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## THE POWER OF POINT OF SALE: IMPROVING GROWTH, PROFIT AND ENHANCING GOVERNMENT REVENUE COLLECTION.

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**NWAGUIYI JEREMIAH T.**

DEPARTMENT OF COMPUTER SCIENCE FEDERAL POLYTECHNIC OKO,  
ANAMBRA STATE, NIGERIA.

SEPTEMBER, 2020.

### **Abstract**

*For many countries, creating a captivating revenue and tax collection experience is the key to success, and finding the right technologies to enable that experience is crucial for sustaining a competitive advantage. This project is a case study designed to evaluate and select a point of sale (POS) system and revenue management system for government internally generated revenue based upon its specific needs. This study creates a three step framework leading up to the real world implementation of these system and uses BIZI mobile cashless consultant LTD. Company as the subject of the study. Bizi mobile cashless consultants LTD is a financial institute that is registered under the incorporated laws of the Federal republic of Nigeria, which specializes in the development of strategic communication materials and behavioral change concepts for financial policies throughout Nigeria. The Study looks at specific challenges facing Nigerian Government and creates a roadmap for POS and revenue implementation that can be generated for Government. The framework for the implementation includes (1) initial research and current process analysis (2) new system evaluation and process comparison.. Upon completion, the study recommended that government should: 1. Maintain a database of all revenue collection, including price, unit location, number.2. Facilitate a more efficient checkout method that eliminates handwriting receipt and digitally records all revenue collected within the system and communicate with the revenue management system to allow for real-time revenue update upon completion of POS transaction. 3. Run a variety of report on the collected data so that government has greater accuracy and success when making budget.*

**Keywords:** POS, Management system, Government, Profit, Growth

### **Introduction**

This project seeks to answer how Government can benefit from implementing an electronic point of sale revenue collection system. Furthermore, it

seeks to discover how that system can inform the decision making procedures of Government regarding functions such as budgeting, and control. The project also explores how a new point of sale and

revenue management system can benefit Government improve overall revenue collection experience.

Point of sale revenue collection system is highly recommended because consistent revenue tracking helps improve Government budget and decision and reduce cost of governance.

### **Related Literature**

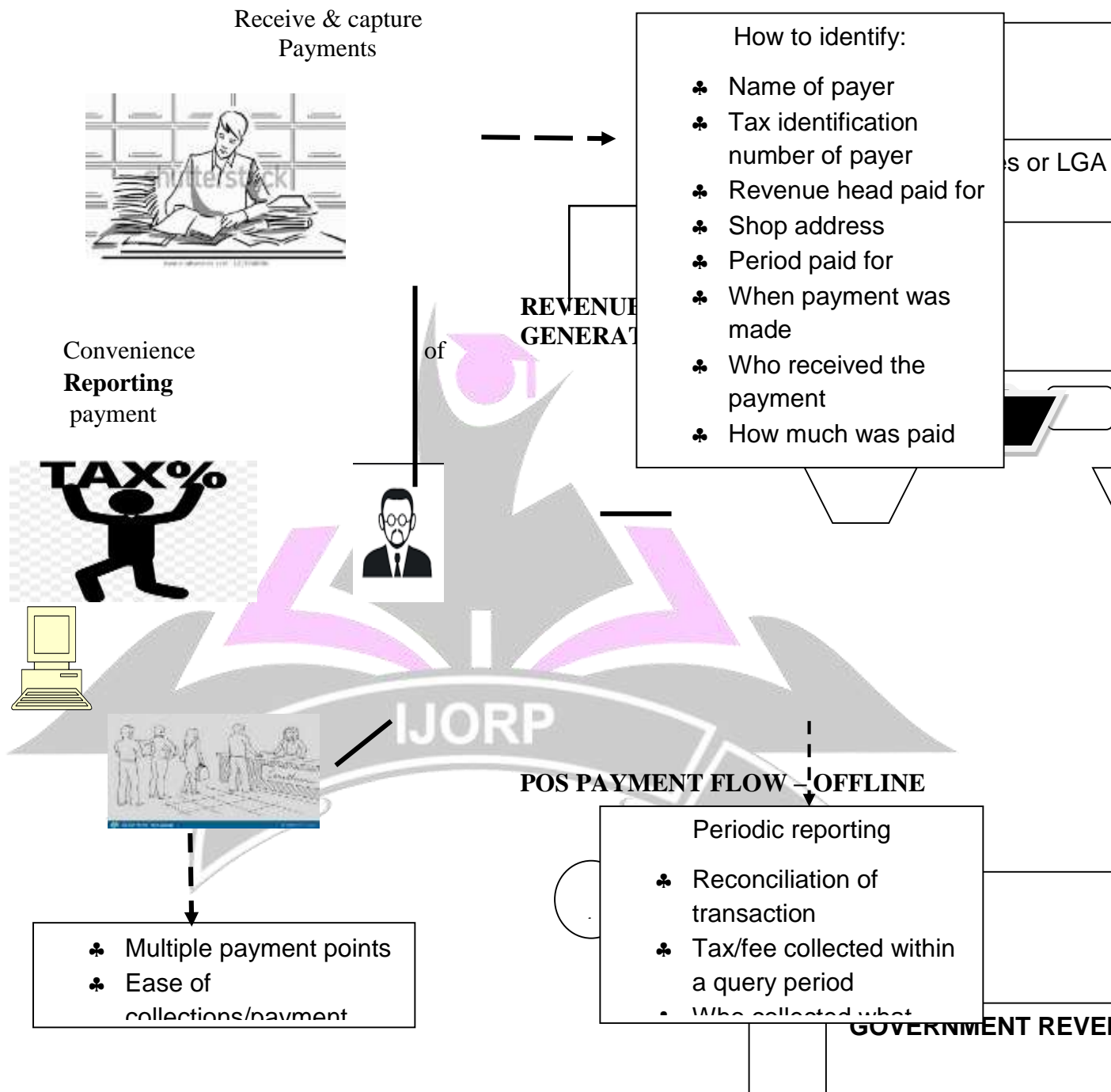
When updating from manual process, the first system necessary is the POS system because it is the core for business and revenue analytics by providing government with access to comprehensive historic revenue information. POS software helps to identify “not only daily and weekly POS performance, but also revenue levels and locations, other status in percentage (Shapiro, 2008) further research shows that a POS system streamlines the process of entering inventory into a computer upon completion of revenue collection/sales thereby allowing for expedited revenue management for Government still doing manual counting (casison, 2013). POS data can be used to create expected revenue forecasts based upon previous demands, so POS data can be used to forecast what end-users will pay (simon,2008). The flexibility and automation that a new point of sale system provides over manual process is a key motivator for upgrade government revenue system. A POS is a means to collect and aggregate revenue data automatically, which can then be used to produce government budget and spendings (polanz, 2011). A POS system tracks the individual revenue categories when they occur and manages every transaction completely, this provides government with a greatly ability to plan orders, and adjust strategies (Lambadi, 2011). Research has proven that switching from a manual system to a computerized revenue system

improved the efficiency of government budgeting Nwaguiyi J. (2020).

### **Methodology**

This project highlights a systematic method for researching, identifying and recommending a new point of sale system for a government revenue collection.

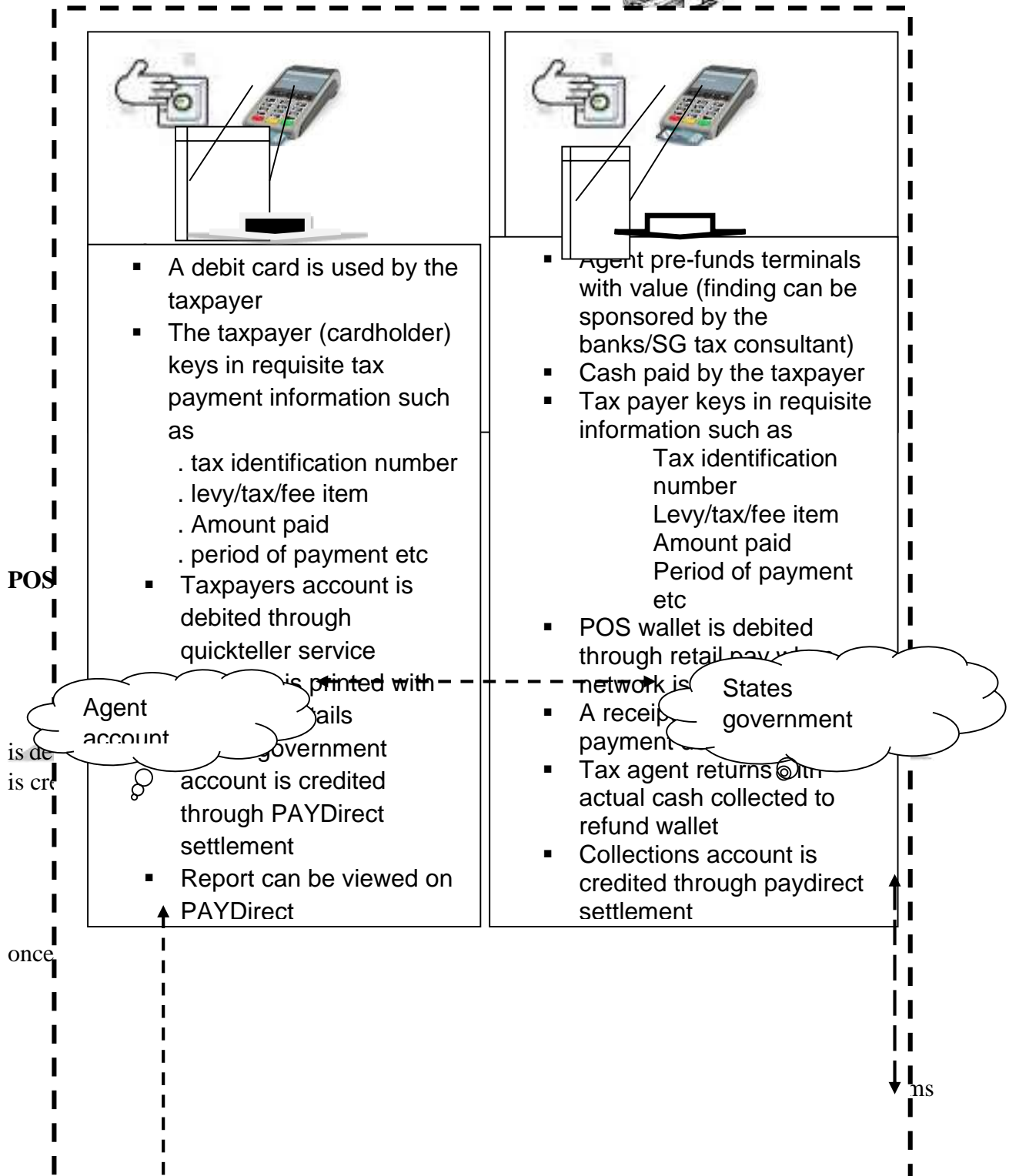
## Challenges Encountered In Revenue Collection



### POS Direct collection

POS Direct is an off-line and on-line revenue solution that provides a tax collection framework for the states and LGAs to collect taxes and other levies with the use of POS terminals. It captures full payers details thus providing proper monitoring, accountability and reconciliation.

## How it works....



POS Payment Flow – Offline

1. Online  
2. Offline

4

RE-ENTER REVENUE CODE

6

ENTER PHONE NUMBER

8

POS Payment - Offline



1

ENTER REVENUE CODE

5

TRANSACTION APPROVED

7

LOGO

PAYER CODE  
STATES OR LGA GOVERNMENT  
DATE:01/01/2020

NAME: WASIUN EMEKA IBRAHIM  
PHONE NUMBER:080602345098  
TERMINAL ID : 20347575P

REVENUE CODE :00000  
SHOP NO: 11111  
TAX NO:22

9

PAYMENT PERIOD :2013  
AND NOTICE NO:33333  
AGENT ID: 444444

AMOUNT : N100,000

PLEASE OBTAIN YOUR RECEIPT  
THANK YOU



1

ENTER PAYER ID

5

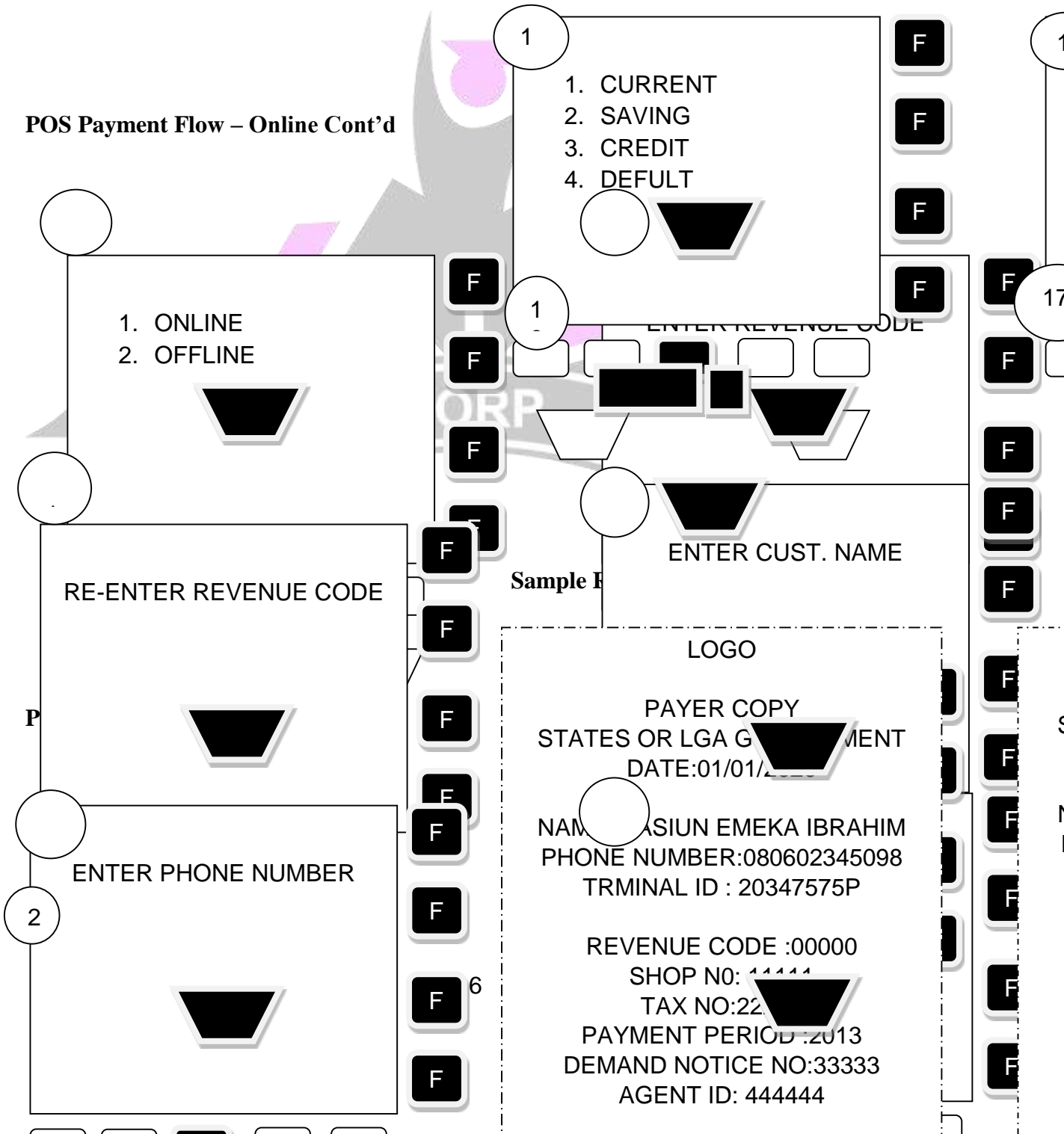
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1.  
2.

**GOVERNMENT**

## POS Payment Online Cont'd

### POS Payment Flow – Online Cont'd



1. ONLINE  
2. OFFLINE

RE-ENTER REVENUE CODE

ENTER PHONE NUMBER

1. CURRENT
2. SAVING
3. CREDIT
4. DEFAULT

ENTER REVENUE CODE

ENTER CUST. NAME

Sample P

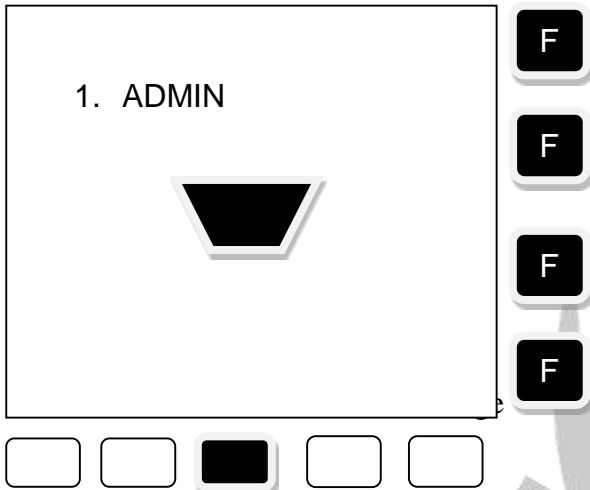
LOGO

PAYER COPY  
STATES OR LGA GOVERNMENT  
DATE:01/01/2013

NAME: ASIUN EMEKA IBRAHIM  
PHONE NUMBER:080602345098  
TRMINAL ID : 20347575P

REVENUE CODE :00000  
SHOP NO: 11111  
TAX NO:22  
PAYMENT PERIOD :2013  
DEMAND NOTICE NO:33333  
AGENT ID: 444444

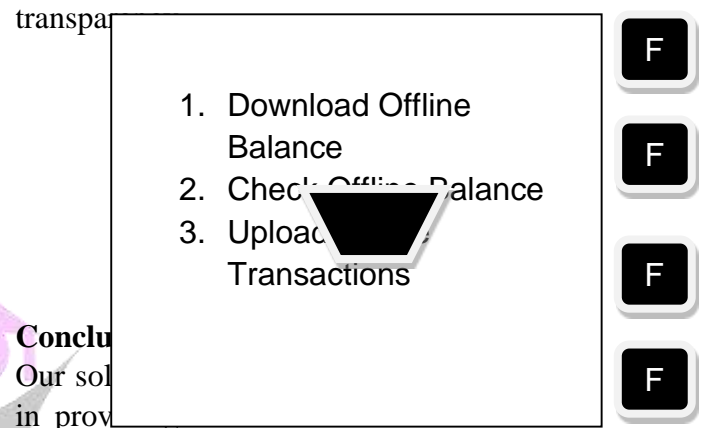
## POS Terminal – Other Menus



Ability to capture and record payments solve problem of proper capture  
 With or without network connectivity of taxpayer information

Provides convenience of payment monitoring through provides proper

Which encourages prompt tax/fee reporting Payment which promotes accountability and



**Conclusion**  
 Our solution is implemented in providing ultimate success of implementation. The essential core element of our solution consist of:

- ♣ Building a reliable tax database
- ♣ System Automation to eliminate leakages
- ♣ Integrating the various MDAs and their revenue windows

### Recommendation

Government should:

1. Maintain a database of all revenue collected including price, unit location, number

Facilitate a more efficient checkout process that eliminates handwriting receipt and records all revenue collected within the system and communicate with the revenue management system to allow for real-time revenue update upon completion of POS transaction.

3. Run a variety of report on the collected data so that government has greater accuracy and success when making budget.

## Reference

Casion, J. (2013). Retail technology update 2013, gift and decorative accessories. Retrieved from: <https://www.giftsanddec.com/>

Lombadi, J. (2011). Greater ability to plan orders and adjust strategies. Retrieved from: <https://philanthropynewsdigest.org/columns/the-sustainable-nonprofit/strategic-planning-five-steps-to-a-more-secure-future>

Nwaguiyi, J. (2020). Computerized revenue system improves the efficiency of government budgeting.

Simon, R. (2008). The ABCs of point of sales (POS) data, journal of business forecasting. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S187705091300135X>

Shapiro, R. (2008). How to use POS data in demand planning journal of business forecasting. Retrieved from: <https://erply.com/govpos/>

Polanz, J. (2011). Your POS shaping list today's garden center. Retrieved from: <https://www.gardencentermag.com/article/garden0313-point-of-sale-system-benefits/>