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BUID: A Virtual Agent to Become Robust Integrated Core Financial System

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Abstract: Today's core banking system is a comprehensive, integrated yet modular business solution that effectively addresses the strategic and day-to-day challenges faced by banks. It is highly parametrical providing much-needed flexibility to innovate and adapt to a dynamic environment. The current core banking system is comprehensive and unified customer data repository with capabilities to educate and empower customers. With core banking solution, banks can meet the challenges of managing change, competition, compliance and customer demands effectively. But core banking system doesn't know the customers opened number of accounts in assorted banks under one roof. This paper offers the concept of BUID (Bank unique Identification) code to unhide customer details and transaction from income tax department, government and overall financial system. The BUID can be easily unified in current financial core system. It will be better alternative of pan card. The BUID will be well-built to execute a position to augment the present financial core system.

Keywords: Bank Unique Identification (BUID), Bank Account Number (BAN), OLTP, OLAP, 7-tier Architecture.

I. INTRODUCTION

Core Banking is normally defined as the business conducted by a banking institution with its retail and small business customers. Many banks treat the retail customers as their core banking customers, and have a separate line of business to manage small businesses. Larger businesses are managed via the corporate banking division of the institution. Core banking basically is depositing and lending of money. Nowadays, most banks use core banking applications to support their operations where CORE stands for "centralized online real-time exchange". This paper basically means that the entire bank's branches access applications from centralized datacenters using BUID. This means that the deposits made are reflected immediately on the bank's servers and the customer can withdraw the deposited money from any of the bank's branches throughout the world using BUID code. The applications now also have the capability to address the needs of corporate customers, providing a comprehensive banking solution. The core banking functions will include deposit accounts, loans, mortgages and payments. Banks make these services available across multiple channels like ATMs, Internet banking, and branches using customer BUID.

Implementing the concept, Enterprise solution facilitates integration with a bank's with existing technologies and avoids the potential disruption to business caused by replacing entire systems. Core banking solutions is new jargon frequently used in banking circles. The advancement in technology, especially Internet and information technology has led to new ways of doing business in banking. Here, computer software is developed to perform core operations of banking like recording of transactions, passbook maintenance and interest calculations on loans and deposits, customer records, balance of payments and withdrawal all these things happens using BUID code. This software is installed at different branches of bank and then interconnected by means of communication lines like telephones, satellite, internet etc. It allows the user (customers) to operate accounts from any branch. This new concept of BUID has changed the way of banks are working and defines a core banking system as a back-end system that processes daily banking transactions, and posts updates to accounts and other financial records. All these facilities have made available to customers using the concept of Data Warehouse where it is a repository of subjectively selected and adapted operational data, which can successfully answer any ad-hoc, complex, statistical or analytical queries.

It is situated at the centre of a decision support system of an organization and contains integrated historical data, both summarized and detailed information. Here, we have included the bank unique identification code of customer to enhance the current Core financial System using architectural model and the core system has radically changed the way in which financial system functions. The greatest advantage of having a Core Bank System is that new features and functionalities can be easily added to the proposed system. Using BUID card of proposed system, the customers can manages his financial

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needs and transactions. The government authorities like Income Tax department, Financial Industry Regulatory Authority, Financial Services Authority, Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Forward Markets Commission (India) (FMC), Insurance Regulatory and Development Authority (IRDA), etc can easily centralized managed and overall control on all financial system through maintaining data warehouse of either individual or a group[1].

Electronic funds transfer between banks, online trading in the stock markets etc. can be done using BUID, which were unheard in present era of Core Banking System. Any financial organization who wants to interact with customers and share information within the organization from top to bottom can manage through data warehouse.

II. PRESENT CORE FINANCIAL SYSTEM

Financial sector in general and banking industry in particular have under gone transformation due to induction of Information Technology (IT). Financial systems have been in the fore front in use of technology. Core banking solutions is new jargon frequently used in banking circles. The advancement in technology, especially Internet and information technology has led to new ways of doing business in banking. These technologies have cut down time, working simultaneously on different issues and increasing efficiency. The platform where communication technology and information technology are merged to suit core needs of banking is known as core banking solutions. Here, computer software is developed to perform core operations of banking like recording of transactions, passbook maintenance, and interest calculations on loans and deposits, customer records, balance of payments and withdrawal. This software is installed at different branches of bank and then interconnected by means of communication lines like telephones, satellite, internet etc and stored huge volume of data repository in data warehouse. The advantage, a customer can operate on his account from any branch of the bank and if the bank owns Internet Banking or ATM facilities, then the customer can operate on his account from virtually anywhere. It allows the user (customers) to operate accounts from any branch if it has installed core banking solutions.

Core banking has emerged as the most used technology platform amongst banks and in building their technology infrastructure, banks have made huge investments. While this has contributed to growth of business, the return on investment is yet to be realized. As core banking technology is versatile, banks need to move up in the technology value chain and offer value-added services. While development of alternative channels, banks need to guard against de-personalization of service and ensure that they provide consistent banking experience to customers irrespective of the channel used. Though technology would help in building large data repository which could be used for cross-selling purposes, banking continues to remain essentially a service business where customers prefer to feel the personal touch.

The core banking system included Enterprise Customer Information provides a comprehensive solution to leverage customer information and create differentiated customer experience through the Enterprise Customer Information File (CIF). It empowers banks to manage the various life-cycle stages in their relationship with the customer. Comprehensive segmentation information, including demographics, psychographics, financials and product preferences, is captured and presented through a unified view. This view presents information on products and services availed within the core banking solution and across multiple back-end systems.

Implementation of the Core Banking solutions paves the way for Introduction of the electronic funds transfer mechanism in a secure way. Increased regulatory requirements have put pressure on banks. To sustain growth under the circumstances with continued regulatory requirements, it is essential for banks to have the right Core Banking System in place.

The present core banking system doesn't provide the bank universal unique identification code and cannot identify the customer transaction of different accounts at one place. The current system cannot investigate turnover of money from different account of same customer in self system [2].

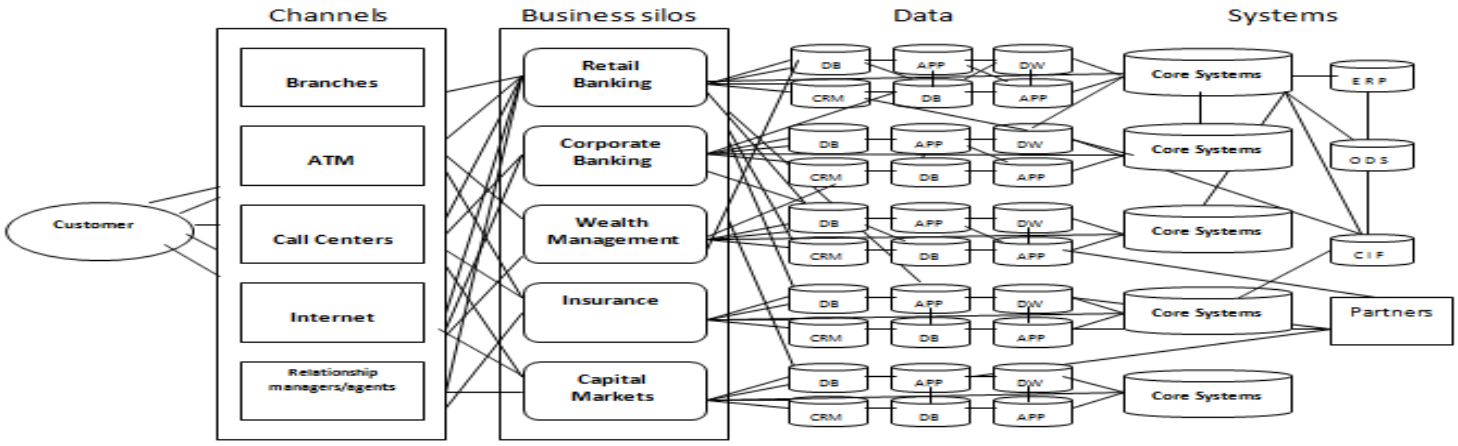

Figure: 1 Current Core Banking System (2)

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III. PROPOSED CORE FINANCIAL SYSTEM

The proposed BUID concept will be evolved over a period and grown exponentially encompassing an entire gamut of products and transactions under a wide umbrella in financial sector. Core Banking Process for a bank is thus a generic term for the complete administration of transactions for the bank through a central database using BUID code. All such activities undertaken by a bank using the above concept of BUID is included in proposed core financial system.

To make the transparency in customer processes, channels, customer information and management tools are integrated and administered through a central database of the bank with branches using BUID code and It also supports configuration of features, structure, commission, redemptions, relationship pricing, customer communication and a wide range of related properties and entities for structured products, distribution of insurance products and distribution of mutual funds. The BUID core system is tightly integrated with the banking and CRM and transaction processing. It also proposed a powerful range of offerings for corporate banking.

The present core system is account centric but proposed core financial system is customer's transaction system. The present core banking system doesn't provide the bank universal unique identification code and cannot identify the customer transaction of different accounts at one place. But the propose system will be overcome the above drawback. The system will be investigated turnover of money from different account of same customer in self system using BUID. BUID code can easily blend with present system, so that the present system can be easily changed into new one.

The concept of BUID will help to maintain and monitor the complete transactions of a customer accounts (individual/group/society). The BUID will maintain transparence in account opening system and its transactions. The government can monitor and can easily make decisions regarding financial crises. The Income Tax department need not worry to maintain and control individual details and transactions of customer accounts for Income Tax purpose. The BUID card will be better alternative than the PAN card, since the BUID card maintains biometric detail and his income details. Under this model, all financial sectors, including Government, Private, and Public will work under one roof. The Financial system can easily detect the defaulter and can take suitable action. As we maintaining Data Warehouse, The Online transaction processing (OLTP) and Online Analytical Processing (OLAP) can be used for efficient decision making process [3].

IV. ROLE OF BUID IN 7-TIER ARCHITECTURE

The BUID will generate by strictly following 7-tier architecture model. The model has seven layers; these are customer, registration counter, verification and legal, compliances, fulfillment, data mart and data warehouse, defined in well manner. The customer will get BUID implicitly following 7-tier architecture. The customer is opening his account for first time in his life should submit the biometric details and then he/she will receive BUID code, BAN, Cards, Books and etc. and if he/she is already having BUID code then only BAN, Card and books will be received using 7-tier architecture [4].

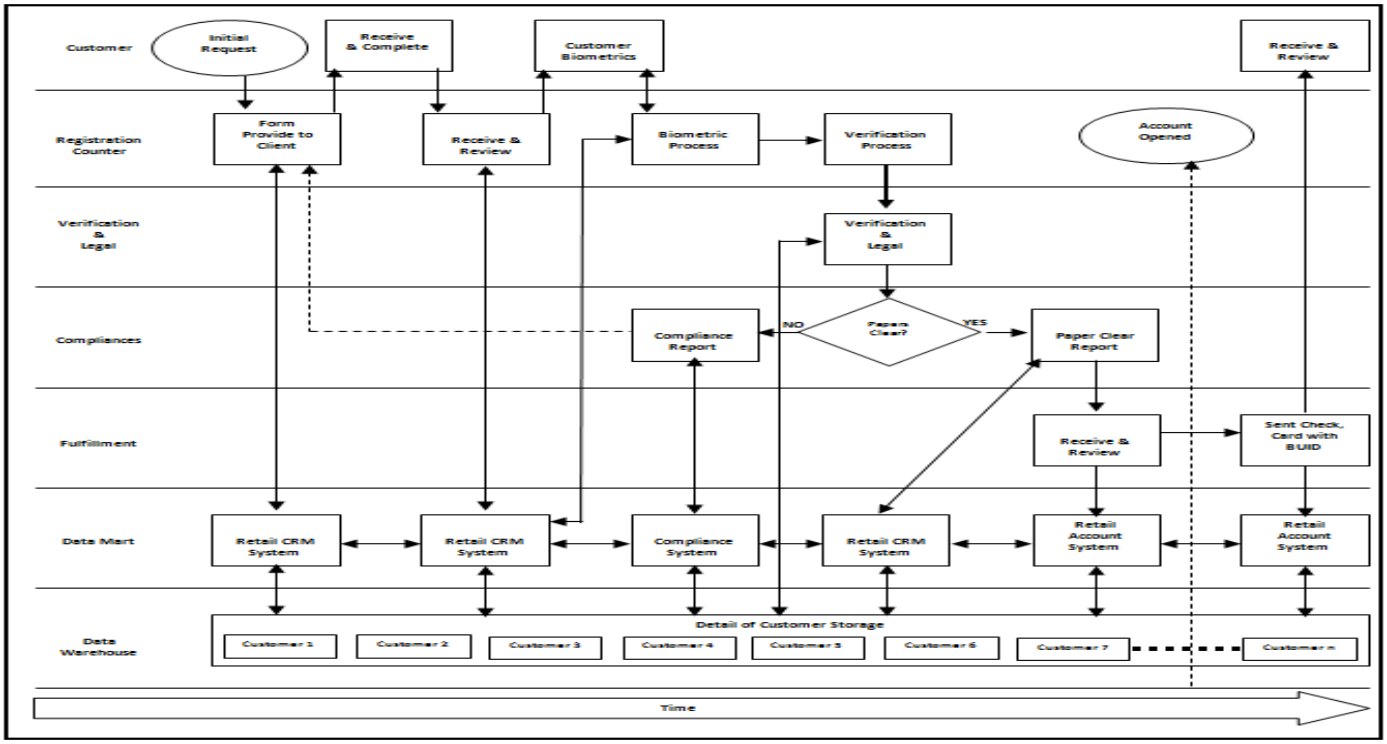

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Figure: 2.7 Tier Architectural Model

V. ADVANTAGES OF BUID USING 7-TIER ARCHITECTURE MODEL

Following are the advantages of BUID and 7-tier architecture model –

A. New model and BUID code can easily blend with present system, so that the present system can be easily changed into new one.
B. The concept of BUID will help to maintain and monitor the complete transactions of a customer accounts (individual/group/society).
C. The 7 –tier architecture will maintain transparence in account opening system and its transactions.
D. The government can monitor and can easily make decisions regarding financial crises.
E. The Income Tax department need not worry to maintain and control individual details and transactions of customer accounts for Income Tax purpose.
F. The BUID card will be better alternative than the PAN card, since the BUID card maintains biometric detail and his income details.
G. Under this model, all financial sectors, including Government, Private, and Public will work under one roof.
H. The Financial system can easily detect the defaulter and can take suitable action.
I. As we maintaining Data Warehouse, The Online transaction processing (OLTP) and Online Analytical Processing (OLAP) can be used for efficient decision making process.

As such, there are many advantages after implementing the 7-tier architecture model. Here we have explored only architecture for opening an account number. In our detailed study there are many aspects regarding security, transactions, implementation and software, which will highlight many benefits about the complete system [5].

VI. CONCLUSION

The paper is focused on BUID code generated by 7-tier architectural model. BUID has proposed core financial system by offering powerful way to work under a roof. The BUID will be tightly integrated with the banking, CRM and transaction processing etc. of overall core financial system. It will be help Core banking system to monitor and manage the customers opened number of accounts in assorted banks under one roof. The BUID can be easily unified in current financial core system. The 7-tier architectural model will help in decision making process by using OLAP and OLTP tools. The main advantage BUID can easily blend with current finance system using the 7-tier architecture model. The BUID has become a robust to perform a role to enhance the financial core system by using 7-tier architectural model.

VII. REFERENCES

[1] Finacus Solution Pvt. Ltd. Finacus powered by innovation. “FINcore core banking system”. Online Available: http://www.finacus.co.in/fincore.html

[2] Scott Simmons, “Modernizing banking core systems” online available: http://www.ibm.com/developerworks/websphere/techjournal/0809_col_simmons/0809_col_simmons.html

[3] C.S.R. Prabhu, “Data warehousing concepts, Techniques, Product & Application”, Third Edition, April 2011, PHI publication pp. 8-28.

[4] IBM Global Business Services. “IBM Institute for business value”. Online available: http://www-05.ibm.com/de/financialservices/pdf/ibv_soa_banking.pdf

[5] M/S S. Sathnanakrishanan, 2005. Information System for Banks, 2005, M/S/, Taxman publication, Pvt. Ltd pp. 20-90.

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