

# Information Technology Need in Consumer Banking and a Case Study of CAMS

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## ABSTRACT

Consumer banking brings a drastic change in a common person's life. It is not only the name of giving services to elite and privileged class of the society but is also to facilitate the common people, which normally represent a big proportion of the society. Although this change brought betterment to an ordinary lifestyle dweller but has also created new challenges of handling the mass consumer clients for Consumer Banking Service Providers (CBSP), financial institutions and banks. It is not possible for CBSP to offer better services to this big proportion of the society without the help of information Technology. In this paper, we discuss the problems faced by CBSP while offering consumer banking services. We present a case study of CAMS as a facilitator to CBSP for the solution of their problems discussed in this paper.

**Keywords:** Consumer Banking, CAMS, Role of IT

## 1 INTRODUCTION

When we talk about consumer banking, it means that we talk about facilitating the common and ordinary people of the society by providing them all the necessities and accessories of the life that is needed by them to pass an affordable pleasurable easy and comfortable life. If we catch a glimpse of a consumer's needs, we will find out that a consumer normally needs a good and comfortable living place, a reasonable vehicle to drive and some accessories as a facility or hobby. If CBSP gives these facilities to a consumer, it means that it provides a life which in past, a consumer could only see the dreams about. In this context, the banks and financial institutions that we call here Consumer Banking Service Providers (CBSP), offer many products to their consumer banking clients.

### 1.1 Classification of Consumer Banking Products

There can be many consumer banking products but some famous products are as under:

**Mortgage Housing finance:** A mortgage is the most common form of financing for real estate transactions. It facilitates the consumer according to its affordability and need to buy a living place like house, flat, or a piece of land for construction

**Personal Loans:** Personal loans are also known as consumer loans. It is a great way to acquire some quick cash without going through a lot of hassle.

**Auto Loans:** Auto Loan or Car loan is used to purchase a new or old car.

**Credit Cards:** Credit cards are plastic cards with scannable magnetic strips issued by a bank or a business which allow the cardholder to purchase goods or services on credit.

**Debt Consolidation:** Debt consolidation is the replacement of multiple loans with a single loan, usually with a lower monthly payment and sometimes with a longer repayment period. A debt consolidation loan can also be called a consolidation loan.

### 1.2 Business process flow

Banks usually follow the following processes systematically to process any consumer Loan [1].

**Account Solicitation:** In account solicitation, the contact person may issue particular product Loan application form after giving the relevant knowledge to the customer.

**Application Submission & Preliminary:** In Application Submission & Preliminary Processing, the customer brings all the required documents along with the Application Form and submits them to the contact person.

**Processing:** After receiving the application with all relevant documents, the Customer Relationship officer (CRO) evaluates the eligibility and check qualification in accordance with the various terms and conditions for the applied product.

**Credit Review and Final Approval:** Credit Review and final approval is the key process as it involves thorough evaluation of the customer that decides whether the customer is eligible for applied loan or not.

**Disbursal Processing:** After the loan is approved, a sanction letter is sent to the customer that shows all the rules and regulation for the loan. If the customer accepts the terms and conditions, the approved loan amount is ready for disbursement. Disbursement process involves account opening activity for the customer in which bank will disburse the loan.

**Collection:** After disbursement most of the banks start repayments from next month of the disbursement. If the customer fails to pay the installment, he will be considered as a defaulter. Bank will take any action as prescribed in the rules. The installment recovery is the responsibility of collectors in Banks.

This paper is organized as follows. Section 2 highlights the information technology need in consumer banking. The overview of CAMS is illustrated in section 3 and subsequently in section 4, the implementation issues of CAMS is discussed in detail. Section 5 describes the loan calculator, followed by conclusion in section 6.

## 2. INFORMATION TECHNOLOGY NEED IN CONSUMER BANKING

Now a days Information Technology is no doubt plays a significant role in the growth of other industries. Its need in consumer banking can be justified by the following key considerations where only IT infrastructure can help to handle these issues.

**Fast application processing:** By using information technology, the application processing of the customer can be made fast. Electronic transactions take less time to process the application than manual because all the information is available online and relevant application processing persons just have to take the decision on the data available online.

**Better Services to customers:** In this era of high competition, it is the better service which attracts the customers toward doorstep. In consumer banking, this can be done by solving all the hurdles that come in front of the customer to avail the product. In this perspective, the information technology seems to be quite useful such as easy accessibility of resources online, fast and easy availability of the product by fast application processing described above.

**Mass consumer client record handling:** This problem is a big concern for CBSP. In consumer banking, the number of clients is very high and to keep the record of all customers manually is not only hard to maintain but also time consuming and resource intensive. By using any good consumer banking software solves this problem with an ease.

**Reduce calculation errors:** By using a good consumer banking software makes the tiring and time taken calculations faster and error free.

**Efficient loan recovery:** Because the number of consumer banking clients is large and everyone is not innocent and responsible enough to pay the repayments or dues in time, there is always a need to recover the loan amount from defaulter. Any efficient collection or repayment software is very useful in this context to support the collectors as they need to trace the defaulters frequently to take appropriate action against them for recovery.

**Auditing and fraud detection:** With IT framework, banks can closely monitor accounts for risk analysis. They are better equipped to determine patterns of fraudulent activity and identify fraud in time to prevent it, saving their money.

## 3. OVERVIEW OF CAMS

Our new economic reality is one of increased competition, informed and demanding customers, commoditization of products and services, and relentless pressure to cut costs. In this environment, customer service is the single biggest differentiator in the market. A range of financial products and related services to individuals and small businesses, and the need for the retail/consumer banking to increase the credit culture amongst individuals, has resulted in significant growth in consumer asset based products [2].

### 3.1 What is CAMS?

CAMS is a Consumer Assets Management System which enables a bank to provide premium customer service by introducing innovative products and keeping track of all customer information & transactions related to asset financing; whether it is home, consumer durables, or automobiles. Allowing for mortgage, auto and personal loan life cycle management, CAMS seamlessly integrates loan origination, processing, accounting, management, collections and securitization. It also covers the full lifecycle of an agreement from first customer contact through quotation, agreement modeling, data capture, proposal processing, credit scoring, credit limit checking, underwriting (automatic and manual), agreement servicing, payment processing, accounting and default management right through to agreement expiry and asset disposal.

### 3.2 Key features of CAMS

CAMS has the capability to cover all major needs of CBSP. Some of its key features are as follows.

- Keep Different Verification records for customers
- Maintaining its own GL on basis of transactions made on the system.

- Automatic Accrual process
- Maintaining Records of customers for Repayments.
- Balloon payment option
- Maintain Defaulters History
- Inquiry facility for customers during case processing
- Loan Calculator that helps in initial inquiry for the customers. It has the capability to generate repayment schedule on given parameters for future customers.
- By keeping the application data and record up-to-date to the last minute, CAMS enables you to answer applicants' queries regarding their application status effectively, and delivers information throughout the organization immediately, intuitively and with little learning curve.

### 3.3 Technology Used

CAMS Application has been developed by using Oracle Developer Suite and Oracle Relational Database.

### 3.4 Security Features of CAMS

The robust security features of CAMS give professionals greater control over the information they share. CAMS has a complete module of system administration that is used to customize the application, create the users and assigning them the roles and responsibilities. These users, roles and responsibilities play an important and significant part to maintain the application level security. It also takes care of data security by keeping the data confidential and private from other users according to the set policy. The application has audit and trail facility that

sometimes help system administrator and users to identify the authentication, validity and origin of data.

### 4. IMPLEMENTATION ISSUES IN CAMS

CAMS is successfully implemented in many CBSP, financial institutions and banks. During the implementations, there are number of problems faced by the CAMS team. Some of these problems are worth discussing which are as follows.

**Unavailability of Network:** Majority of Banks has no practical network available however few networks available for their ATM. Sometimes branches of CBSP are not linked with each other. At this scenario, CBSP is going to implement a consumer banking software. This software is based on client server architecture, which off course required all branches to be connected with each other. To solve this problem, CAMS has Data Transfer Utility in its suite. This Utility simply makes a data file, which is transferred from one place to another via dialup. After the file is transferred, the utility imports that file into the database, installed on that site. This is how data transfer utility is used to synchronize the data between head office and branches.

**Bandwidth Problem (If network present):** There are some banks where networks already exist but they do not have enough bandwidth to bear the traffic load. This kind of problem was once faced by the CAMS team during the implementation on one of the client sites. The application was tested between server and client through 64 K Radio Link as shown in figure (a). Server was situated on remote location. While testing all the forms, it was found that customer inquiry form took extra bandwidth.

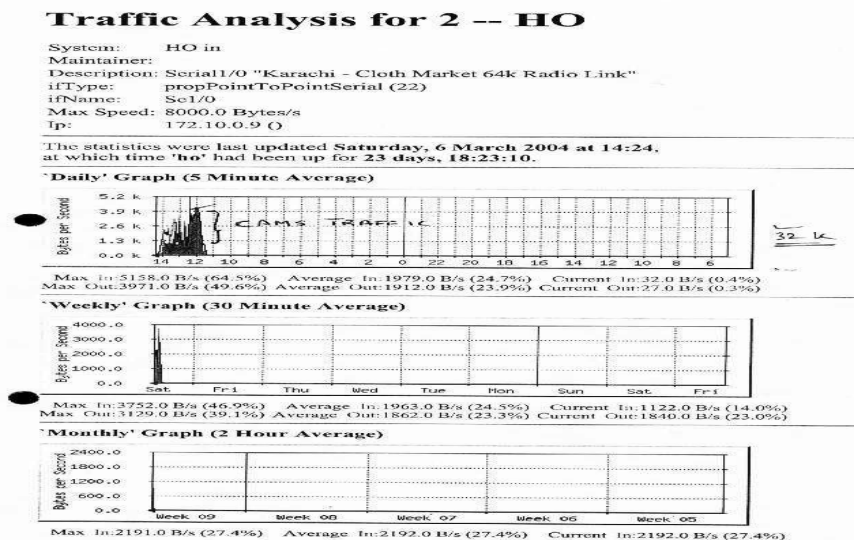


Figure (a) : Traffic Analysis [1]

This problem was resolved by doing

- Some queries optimization
- Batch processing using SQL programming units. This allows Database server to fetch the complete programming unit to and process all the instructions at one cycle. This helps to reduce the bandwidth.
- Setting number of record fetch per cycle (Array DML Processing).

**Integration with General Ledger (GL) software:**

Banks can run business better if they could gain operational efficiencies improving the many different business processes of the enterprise both internal, and spanning the key interactions with their respective branches, vendors, customers, and partners using integrated information, and access to that information. Wherever the CAMS is implemented, the integration of it with clients already running GL was the key requirement of the client.

- using file transfer at the end of the day or some time through ODBC.
- Consumer banking software automatically breaks up installments into Mark-up and

Following Integration approach was implemented in most of the banks where CAMS was implemented as shown in figure (b).

- Loan account will be setup at Bank GL and Consumer banking software together.
- Consumer banking software generates all the accounting entries like verification processing charges, monthly accrual accounting etc and then Bank GL table is updated in real time.
- Bank GL procedures will pickup the data generated by Consumer banking software and then will be posted into Bank GL's relevant tables for banks for relevant usage.
- Installment payment received at branch will be entered into Bank GL using customer's loan account and then entries are to be made in Consumer banking software

Principal etc. If needed entries for break-up is made in Bank's GL using integration utility.

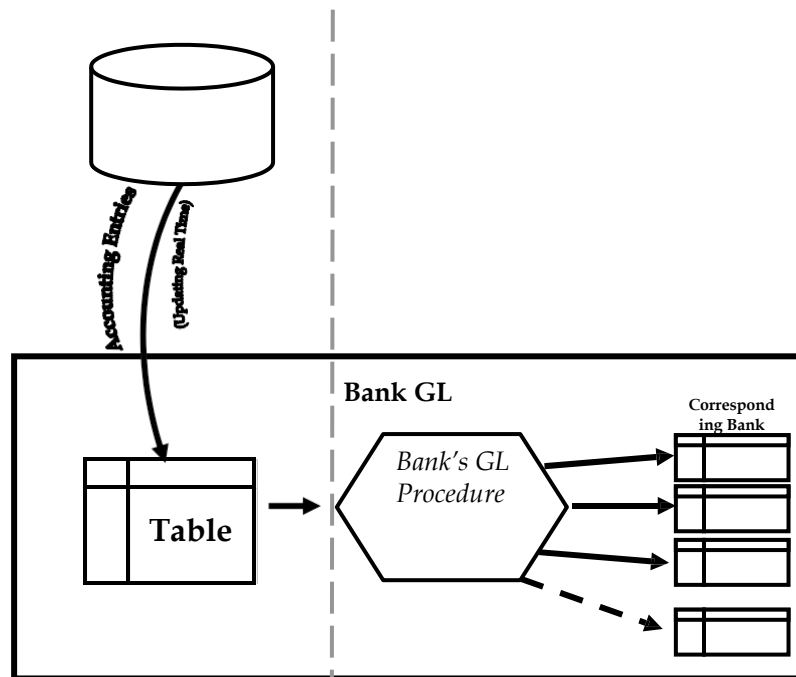


Figure (b): GL Integration

## LOAN CALCULATOR

<b>Customer Information</b>	Sr.No.	10		Title	<input checked="" type="radio"/> Mr. <input type="radio"/> Mrs. <input type="radio"/> Ms.	
	Name	IRFAN AHMED		Father / Husband Name		
	NIC No.	OLD	450-70-258258			
	Address	GULSHANE IQBAL KARACHI				
	Phone	8254789	Email	email@mail.com	Mobile	030085214785
<b>Maximum Grantable Loan &amp; Tenure Calculation</b>	Occupation Type	A - Salaried				
	Date of Birth (DDMMYY)	02-FEB-1970	Year	34	Months	0
	Income	500000		Monthly Installment	175000	
	Markup	3.5		Calculate Maximum Grantable Loan		
		Maximum Grantable Loan	400,000		Maximum Grantable Tenure	240 Months
<b>Desired Loan &amp; Tenure</b>	Principle Loan Amount	5000000				
	Insurance Company					
	Insurance Premium Rate & Amount	.52	26050			
	Markup	0				
	Loan Tenure	Years	5	Months	0	
	<b>Monthly Installment</b>	<b>83333</b>				

Figure (c): Loan Calculator

## 5. LOAN CALCULATOR

Though we have discussed the CAMS briefly but discussing CAMS without highlighting the Loan Calculator module of the CAMS is like a meal without appetizer.

Loan Calculator as shown in figure (c) is an advanced tool that provides support to the bank officials / loan officers to calculate the maximum grantable loan and tenure on the basis of age, markup and net monthly income of the walk-in customers. The installment amount is evaluated automatically on the basis of the customer's occupation (i.e. salaried, businessman or self-employed), bank's criteria and policies. It also calculates the monthly installment and generates complete schedule for the customer according to the given tenure, markup and loan amount.

## 6. CONCLUSION

Consumer banking plays a vital role in economical growth of any country. The Housing schemes create job opportunities not only for banks itself but almost 20 industries including cement, steel, paints, and most importantly unskilled labor employment.

For consumer banking products, by the increasing of number of consumer clients, it becomes

almost impossible to manage the data without proper information technology support. CAMS plays a vital role in consumer banking industry of Pakistan by facilitating the financial institutions, banks and CBSP.

## 1 REFERENCES

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