

customer
relationship
management



retail
banking



consumer
finance

trade finance

export
refinance

corporate
finance

core

banking

treasury



alternate
delivery
channels

SIDAT HYDER

TABLE OF CONTENTS

1. Introduction & Background	1
1.1 Features.....	1
2 Sidat Hyder – Banking	3
2.1 Global Interfaces.....	3
2.1.1 Alternate Delivery Channels.....	3
2.1.2 Security and Transaction Routing.....	3
2.1.3 Transaction Audit Layer.....	4
2.1.4 Product Configuration.....	4
2.1.5 Customer Management.....	4
2.1.6 Customer Profile.....	6
2.2 Core Banking Functionality	7
2.2.1 Retail Banking	7
2.2.2 Credit Finance	13
2.2.3 Trade Finance	18
2.2.4 Treasury	22
2.2.5 Financial Management.....	26
2.2.6 SWIFT.....	26

1. Introduction & Background

SIDAT HYDER - BANKING is a suite of modules catering to the banking, accounting and reporting requirements of any type and size of banking enterprise. With an easy-to-use and intuitive Windows-based interface, the system architecture is based on state-of-the-art web technology architecture and has been developed to work in an integrated as well as an independent environment.

Sidat Hyder – Banking, in its present state is a result of many years of effort put into the product by our business consulting & software development experts and feedback from our valued customers. Over the years the system has evolved in size and functionality keeping in view the wish list of our customers and also the emerging technology trends.

Focused to serve as the technology partner for our customers, we maintain dedicated development and support teams to deliver powerful functionality for current needs, while providing solid platform for future ones. Our business solutions are there to grow with your business needs.

1.1 Features

The system has the following features:

- **Customer Centric**

Captures and maintains all relevant customer information and provides a detailed profile of the customer's relationship with the bank and of the relationships between customers.

It is a state-of-the-art customer-centric system that provides a single view of the bank's customer regardless of the services that are obtained from the bank.

The customer-centric approach also supports relationship with customer along

with analysis of account, customer worth, profitability, credit risk and marketing.

- **Parameterization**

The system is highly parameterized and uses a product definition concept. The parameterization provides more consistency, reliability and informality. All entities throughout the system like currencies, branches, locations, departments etc., are parameter driven which provide ease & comfort to its users.

- **Global Product Warehousing**

The system provides a global product definition and configuration, which supports basic elements of data, rules, rates, common features, validation parameters, calculation methods and procedures.

Its high-level product configuration offers - a product based architecture, which enables the bank to design new products in a very short time without making any changes in the program and source code.

- **Data Integrity**

In order to reduce data entry errors and ensure data integrity, data entered by the users is validated by the system against a set of parameters or default values, which are set up at the time of system installation or configuration. The suite is a set of integrated modules and therefore provides a single point for data entry thereby preventing duplication of data between different modules of the system.

- **Multi Currency**

The system deals with multiple currencies, and maintains exchange rates with respect to different foreign currencies on a daily basis. The system offers all transactions in the source currency; there is no manual-conversion required for a base currency. Of course, reports are available and can be consolidated on-the-fly to any currency as required.

- **Multi-Branch**

The system is designed around a multi-branch environment, with the facility to

consolidate data at any level like region, Head Office etc.

- **Supports Centralized and Decentralized Environment**

The system supports start-of-the-art web-based architecture and supports both centralized as well as decentralized environment. In case of decentralized environment, branches will be equipped with local servers. In case of a centralized architecture, the central server will be required for setting up a centralized database.

- **Alternate Delivery Channel**

The system provides an interface to multiple delivery channels like Internet Banking, 7 X 24 ATM, Tele-banking, Mobile Banking and Point of Sale terminals, which allows the bank to reach out to the new customers and segments. Real-time update of all Customer and Accounts data is also a built-in activity of the system.

- **Audit Trail**

The system maintains an audit trail for each transaction being created or updated. For this purpose the system records transaction reference number, user-id, date and time as part of each transaction.

- **Accounting Interface**

The system provides an interface – defining standard for debit/ credit entries (vouchers) against each type of transaction. The system shifts generated vouchers automatically to their respective General Ledger Accounts.

- **Interface with Microsoft Office**

The system interfaces with Microsoft Words and Excel. In case of producing both MIS and Financial Statement, the system is using an Excel interface. In case of letter generation, the system is using a Word Interface.

2 Sidat Hyder - Banking

Sidat Hyder - Banking consists of online real-time transaction processing application which supports both back-office as well as front-office operations. The system supports a variety of banking products like deposit account, term deposit, local & foreign payments, consumer finance, trade finance, short-term financing, corporate lending and treasury, includes both Forex and money market.

The system provides a common customer and product definition which ensure seamless integration of customer activities. The solution includes the following:

2.1 Global Interfaces

- Alternate Delivery Channel
- Security & Transaction Routing
- Workflow¹
- Transaction Audit Layer
- Customer Relationship Management
- Core Banking Functionality
 - Retail
 - Deposits
 - Payments
 - Lending
 - Consumer
 - Corporate
 - Export Re-finance
 - Trade
 - Import
 - Export
 - Treasury
 - FOREX
 - Money Market
 - Financial Management
 - General Ledger
 - Receivable / Payable
 - Reconciliation
- Reporting and Support Processes
 - Internal Management (MIS)
 - Statutory

2.1.1 Alternate Delivery Channels

With technological advancements, it has now become a hygiene requirement to enable customers to avail the organization's services through various means and mediums. ADC Module provides the organization with the most effective and efficient method of organizing core business functions across different channels like ATM, POS, IVR etc. ADC will provide:

- Unique profile for each customer
- Provision for linking multiple accounts to a single profile
- Flexible parameters for maintaining comprehensive profile information
- Completely customizable profile setups including personal profile, associated channel profile, address profile, linked accounts profile, general profile, services consumer profile etc.

2.1.2 Security and Transaction Routing

Security management is the main key to enter into any of the module(s) of the banking solution for which a user has access rights. The basic purpose of this layer is to record group and user profile(s) along with the parameters like identification details, information and facilities available, the dates and times at which the system may be accessed and other information required for security management.

The system also provides real-time transaction management in a way that the users can easily and quickly access transactional records. The system has built-in features for transaction routing and tracking of other levels of users. Provisions to set up authority levels with authority groups in terms of the authority limits, which will be controlled through parameters, are available. The user authorization level, with regard to the transaction approval can also be configured through this module, for example, if the organization requires that any individual customer transaction exceeding Rs. 200,000 must be validated and authorized at

¹ This module is covered through Sidat Hyder - Workflow system.

multiple levels, this can be performed by defining user levels and the transaction amounts requiring approval from multiple authorities.

- Profit rates for accrual calculation
- Transaction definition
- Cash management
- Overdraft

2.1.3 Transaction Audit Layer

Audit Trail or Activities Log is used to track the activities performed by different users on the system as operations. During each activity, the system maintains a record in the log (Audit Trail) with the user identification, activity, date / time, network identification (like IP address) and other details as setup in the system. The system takes care of all the events and their logging, online monitoring and later analysis. The system provides different types of Audit Trail Logs based on the selection criteria, such as Business Activity Audit Trail, Module Attributes Audit Trail, User Login Log, Activity Audit Log and Column Audit Log.

2.1.4 Product Configuration

This module assists the user to configure the product by defining rules, common features, validation parameters and the calculation methods / procedures. The diversified & efficient product configuration module

The screenshot shows a software interface with two main sections. The top section is titled 'Customer Information' and contains a table with columns: 'Customer', 'Name', 'Address', 'Phone', 'E-mail', 'Customer Number', 'Gender', and 'City'. Below this is a section titled 'Customer's Products' which contains a table with columns: 'Product', 'Description', 'Product Code', 'Category', 'Status', 'Interest', 'Rate', 'Interest Rate', and 'Number'. The table lists various products such as 'Savings', 'Current', and 'Overdraft' with their respective details.

minimizes the impact on the system when a new product is launched, thereby not requiring modification of the system-code and consequential heavy testing. In addition to that, setup of the existing products can also be modified whenever required with the immediate & instantaneous effect

During product configuration, the parameters requiring setup are:

- Accounting rules for debiting and crediting a general ledger account.

2.1.5 Customer Management

Sidat Hyder - Banking provides a comprehensive customer relationship management module fully integrated with other banking modules. It provides a platform where customer transactions are integrated and consolidated in a way so as to present information for bank management to closely monitor customer performance and take timely decisions.

The customer management system provides a strong relationship management tool which portrays a complete picture of the customer portfolio at a common point. This information provides a view to assist the banker's target customers and sell new products and services.

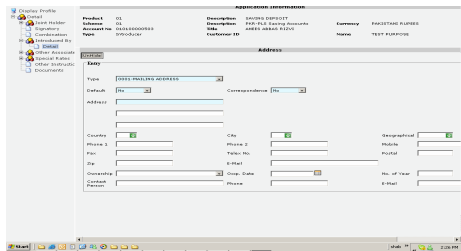
This tool also assists customer services functions to quickly identify the customers and respond instantaneously to queries. The module caters to all types of customers like individuals, corporate, institutions, projects and communities. It functions as a hub for all customer related activities, such as relevant demand and fixed accounts, payments operations, import and export documents, credit management activities etc. This enables the bank not only to offer a wide range of products to its customers but at the same time monitor risk and profitability.

2.1.6 Customer Profile

The system allows dynamic definition of information which will constitute the customer profile. Provision exists for entering multiple addresses of clients like residence, registered office, factory etc. To identify customers with reference to regulatory body requirements, multiple identifiers are available like national identity card number, national tax number, sales tax number, etc.. Facilities exist to capture relevant dates for events such as birth, joining employment, retirement, registration, commencement of production, etc. A number of parameters also exist to allow categorization of customers. These include region, business category, industrial sector, geographical location, operating status, designation, occupation, religion etc.

Multiple Addresses

Multiple addresses may be assigned to each customer like permanent address, correspondence address, etc.



Customer Relationship/ Affiliation

The system has a feature to capture particulars of customer relationships and affiliation with other customer who may or may not have any dealing with the bank, in order to ascertain risk and profitability. It also captures details of other banks and registered entities (e.g., companies) associated with the customer

Business Details

The module also facilitates recording of financial details of businesses including financial statements, associated bankers details and products / services being produced / offered by the business.

Signature and Picture

Signature specimens and photographs of customers are available together with a capability for verification from any transaction point in the system where customer-related activities are to be performed.

Facilities and Limit Availed

To monitor and control customer interaction with the bank with reference to products and facilities availed, relevant limits with expiry dates are defined. There is also a feature to record facilities availed from other banks.

Stock Management

As customers may also pledge or hypothecate stocks against loans, the system provides stock management facility. The system keeps record of all stocks and movement in balances.

Financial Inquiries

This provides an integrated view of all financial transactions between the client and the bank. This includes deposit and loan account data, earnings, charges, commission paid by the customer, interest, tax adjustments and zakat paid or deducted from the customer's account. Inquiry summarizes the total business transactions between the bank and customer and also

allows drilling down to comprehensive ledger activity and turnover details. A reporting mechanism is available to view financial details by product, by customer, by account, etc., at any time and for any period / length of time.

2.2 Core Banking Functionality

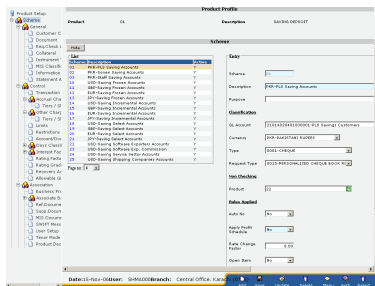
2.2.1 Retail Banking

The module is highly parameterized, which allows it to be easily configured and expanded to introduce new retail banking products and practices. As an example it can be easily configured to set up user defined Deposit Schemes both for demand as well as time liabilities. Each scheme can be set up for different currencies, with the required definition including accrual basis, accrual slabs, profit calculation and, in the case of time liabilities for different maturity periods. The module also provides user-defined parameters for integration with General Ledger, requiring a definition of debit/credit GL codes for each transaction at scheme level.

The module has been engineered with simplicity and purpose in mind, to assist the staff of an organization - delivering better-quality customer service.

Product Coverage

- Current Accounts
- Saving Accounts
- Foreign Currency Accounts
- Basic Banking Accounts
- Other Deposit / Investment Accounts
- Overdraft Accounts



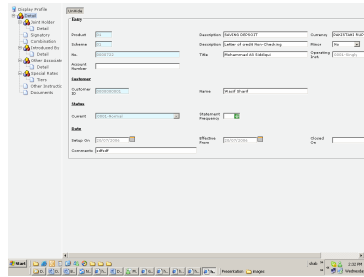
Accounts

The system supports the complete range of Savings, Current and Overdraft accounts requirements. It provides account-level parameterization, while maintaining centralized control. Accounts includes the following features:

- Searching facility for customers by using CNIC/NTN etc.
- Key profile capturing for customers (both for Individual/Non-Individual)
- Quick Account Opening
- Provision to associate CRM with Account
- Detail Account Profile including Joint Holder and Nominee details
- Signatories with authorized signature combinations
- Standing Orders for Payments and Fund Transfer
- Maintenance of Accounts
 - Change Account Profile
 - Lien Maintenance
 - Marking Deceased Account

- Closing of Account

The quick and fast account opening procedure facilitates customer in account opening and also supports in smooth banking operations.



Account Number Allotment

The account number allotment can be made in the system in a very sophisticated manner. The system allows a variety of combinations to define the account number generation method.

Letter of Thanks

The system generates letter of thanks for the customer as well as for introducer, after account opening procedure. This mechanism helps in verifying customer as well as introducer's information.

Standing Instructions

The system facilitates maintaining standing instructions for an account like:

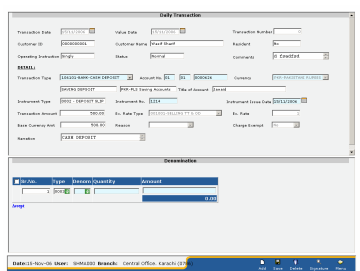
- Transaction(s) as per account holder's requirements (as per bank policy).
- Funds transfer from his/her account to another account (based on availability of funds) on a particular date/day in a given frequency (i.e. Weekly, Monthly etc.) or
- Any other service offered by the bank like payment of utility bills, taxes, duties etc. from his/her account (based on the availability of funds).

Signature Scanning

The system also provides facility to scan Signature Specimen Card(s) submitted along with AOF. The system also supports multiple signatures against each account.

Teller Operations

This sub-module supports the teller to perform transactions in a quicker manner due to the system's inbuilt integrity and automatic calculation support inherent by the strength of product parameterization. The module supports both on-line as well as off-line transactions entered manually or automatically calculated by the system.



The module supports the following transactions:

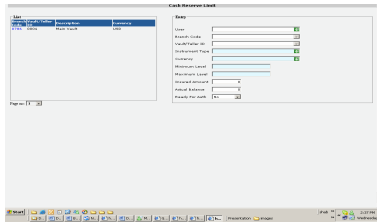
- Cash Deposits
- Withdrawals
- Transfers
- Other Transactions

Note: Transactions entered manually can be verified by up to three users depending upon the amount limits setup in the system for each user. This is an open option that can be applied when invoked by the user at the time of system configuration or at a later stage when configured by an authorized user.

The module also supports the denomination-wise capturing of each transaction at teller level. This activity helps managing denominations in the main-vault.

Vault Management

The system offers multi-teller vault management - to maintain cash both in local & foreign currencies and other bearer instruments such as prize bonds etc. Vault module also supports individual vault at teller level.



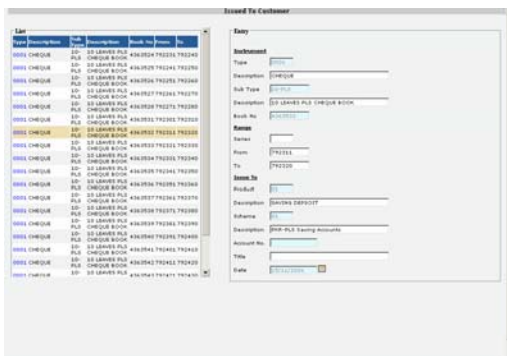
The vault management module caters following area of a vault:

- Maintains vault and teller wise Cash Reserve Limit
- Maintains cash movement currency wise and with in that denomination wise.
- Vault-to-Teller and Teller-to-Vault cash movement
- Cash Requisition from Feeding Branch / Bank / CENTRAL BANK
- Cash Deposit to Feeding Branch / Bank / CENTRAL BANK
- Performs Cash / Vault Daily Balancing
- Performs relative accounting entry in the General Ledger

Instrument Management

This module maintains an inventory of Cheque Books, Certificates and other valuable instruments through issue to receipt transactions. The maintenance of instrument inventory is catered for at three levels:

- Receipt at vaults from H.O.
- Issued to teller
- Issued to depositor by teller



The module is capable of freezing cheques or certificates reported by the customer(s) as Destroy or Lost. Similarly the module stops any future processing of transactions on instruments being marked as Destroy or Lost.

Daily Processing

The module performs the following processing as end of period process, which triggers the transactions based on the definition setup at the time of product configuration. The processes are:

- Accruals
- Profit payments to Accounts
- Standing Orders
- Revaluation of Foreign Currency Accounts
- Status Monitoring of Accounts (Inactive / Dormant / Unclaimed)
- Zakat Deduction (on every 1st of Ramadan)

Fixed Deposits

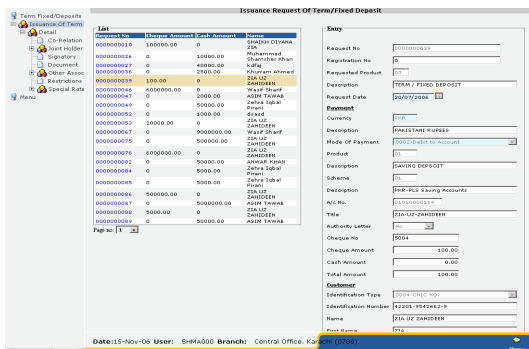
The system handles complete processing of fixed deposits like:

- Account Opening
- Redemption
- Renewal
- Profit/Interest Payments
- Pre-encashments
- Rollovers
- Maturity Processing

The institution will have the provision to define its own standard, rate and attributes for their fixed deposit products through product configuration module.

Product Coverage

- Term Deposits
- Call & Short Notice Deposits
- Foreign Currency Deposits



Issuance

The module provides a provision to the bank for issuing different type of Term and Call Deposits in either foreign or local currency for different denominations and tenures to their customers.

Profit Installment and Encashment

The module computes profit based on parameters set up by the user at product level and deducts charges like withholding tax and zakat. Users can configure a variety of profits by using the product module like:

- Profit Payment on Saving Accounts at any specified period.
- Monthly Profit Payment in the case of monthly certificate scheme.
- Profit payment for any specific range of period (i.e., Quarterly, Six Monthly, Yearly).
- Calculate profit on the rates prevailing at the time of issuance of certificate(s).
- Calculate profit on the slab changes from the issue date up till to-date or till encashment.
- To a given rate after a maturity period.

Options are available to distribute the net amount payable (Profit or encashment) to the depositor via any saving, current or a new term account.

Similarly, the maturity periods and slabs rates for each product are defined by the user and the system reacts accordingly. During profit installment payment or encashment, the module displays all the details comprehensively.

Daily Processing

The module performs the following processing as end-of-period process, which triggers the transactions based on the definition setup at the time of product configuration. The processes are:

- Accruals
- Profit payments through nominated accounts
- Auto-deduction of charges like withholding tax, Zakat, etc.

Clearing

The module supports both inward and outward clearing.

Outward Clearing (Special / Normal / Outstation)

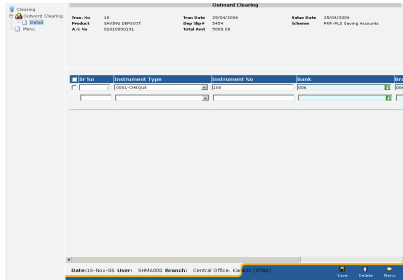
- Lodging of Local and Foreign Currency Cheques
- Recording of Realization and Un-Realization of Cheques

Inward Clearing

- On realization debiting customers account

Other Features

- Recording of returned cheques
- Auto Deduction of Service Charges



Lockers

This module handles the following activities of Lockers management:

- Allotment of Locker
- Locker Operations (Transaction Activity)
- Renewal of Locker
- Surrender of Locker

The system supports following activities in Locker module:

- Configuration Module
- Association with Customer Relationship Number
- On-line Signature Verification
- Auto Renewal of Locker
- Maintenance of Rental Diary (Financial History)
- Maintenance of Attendance Records
- Event based Accounting Entries

Remittance

The Remittance module provides the entire range of inward and outward local and foreign currency fund transfers and payments.

Product Coverage

- Pay Order (PO)
- Demand Draft (DD)
- Telegraphic Transfers (TT)
- Foreign Currency DD / TT

Issuance/ Encashment

At the time of issuance / encashment of instruments, the system calculates charges, commission etc. automatically and generates voucher entries, which are posted to the general ledger module on-line or off-line at the end of the day.

This module is also integrated with the retail-banking module in order to debit/credit the customer's account depending upon the nature of transaction.

Outward Bills for Collection (OBC)

- Lodging of Cheque(s)
- Realization / Un-Realization

Inward Bills for Collection (IBC)

- Lodging of Cheque(s)
- Realization / Un-Realization

Other Activities

- Provides Nostro accounts maintenance (dealing with foreign banks)
- Provides multi level of user authorization for creating general ledger transactions.
- Provides a facility to restrict any type of instrument in case of loss, so that automatic encashment of such instrument can be stopped.

2.2.2 Credit Finance

Credit Finance application is an integrated, real-time, multi-currency credit banking module that helps organizations in delivering competitive products and excellent service to its customers.

It supports consumer and corporate financing within a single platform. Flexible and easy-to-use, the application is designed to process even the most complex financial products and services quickly, simply and intuitively. It has been engineered with simplicity and purpose in mind, to assist the staff of an organization - delivering better-quality customer service.

The banks and financial institutions offer different types of products for corporate and individual clients. The designed structure of these products varies in terms of the processing, disbursements, collections as well as the charge structure.

The system also supports all types of credit finance products prevailing in the market by setting up product details in the product configuration module.

Product Configuration

This module assists the user in configuring the product. The benefits of the product configuration are manifold. The efficient product configuration module minimizes the impact on the system when a new product is launched as almost all products would be capable of being defined using the product configuration facility thereby not requiring the modification of the system code and consequential heavy testing. In addition to that, the setup of the existing products can also be modified whenever required with the effect on the system being instantaneous.

Product Coverage

- Consumer Financing
- Corporate Financing
- Guarantees

Application Processing

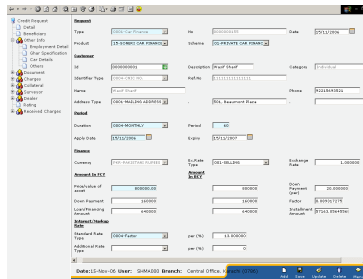
The credit application is basically a proposal prepared on demand for prospective customer(s), after having ascertained the specific requirement.

It comprises of the following activities, which basically are core activities for credit processing:

- Application Capturing
- Evaluation & Credit Scoring
- Decision Making

Each new customer process application with the bank is issued a unique potential customer ID. The system treats this ID as a key reference till the decision has been made. As the application is marked 'Approved', the system changes the potential customer ID into regular customer ID, which will be used whenever an existing customer wishes to apply for a new credit, to avoid duplication and re-entry in the system. The system also provides searching facilities of customer-based on customer Name, Identifier (NIC/Registration Number) and Date of Birth etc.

The application processing procedure facilitates customer in establishing a credit relationship with the bank and also supports in smooth administration operations.



Application Capturing

The system offers same credit application processes for new & existing customers however the system receives all the information of existing customers from the CRM module that provide ease to its users. The system also maintains customer's completed credit application form along with signature specimen card(s) and other required documents like NIC copy etc.

The application in the system is entered in two steps. In the first step, the customer information is entered if it is a new customer and then rest of the information is captured. The determination of a new or an existing customer is facilitated by customer search.

Once the customer information has been entered, the second step involves entering mandatory information of the application like Amount of finance, Commencement Date, Expiry date, Currency, Bank Details, etc. into the system.

Upon completion of the data entry for the application, the same is validated by the system. During validation, the system ensures that all mandatory information has been entered and generates terminal and warning messages where the information is found missing.

Other supplementary information associated with the application will be as follows:

- Documents Submitted
- Collateral / Security Offered
- Guarantors / References

Evaluation and Credit Scoring

Once a loan application origination takes place leading to customer's requirements, the second step in the loan cycle is the analysis of these requirements. The system displays a list of requirements checklist as per the relevant product type. It also evaluates the application for determining the eligibility of the customer. The eligibility screening is performed on the basis of the scoring model defined. The application is evaluated and score is assigned to each evaluation factor.

Decision

The decision process marks a credit application as Approved, Approved with Condition, Seek Clarification / Pending, Rejected etc.

Provisions are available in the system to enter comments of the committee members against a particular loan application.

Status Management

The user will be able to mark the status of a loan application at any point of time under the rules prescribed below:

"Applied" is when the loan application has been completed and entered in the system. From this option, users can only approve, reject or withdraw.

"Pending" means that the appropriate authority has not yet approved the loan. From this option, users can only approve or reject a loan.

"Approved" means that the loan has been approved by the appropriate authority as defined by the policies of the Bank. From this option, users can only disburse or withdraw a loan.

"Rejected" is when the bank has decided not to grant the applied loan. The user cannot take any further action from this state.

"Accepted" is when the customer has decided to accept the bank offer.

Credit Sanctioning

Once a loan application is passed through the approval process, the system allocates a unique loan number to that particular application. A customer against a single Customer ID, can avail number of loans or facilities from the bank. A unique loan number is maintained for each product / scheme the customer avails. This number is automatically generated by the system at the time of approving a loan or facility.

Disbursement Schedule

Based on the data entered in the system regarding the loan, the user generates a disbursement schedule for the customer. Different schedules can be designed, however, only one can be marked as active. Disbursement schedule will be automatically updated when payment has been made.

Repayment Schedule

Based on the data entered in the system regarding the loan, the user generates a repayment schedule for the customer. Different schedules can be generated for the principal and the interest

as well as for different period of the loan; however, only one will be marked as active. Repayment schedule will be automatically updated when repayment has been made.

No	Start Date	Principal F1C7	Int/F1C7	Other F1C7	Total Amount	Remaining	Priority
1	2014/01/01	10000.00	0.00	0.00	10000.00	9000.00	1
2	2014/02/01	9900.00	100.00	0.00	10000.00	8000.00	1
3	2014/03/01	9800.00	200.00	0.00	10000.00	7000.00	1
4	2014/04/01	9700.00	300.00	0.00	10000.00	6000.00	1
5	2014/05/01	9600.00	400.00	0.00	10000.00	5000.00	1
6	2014/06/01	9500.00	500.00	0.00	10000.00	4000.00	1
7	2014/07/01	9400.00	600.00	0.00	10000.00	3000.00	1
8	2014/08/01	9300.00	700.00	0.00	10000.00	2000.00	1
9	2014/09/01	9200.00	800.00	0.00	10000.00	1000.00	1
10	2014/10/01	9100.00	900.00	0.00	10000.00	0.00	1

Post-Dated Cheques Inventory

A provision is available in the system to enter post-dated cheque's information into the system. The system, based on the information entered, will generate a reminder for processing of the cheque.

Loan No	Dr No	Bank/Branch	Cheque No	Amount	Priority	Pay/AC No
1	1001	Bank of America	1001	10000.00	1	1001
2	1002	Bank of America	1002	10000.00	1	1002
3	1003	Bank of America	1003	10000.00	1	1003
4	1004	Bank of America	1004	10000.00	1	1004
5	1005	Bank of America	1005	10000.00	1	1005
6	1006	Bank of America	1006	10000.00	1	1006
7	1007	Bank of America	1007	10000.00	1	1007
8	1008	Bank of America	1008	10000.00	1	1008
9	1009	Bank of America	1009	10000.00	1	1009
10	1010	Bank of America	1010	10000.00	1	1010

Charges Definition

This includes defining service charges (interest/markup rates) available through product module and other charges assigned to a particular loan at particular event or on periodic intervals. It maintains details of charges, commission, and markup/interest calculations like from, to, days, rate applied, based on amount etc. It also keeps track of charges not recovered either fully or partially, waived or received.

Following are different *mechanisms* used for applying interest and other charges:

Flat

The rate is an actual number, for example 8% etc.

Floating

The rate is tied to a bank-defined index, hence, when the index or base rate changes, the loans tied to the rate will automatically switch to the new rate.

Base rate – the index rate alone will be used.

Base rate + / - spread – the index rate plus or minus a spread (or margin) may be used.

A percentage of base rate – or in some cases only a percentage of the base rate can be used.

Tiered

Different rates can be applied to specific disbursements (same or different amounts) of the same loan.

Disbursement

A loan is generally disbursed in one trench made to the customer; however, there are certain products in which the loan is disbursed in multiple or event-based payments. In addition, methods of disbursement may vary, depending on the customer's/ product specific requirements.

The amount of disbursement is normally based on the disbursement schedule agreed at the time of sanctioning i.e. on specific date or event-based, however, provision is available to disburse the loan on the application of customer at any date after sanction up to the time limit specified.

The system disburses the financing to the customer (whole or partial) and generates the schedule of the repayment of financing (if required). At this time, the system's highly efficient integration with both the front and the back – office will automatically create a disbursement voucher to record the financing payment made to the customer in the general ledger.

Accruals / Dues Management

The system caters to different aspects of dues monitoring i.e. daily accruals, generating reminders and bills on due dates.

Accruals on outstanding balances are calculated for the period of:

- Accrual starting date to the day before the value date of the next transaction.
- On the opening balance - from the value date of the current transaction to the value date of the day before the value date of the next transaction .
- On the new outstanding balance and so on.

Due to rapid changes in the market trends for charging interest/markup, rates are being revised time to time. Provision will be available in the system to pick the current changes in rates during daily accrual processing. In addition, the system also applies rate from back-date through revised accrual processing for such periods.

Accrual(s) will be generated on actual days, however, generating the financial impact will be dependent on the policy defined in the system.

Collection / Repayment

A loan is generally recovered according to a specified repayment schedule. In addition, methods of recovery may also vary, depending on the customer's/ product specific requirements.

The amount of recovery is normally based on the repayment schedule agreed at the time of sanction / disbursement, however, provision is available to collect / recover the loan on the application of customer at any date as a lump sum / balloon payment.

The system collects / recovers the financing made to the customer (whole or partial) at any date (before or after due date, with or without penalty). At this time, the system will automatically create a repayment voucher to record the financing recovered from the customer in the general ledger. The system caters collection of dues (installments) and their appropriate adjustments against outstanding bills (receivables).

Provision is also available in the system to adjust loans based on post-dated cheques in the inventory. The system, based on the information entered, will generate a reminder for processing cheque realization. The loan adjustment will be conditional to realization of cheques otherwise the installment will be marked as delayed.

Delinquency Management

According to the bank's policies and procedures, the major objective in delinquency tracking is to minimize the cost associated with collecting delinquent loans. Provision is available in the system to list all such loans that have been contractually overdue. Such loans should be considered delinquent and should be subject to immediate follow-up by the bank.

The system provides the user with the facility to track loans and mark their status. The user is required to define past due date conditions and the system will generate the actions required.

The classification of delinquent (infected) loans will normally be made according to the prudential regulations given by Central Bank. The system provides provision not only to the specified classification criteria as per Central Bank regulations but also specified by the bank according to its policy.

Maintenance

Different options/utilities are available in the system for loan account maintenance. The following set of activities fall under the maintenance of loan account options:

- Disbursement / Recovery Re-Scheduling
- Marking of Loans as Inactive / Doubtful / Un-recoverable
- Settlement of Unrecoverable Loans
- Retirement of Loans

2.2.3 Trade Finance

Trade Finance module assists the organization in delivering competitive products and excellent service to customers.

It supports trade finance document processing through flexible and easy-to-use interfaces, and has been designed to process even the most complex financial products and services quickly, simply and intuitively. The system has been engineered with simplicity and purpose in mind, to assist the staff of an organization - delivering better-quality customer service.

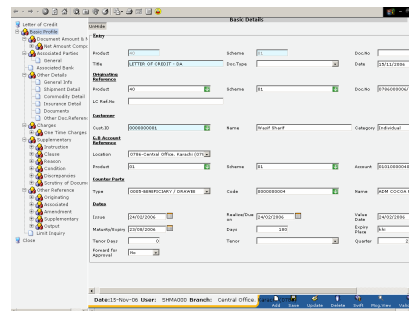
Banks and financial institutions offer different types of products for corporate and individual clients. The designed structure of these products varies in terms of the document processing, lodgment, realizations as well as the charge structure. The system supports all types of trade finance products prevailing in the market by setting up product details in the product configuration module.

Product Configuration

This module assists the user in configuring the product. The benefits of the product configuration are manifold. The efficient product configuration module minimizes the impact on the system when a new product is launched as almost all products would be capable of being defined using the product configuration facility thereby not requiring the modification of the system code and consequential heavy testing. In addition to that, the setup of the existing products can also be modified whenever required with the effect on the system being instantaneous.

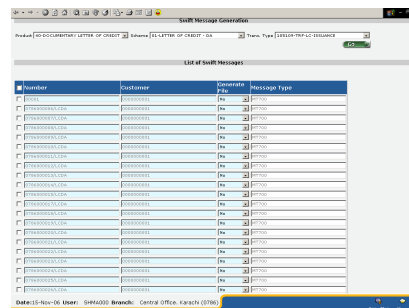
Product Coverage

- Documentary Credit & Collections
- Arrival & Acceptance of Document
- Payments, Realization & Financing
- Bills Discounting & Negotiation
- Letter of Credit Advising
- Transfer & Confirmation



* SWIFT Connectivity

Release swift message instantly after final approval, however, provision is available to generate draft message for verification purposes.



Associated Activities

- Amendments
- Advance Payment
- Foreign Exchange Booking
- Beneficiary Credit Report
- Guarantees

Central Bank Activities

- I-form/E-form Issuance
- Agent Commission Payment
- Proceed Realization Certificate
- Export Re-financing
- Bill of Entry

Document Processing

Document processing is basically a proposal prepared on demand for prospective customer(s), after having ascertained the specific requirements.

Document processing provides the following key features:

- Auto-generates identification reference for all transactions based on the frequency identified.
- Needs to be associated with the parent document referencing for liability reversal purpose.
- Counter party (Beneficiary/Drawer) should be selected from the parameterized profile, however, provision should be available for direct capturing.
- Allows provision for the payment of principal amount breakup in terms of percentage i.e. 25% sight – 75% usance.
- Cater to different payment terms like sight, usance, deferred, mixed and provide provision for allowing partial payment.

Document Capturing

The system offers document process for new & existing customers, however the system receives all the information of existing customers from the CRM module that provide ease to its users.

The application in the system is entered in two steps. In the first step, the customer information is entered if it is a new customer and then the rest of the information is captured. The determination of a new or an existing customer is facilitated by customer search.

Once the customer information has been entered, the second step involves entering the mandatory information of the application like Amount of finance, Commencement Date, Expiry date, Currency, Bank Details, etc. into the system.

Upon completion of the data entry for the application, the same is validated by the system. During validation, the system ensures that all mandatory information has been entered and generates terminal and warning messages where the information has been found missing.

The other supplementary information associated with the application will be as follows:

- Documents Submitted
- Shipment
- Insurance
- Invoice
- Commodity
- Discrepancies

Commission & Charges Calculation

The system maintains details of charges, commission, and markup/interest calculation like from-to days, rates applied based on amount etc. It calculates commission and other charges as per the period slabs specified. The system also keeps track of charges not recovered either fully or partially, waived or received.

The screenshot displays a financial software window titled 'Change'. It contains two main tables: 'Change Detail' and 'Transaction'.

Change Detail Table:

Dr	Adj/Active	Change	Description	Calculation	Value	Currency	Amount FCY	Rate Type	Exchange Rate
	Dr	30.0000	Commission on SF	0.000000	0.0000	USD	148,294.40	0.0000	1.120000
	Cr	30.0000	Interest	0.000000	0.0000	USD	160,769.00	0.0000	1.120000
	Cr	30.0000	Drawn Change	0.000000	0.0000	USD	0.00	0.0000	1.120000
	Dr	30.0000	Discount Charge	0.000000	0.0000	USD	0.00	0.0000	1.120000
	Cr	30.0000							

Transaction Table:

Transaction	Branch	Date	Dr	Cr	Description	Amount	Rate	Rate Type
05/18/2004	4	1.04	0.0000000000		Current Account Customers	148,294.40	0.0000	0.0000
05/18/2004	4	2.04	0.0000000000		Letter of Credit - 04 Customer Letter of Credit	160,769.00	0.0000	0.0000
05/18/2004	4	3.04	0.0000000000		Letter of Credit - 04 Banker Letter of Credit	0.00	0.0000	0.0000
05/18/2004	4	4.04	0.0000000000		PTT Fee - Commission and Banker's Fee	0.00	0.0000	0.0000
05/18/2004	4	5.04	0.0000000000		CUSTOMER RECEIVED OTHER	0.00	0.0000	0.0000
05/18/2004	4	6.04	0.0000000000		Interest on Commission and Banker's Fee	0.00	0.0000	0.0000
05/18/2004	3	1.04	0.0000000000		Current Account Customers	0.00	0.0000	0.0000

Amendments

The system actively caters to different types of financial and non-financial amendments including date of validity, extended shipment date, change in shipment terms, increase / decrease liability value, change in correspondent / reimbursing bank name, change in beneficiary / consignee's name.

Related Activities

Arrival, Acceptance & Payments

- Performs reversal of financial liability (if required) on document's acceptance and automatically updates parent document status at the time of approval.
- Calculate interest/markup from the effective (negotiation) date to the date of settlement at applicable rates.

Negotiation of Documents & Discounting

- Should allow more than one set at a time and allow revision of negotiation amount and facilitate discounting in local / foreign currency through specified bill discounted account.
- Facilitate and determine interest and commissions upfront or in arrears.

Document Advising

- Should maintain issuance of the bank's position when a document is confirmed by the bank.
- Calculate charges and generate accounting entries for the same and update limits (if applicable).

Re-imbusement Claims

- Should capture key information i.e. amount claimed, negotiating bank, paying bank, method of payment.
- Facilitate re-imbusement claim for authorization received from banks through straight processing of incoming and outgoing swift messages when acting as a re-imbusement bank.

Inward & Outward Collections

- Capable of handling inward / outward bills of collection (refers to bills accompanied by shipping guarantee) sent to drawee's bank for payment or acceptance.
- Provides facility for maintaining memorandum accounts for recording collections.
- Support mixed and multiple payments terms with a provision to input multiple due and payment dates in a bill.
- Facilitate claim commission and charges from customer or from beneficiary / advising bank.

Re-finance (Central Banks)

- Cater request from customers for disbursement of pre- and post- shipment finance facilities.

- Maintained separate rates of interest/markup for the loan allowed to customer and the re-finance obtained from central bank.
- Provision for generating accruals interest / markup to be received from customers or to be paid to central bank.
- Provision for the adjustment of loan from the payment of export bills.
- Maintain complete track of loans overdue against the re-finance already repaid to central bank.

Credit Financing

- Cater request from customers for financing against import documents.
- Maintained rates of interest/markup for the finance allowed to customer.
- Provision for generating accruals interest / markup to be received from customers.
- Marking of due dates for the repayment of finance and maintain complete track of loans overdoes.

Shipping Guarantees

- Calculate appropriate margin against the shipping guarantee and its adjustment from the margin held against the relevant document.
- Settlement of shipping guarantee upon lodgment of relevant document and release of margin (if any).

2.2.4 Treasury

The treasury module has been designed to provide best practice solutions for all requirements - regardless of the size and complexity of the treasury department. Its dynamic design and powerful parameterization makes it flexible enough.

The treasury module also assists in making quick decisions and keeps pace with latest business techniques through integration with a powerful General Ledger system, available on demand. The treasury module can also be plugged-in with any third party GL- software application.

Deals / Contracts Configuration...

Its comprehensive Deal/Contract configuration setup facilitates - defining variety of deals and contracts. System also supports Money Market operations including Securities Trading and FOREX dealings for e.g.

Money Market Deals

- Clean, Call Lending / Borrowing
- REPO & REVERSE REPO Deals (Repurchase Agreements)
- Outright Sale / Purchase of Government Securities including MTBs, PIBs & FIBs
- Certificate of Investment (COIs) and Letter of Placement (LOPs) along with Repayment Schedule

FOREX Deals / Contracts

- Ready Sale / Purchase of Foreign Exchange
- Forward Sale / Purchase of Foreign Exchange
- SWAPS / Arbitrage (3rd Currency) Transactions

The system also generates event-based and user defined accounting entries, automatically. On confirmation of a deal or contract system creates its accounting voucher and update General Ledger accordingly.

Functional Coverage

Money Market	<ul style="list-style-type: none"> ✓ Takings & Placements ✓ Repurchase Agreement ✓ Investments
Security Trading	<ul style="list-style-type: none"> ✓ Outright Deals ✓ Security Inventory ✓ Revaluation & Amortization
FOREX	<ul style="list-style-type: none"> ✓ Ready / Forward Contracts ✓ SWAP & Arbitrage ✓ Fund Transfers

Profile Management

Counter Party Profile and Limit

Treasury module offers - capturing vital information or profile of a counter party. The system also monitors counter party wise exposures that help to measure, analyze, and control risk throughout the business.

Broker Profile

System provides - to define and maintain important information or profile of a Broker in the system involved in deals/contracts.

Nostro Profile & Counter Party Relationship

The Treasury module also permits - defining and maintaining vital information/profile of Nostro Bank.

System facilitates - capturing party wise Nostro Relationship setup along with basic particulars like Currency, Account Number and GL Account Code etc. This setup also facilitates picking the default beneficiary and paying through banks at the time of FOREX dealings.

Front Office

Deals Capturing

The treasury module deals with the different types of Money Market and Foreign Exchange Contracts and allows capturing variety of deal or contracts.

Brokerage

The system offers defining Brokerage calculation configuration setup, this setup also facilitates – auto calculation of brokerage while capturing deals/contracts.

Repayment

System generates Repayment Schedule of Principal and markup/interest with or without redemption.

Middle Office

Confirmation of Deals

The treasury module offers multilevel authentications for a deal or contract. This confirmation or authentication provides reliability, consistency and authenticity to a deal or contract.

The system computes daily accrual of Markup / Interest for each deal, and also creates month-end Accrual Voucher. On confirmation – system generates accounting entry based on user defined accounting setup, automatically.

Back Office

Settlement of Deals

The treasury module provides facility of finalizing the settlement of deal at the time of maturity. In case of pre-mature deal system prompts and gives alert.

On settlement - - system generates accounting entry based on user defined accounting setup, automatically.

Securities Inventory

The treasury module also allows - maintaining different types of Govt. and other securities involved in deals. This includes security's issue date, maturity date, face value, purchase value, coupon rate, yield and other precious information.

An up-to-date position of the total investment in securities and status of each security can be obtained any time from the system.

The system maintains inventory of the securities based on deals, such as outright sale /purchase of security, Reverse REPO and REPO etc.

Revaluation

The system also performs revaluation (M2M) of government securities based on revaluation rates.

Amortization

The system generates amortization schedule of government securities into Microsoft Excel Sheet and preserves in the system as well which may be recalled at any time from the system.

Position Monitoring & Analysis

Treasury module empowers treasury department by providing comprehensive, well-designed and well-arranged reports along with up-to-the-minute information. Its wide range of reports

helps in planning for funds arrangement and placement, data analysis, profitability and market analysis.

List of Key Reports

- Deal Tickets
- Deal Confirmation Letters
- SGLA Letters
- Deal / Contract Registers
- Outstanding Maturities of Lending / Borrowing
- Statement of Investments in Securities
- Accrual Schedule
- Daily Blotter / Net Open position
- Brokerage Statement
- Revaluation / M2M Report
- Security Amortization Schedule
- Blotter
- Lending Borrowing Weighted Avg. Cost & Return
- Gap Profile

List of Inquiries

- Comprehensive Deals Inquiry
- Security Inventor Ledger
- Blotter position
- Revaluation
- Amortization
- Outstanding Deals

Salient Features	<ul style="list-style-type: none">• Fits any size of business• Easy to Use• Search Facility on entry screens• Multi-currency Setup• Integration with General Ledger• Event Based Accounting• Comprehensive Deal/Contract configuration• Auto Deal Number Generation• Full support of Front, Middle and Back Office• Repayment Schedule• Limits
-------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Monitoring <ul style="list-style-type: none"> • Brokerage Calculation • Accrual Calculation • Automatic Settlement of Deal • Online Monitoring
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2.2.5 Financial Management

The Financial Management module includes General Ledger, Receivable/Payable, Reconciliation etc. serves as the core for the entire suite, the module take cares of all the accounting requirement and effectively supports in the management analysis and decision making process. It is integrated with all the other modules of the suite. Accounting module offers the following features:

- Flexible and multi-level chart of account
- User define advice and voucher types
- Location wise accounting transactions
- Accounting transactions in multiple currencies along with base and reporting currency
- Subsidiary ledgers like Supplier Ledger, Employee Ledger etc.
- Maintaining multiple periodic balances such as weekly, fortnightly, monthly etc.
- Recording of open item for receivable and payable and also ability to knockoff payment / receipt against open items
- Recording of JVs and other adjustment entries
- Reconciliation of Bank and Inter-Branch transactions
- Generates financial statements through Excel Interface as per user-defined templates

2.2.6 SWIFT

SWIFT Interface Module provides a connection between the general banking system and SWIFT system. It simplifies the task of message creation and provides better features for defining parameters of the system. This system is developed by our experienced team which has covered each and every aspect for creating a hassle free and unruffled system. Some features of the system are:

- Full integration with banking system applications
- Fast and flexible message processing
- Modular design, configurable from entry-level interface to multi-application systems
- Creation and exchange of FIN messages between banking application and SWIFT terminal
- Allows for selecting the level of functionality that best suits the needs of various applications of Banking System

The document is provided for informational purposes only, and the information herein is subject to change without notice. Please report any errors herein to Sidat Hyder Morshed Associates.

Sidat Hyder Morshed Associates does not provide any warranties covering and specifically disclaims any liability in connection with this document.

All other company and product names mentioned are used for identification purposes only and may be trademarks of their respective owners.

SIDAT HYDER MORSHED ASSOCIATES

Management Consultants

DUBAI

P.O.Box - 506545, Dubai, UAE

Tel : (97-14) 2688581-82

Fax : (97-14) 2688583

ISLAMABAD

House No. 11, Street No. 1

Hill Side Road, Sector E-7

Islamabad 44000, Pakistan

Tel : (92-51) 265 4881-83

Fax : (92-51) 265 4884

KARACHI

6th Floor, Beaumont Plaza,

Beaumont Road

Karachi 75530, Pakistan

Tel : (92-21) 569 3521-30

Fax : (92-21) 568 5625

LAHORE

3rd. floor, 18 Commercial Zone

Liberty Market, Gulberg III

Lahore, Pakistan

Tel : (92-42) 578 9725-28

Fax : (92-42) 576 3025

www.sidathyder.ae
www.sidathyder.com.pk

SIDAT HYDER