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Retail Bank Loan Application

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Abstract
The application offers broad and generic functionality that can handle all types of receivables across a wide variety of business areas such as banking and financial services, utilities services (power or telecom, for example) and health care services. Decision-makers and Managers in these businesses face several challenges in managing receivables :Reducing bad debt write-off and loss provisions by defining sophisticated strategies and work flow processes that can be continuously improved to increase collections and recovery rates ;Having a complete understanding about the overall relationship of a Customer with the organisation, in a single snapshot, even if the Customer is exposed to multiple products ;Differentiating follow-ups with Customers of different profiles and at different levels of delinquencies ranging from Customers with temporary difficulties to those who require legal action to realise the outstanding amounts from them ;Fostering collaboration within the collections units by exchanging advice, referring "difficult" Cases to others or escalating them to superiors ;Communicating with the Customers using diverse media such as conventional letters and faxes as well as modern tools such as e-mail and SMS (Short Messaging Service);Providing quick access to complete and up-to-date information about the Customers to the collection units ;Managing the Collectors and the collection units by optimal allocation of Cases, monitoring their productivity, and thereby reducing personnel costs; and Extending the collections cycle to include legal and repossession activities for achieving complete realisation of receivables .The application addresses all of these requirements for managing receivables by providing features to adopt a proactive approach to collections and recovery.

Keywords
Collectors,Customers,Supervisors.

I. Introduction

Managing receivables is one of the key activities of any business organisation. Following up debtors regularly, and closely monitoring the collection activities are essential for minimising bad debts. Irrespective of the type of receivables, debtors need to be reminded of their dues and followed up periodically, to ensure payments on time. Long-standing debts end up in legal disputes, which may take anumber of years to be settled. Moreover, by the time of settlement, the value realised from legal disputes or auctions is usually much less than the actual outstanding amount. In addition, the costs of conducting legal cases are significant. Therefore, businesses need to aim at preventing potential delinquents from becoming actual delinquents .Some of the key issues in managing receivables include :Adopting different strategies for follow up and collection for different types of receivables.Managing debtors or collection units spread across different geographical locations .Managing a large number of debtors or Customers. Adopting a cost-conscious approach to monitor and minimise the cost of collecting receivables; and Modifying the collection strategy in a dynamic and continuous manner to suit growing business requirements .Performing these tasks in an effective and timely manner is critical for increasing collections. But these tasks can be time-consuming and labour-intensive if done manually or using disparate legacy systems .Following up with debtors, monitoring the collections and tracking the recovery process not only require a proactive approach but also a single, intelligent system to assist the collection units to work efficiently. The Collect application, which is a part of the Intellect Suite software, is a comprehensive collections and recovery solution for managing any type of receivables such as loan instalments, credit card payments, and overdrawing on current accunts. The Collect application automates tasks across all the phases of receivables management, from sending soft-alerts that remind debtors about the impending due date, to prioritising day-to-day follow-up work lists for the Collectors, to escalating difficult Cases from Collectors to their Supervisors. In addition, the Collect application enables the collection units to record the complete details of follow up and document them. his is useful in meeting any statutory requirements as well as maintaining the history of Cases, for reference. As a result, the Collectors will be able to take quick, and yet, informed decisions, and schedule the follow-up events.

A. Functional Overview

The Collect application provides functionalities to handle all types of receivables and perform all the tasks in the entire receivables management cycle. It also provides a unified view of the delinquency exposure at the entire asset portfolio level and an understanding of the overall relationship of the Customer with your organization , to improvise your collection approach .Everyday, the various product processors (such as Loans, Credit Cards and Advance accounts) feed delinquency details and repayment information into the Collect application, in batch mode. The Collect application carries out pre-processing of the information and prepares the collections database for the day's online work to be performed by the Collectors, including the following: Organising workflow for account assignment, work queue management, and delinquent account control; Providing an automated environment for contact management of delinquent Customers; Legal tracking, if legal action had been initiated; Repossession Tracking; Managing the Collections department and tracking the Collectors' productivity and efficiency; Creating reminders or letters to delinquent Customers; Providing feedback to the centralised database of credit monitoring to mark relevant Customers as "high-risk Customers" to prevent further increase of the risk; and Providing MIS reports such as productivity reports and incentive calculation reports.

B. Overview of the Collection

Process Credit Officer: Lender's Credit Officer periodically reviews and updates the credit limit of a Customer based on various factors

such as value of collateral, repayment capability of Customer (that is, the ability of the Customer to generate income to fulfil its timely debt repayment obligations) and past payment history. Risk Manager: Lender's Risk Manager proactively reviews outstanding debt against the creditworthiness of the Customer. This way, the Risk Manager ensures that potential nonperforming credits are identified sufficiently in advance, so that necessary action can be initiated. Collection Manager: The Collection Manager formulates the strategy for collection, based on portfolio and other factors. Collection Unit Supervisor: The Supervisor assigns the Cases to the Collectors and monitors distribution of workload among the Collectors. The Supervisor also acts as an advisor to the Collectors to help them handle complex Cases. Collector: The Collector interacts with the Customers through various communication channels such as telephone, letter, e-mail or SMS and gets the Customers' commitment towards payment. If the Collector is not able to contact the Customer over phone, the Collector undertakes a field visit. External Collection Agency: Third party service provider to whom organisations outsource the Collectors' tasks or field activities.

II. System Analysis

A. Existing System

A System used to separate the customers based on transaction process .Services offered include savings and transactional accounts, mortgages, personal loans, debit cards, and credit cards.

B. Proposed System

The Collect application automates tasks across all the phases of receivables management, from sending soft-alerts that remind debtors about the impending due date, to prioritising day-to-day follow-up worklists for the Collectors, to escalating difficult Cases from Collectors to their Supervisors .In addition, the Collect application enables the collection units to record the complete details of follow up and document them.

III Requirement Specification

A. Introduction

The requirements specification is a technical specification of requirements for the software products. It is the first step in the requirements analysis process it lists the requirements of a particular software system including functional, performance and security requirements. The requirements also provide usage scenarios from a user, an operational and an administrative perspective. The purpose of software requirements specification is to provide a detailed overview of the software project, its parameters and goals. This describes the project target audience and its user interface, hardware and software requirements. It defines how the client, team and audience see the project and its functionality.

B. Hardware and Software Specification

1. Hardware Requirements

- OS - Windows (2000,XP,7)
- Memory - 256 MB RAM or above.
- Internet Explorer 6.X + (128 bit SSL)
- Hard Disk: 72 x 6 GB
- Processor: Intel Xeon Dual Core 2.50 GHZ
- NIC: 100Mbps
- Web server/Application server: WAS6.1.x

2. Database

Oracle RDBMS (version 10G) or above shall be the RDBMS residing on the Server and form the database component.

IV. System Design

A. Architecture Diagram

It gives the basic architecture of the developing project.

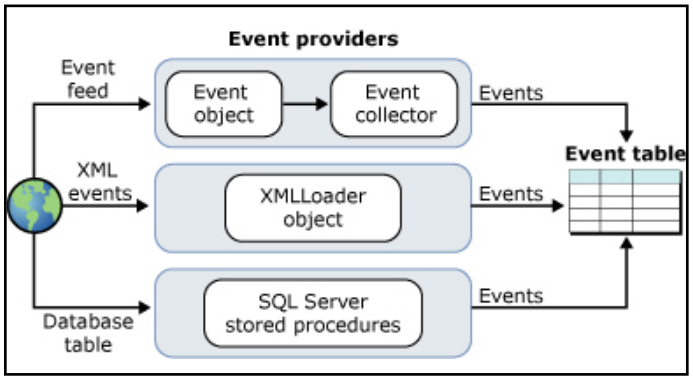

Fig. 1

V. System Implementation

A. Module Explanation

1. Request and Response

Request-response or request-reply is used to communicate to each other. When using request-response, HTTP Client sends a request for some data and HTTP Server responds to the request. Usually there is a series of such interchanges until the complete message is sent . The getQuote() request message is sent from the Web service client to the Web service .The ReplyTo header contains a Make Connection anonymous URI that specifies the UUID for the MC Initiator. The MC Receiver closes the connection by sending back an empty response (HTTP 202) to the MC Initiator. Upon timer expiration, the MC Initiator sends a MakeConnection message to the MC Receiver with the same MakeConnection anonymous URI information in its message. As the MC Receiver has not completed process the getQuote() operation, no response is available to send back to the MC Initiator. As a result, the MC Receiver closes the connection by sending back another empty response (HTTP 202) indicating that no responses are available at this time. Upon timer expiration, the MC Initiator sends a MakeConnection message to the MC Receiver with the same MakeConnection anonymous URI information in its message. Upon receipt of the MakeConnection message, the MC Receiver retrieves the stored response message and sends it as a response to the received Make Connection message.

2. Authentication

When client makes SOAP requests to the server must implement the client portion of one of the supported authentication protocols. The authentication and security for consuming and providing Web services either at HTTP transport level or at SOAP message level. The authentication can be done by standard HTTP authentication mechanisms, such as HTTP standard authentication with user

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ID and password, and standard WS mechanisms to allow authentication at the higher SOAP message level. Authentication at SOAP message level is suited to the specific authentication requirements for WS access and allows you to use strong SOAP message authentication mechanisms, such as XML signatures, for incoming and outgoing WS connections.

3. Output Generation

The final process is output generation; the output will be displayed in web site for the collector and customer .The supervisor also able to view the output of collectors and reports of the collector process.

VI. Concluison

In this proposed system the Collect application is loaded with all the functionalities a Bank / financial institution would require, to ensure that their lending portfolio remains profitable by virtue of effective and proactive follow up. Collect application is a cost-effective, quick payback efficient solution to the most difficult collections challenges. The unique collections solution has a comprehensive set of tools to effectively control the rising tide of delinquencies. This would dramatically enhance an institution's effectiveness in collecting and recovering money. The customer based collection process, helps the financial institutions improve competitive position, customer relationship and therefore customer loyalty. Collect application easily scales from thousands of cases to millions of collection case by virtue of its being powered by Java and the architecture being Web based. The n-tier architecture uses modern relational database design and a user-friendly graphical user interface (GUI).

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