
  - 4GB Physical Memory
  - 500GB Hard Disk
  - 100Mbps/1Gbps Network Interface Card
- Workstation Computers
  - Dual-Core Processor
  - 2GB Physical Memory
  - 100Mbps/1Gbps Network Interface Card
  - 1024 x 768 Screen Resolution

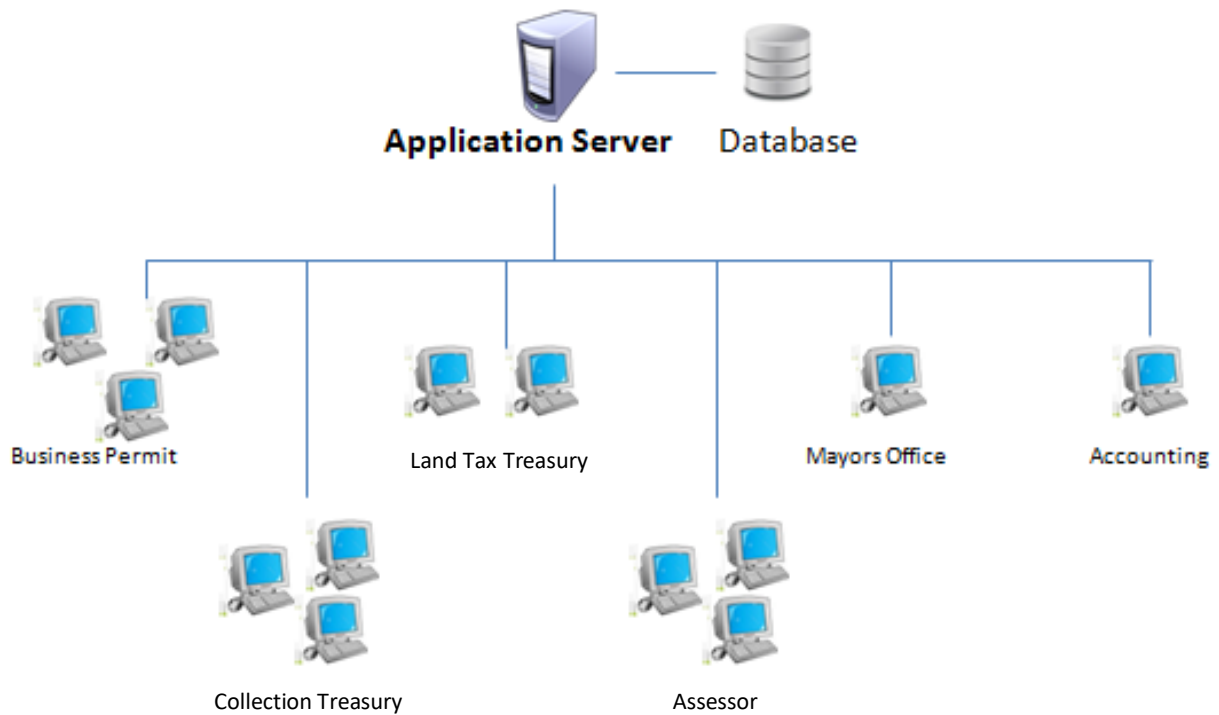
- **Epson LQ-300+ Dot Matrix Printer** – for collectors. One (1) printer per collector
- **DeskJet or LaserJet Printer** – used for the printing of reports.
- **Local Area Network** – the network should interconnect the Treasurer's Office, Assessor's Office, Land Tax Division, Business Permit and Licensing Division, Accounting and the Mayor's Office.

**Note:** The number of desktop computers depends on the number of users. A minimum setup might be composed of the following: 3 units for the Treasurer's Office, 2 units for the Business Permit and Licensing, 3 units for the Assessor's Office, 1 unit for Land Tax and 1 unit for the Mayor's Office.

### STEP 3: Installation and dry run of the system

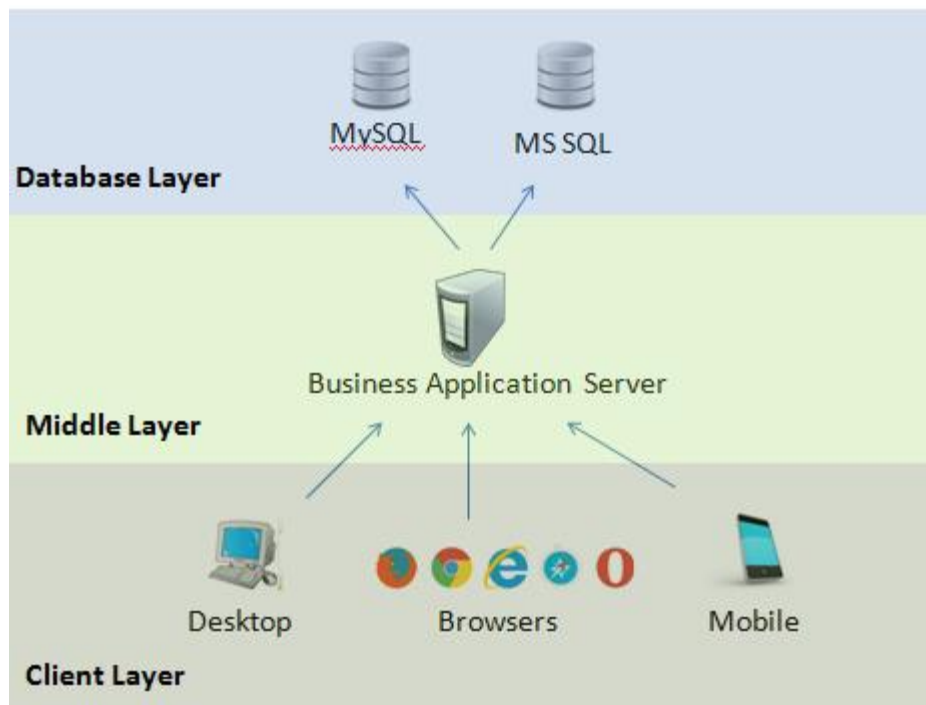
#### ETRACS Setup

ETRACS is a multi-user system that spans several offices. It requires a local area network and several computers connected per office that needs access to the server.



#### Architecture

Osiris 2 Enterprise Framework™ is a multi-tiered framework that is composed of several layers intended to be scalable and dynamic. Basically it is composed of three tiers – the client or presentation, the business application or middle layer and the database layer. See diagram below:



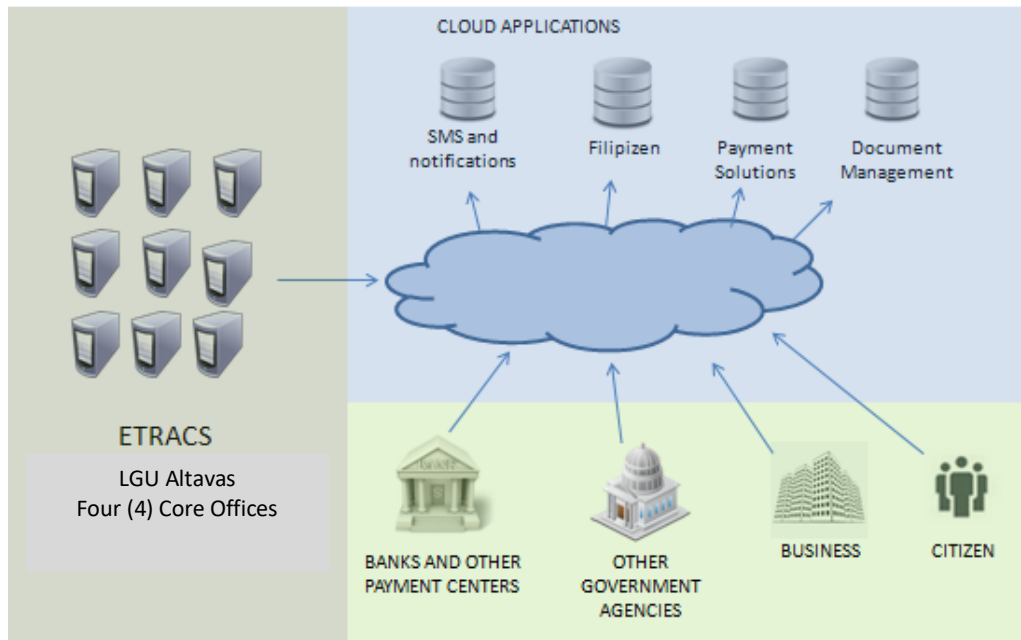
**Client or Presentation Layer** – this is what users use to interact with the system and it could be any computing device. It can be a desktop or workstation application, a web browser, a mobile application, a kiosk or any device like card readers for example. The ETRACS program however at this time is developed for the personal computer and uses the *Osiris 2 Client Platform™*.

**Business Application Layer** – Also known as a middle layer, data collected from the client is processed and acts as the go-between the client and data layer. Transactions are organized as services and code is written in scripts, or a text-like programming language. Services can be accessed by the client or even by another system using another programming language. This is commonly referred as a Service Oriented Architecture (SOA).

**Data Layer** - This is the where data will be persisted or “saved” and commonly stored in relational databases. However, data storage is not limited to relational databases. Data can be also be stored in other data formats like a document database and non-relational databases. However at this time, ETRACS is stored in relational databases and an LGU has two options – MySQL or MS SQL Server. There is planned support for other databases in the future but depends on the request of the LGU.

## **Cloud Technology**

The cloud technology is an exciting development in the computing space. Although the concept is not entirely new, the tools are making it easy for developers to manage virtual data centers. It also lowers the administration costs which are very expensive traditionally. This enables one to focus on the solutions and not on maintenance. For example, additional server resources can be added dynamically if high performance is needed at the click of a button.



This is a big deal for LGUs because it has always been the dream of most to allow citizens to transact online like doing payments or to query the status of their properties. In order to do this at present, an LGU needs a huge investment in data centers and monthly leased lines plus additional manpower to develop applications and monitor transactions and security. The cost will not be able to outweigh the benefits unless an LGU is probably big enough and their constituents technologically savvy enough like large cities. The following diagram shows the cloud topology of ETRACS.

**STEP 4: Feed backing and customizing the need**

**STEP 5: Full Implementation**

(Pictures)

**PROJECT IMPACT/RESULT:**

The LGU envisioned for progressive municipality and safer environment because of its great potential of economic growth. ETRACS elevated the field of tax revenue collection and innovated an advance technology to provide an efficient and transparent transaction with fastest delivery of public service. It complied the mandate of Republic Act No. 9485 known as Anti-Red Tape Act, and Republic Act No. 7160 known as Local Government Code of the Philippines, **“A Transparent and Accountable Fund/Expenditure Management”** and **“A public service is a public trust”**.

When the Implementation started in August 2015, tax collection increased by more than 120% posted in the ESRE website of an average growth rate of 131%. This brought us a lower dependency rate of Internal Revenue Allotment and more project implemented in the local revenue sources.

The Municipal Economic Enterprise of the LGU incurred a surplus of more than Ph800,000.00 and resolved to transfer to General Fund for repayment of subsidy of the creation of Economic Enterprise in compliance with DBM Circular regarding Economic Enterprise with subsidy from General Fund.

With the automation of processing of business permits and licenses, clients/taxpayers ease of burden of processing time because of fast approval of their transaction. Payment of taxes are easy and no buildup of people in the teller counter because of automated and auto computed Official Receipt. The tax innovation gave them a public service satisfaction.

The LGU requires to submit a monthly mandatory reportorial requirements to the different national agencies which complied promptly when ETRACS was implemented. The advantage of the system is generating an automated and real time transactions and reports. It has a built-in internal control system that give the user easy task and performed its job with highest degree of honesty.

The results of adopting ETRACS is surely attained financial sustainability the Municipality of Altavas by continuously implementing and maintaining the Enhanced Tax Revenue and Collection System (ETRACS), an automated assessment and collection system with updated internal control program.

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