Impact Factor: 9.9 ISSN-L: 2544-980X

Bank Information Systems and their Characteristics

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Annotation: Bank Information Systems (BIS) are essential frameworks that enable banks to manage and process financial data efficiently. They encompass a variety of technologies and applications designed to support banking operations, enhance customer service, and ensure compliance with regulations. BIS automates routine processes such as transaction handling and account management, reducing the need for manual input and minimizing errors. Strong security protocols, including data encryption and multi-factor authentication, are integral to protecting sensitive financial information and maintaining customer trust.

Keywords: Bank Information Systems, Real-time Processing, Security, Financial Data Management, Data Encryption, Financial Technology (FinTech), Digital Banking, Banking Operations.

INTRODUCTION

The bank information system is a software-technological complex that covers a set of interconnected tasks of an automated bank.

The bank's management system generally performs the functions typical for any management system (calculation, control, analysis, regulation, planning), but it has features of distribution of these functions among the elements of the management structure.

Keeping and controlling accounts in the bank is demonstrated by the closely related practice and accounting calculation : the analytical calculation is reflected in the personal bank account numbers, each personal account number is associated with a certain balance.

Analysis is a management function that determines the economic situation created inside and outside the bank. Large banks have two independent departments: one that analyzes the internal situation of the bank, and the other that analyzes the external environment.

Planning prepares decisions that ensure the achievement of set goals. Decisions prepared at the planning stage are implemented within the framework of the regulatory function.

MATERIALS AND METHODS

The bank management structure can be different and depends on:

- bank volumes,
- the number of types of services provided,
- the bank's operations and the number of customers .

Active and passive banking operations are distinguished. Assets include cash transactions, loans to customers, loans to other banks, deposits with other banks. Liabilities include: customer deposits, bank deposits, bank loans.

DISCUSSIONS AND RESULTS

Banks can perform the following operations: attracting funds of individuals and legal entities to deposits; opening and maintaining bank accounts of individuals and legal entities; making calculations

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according to the order of individuals and legal entities; Collection of funds, promissory notes, payment and settlement documents and provision of cash services to individuals and legal entities; trading of foreign currency; Attraction and placement of precious metals in deposits; providing bank guarantees.

The main requirement for banking systems is real-time execution of transfers and changes in personal accounts.

Jobs the following directions will be automated .

Management of deposits. Customer service, execution of cashless operations and receipt of reporting documents on deposit operations are automated.

Practices with securities. In this case, the automation of the sale and purchase of securities directly in bank departments is envisaged.

Resident fees. Automating payments, reports, and selective data retrieval detailing payments by payee and payment type by payee and bank staff.

Currency exchange practices. The software allows you to automate the calculation of funds for foreign currency conversion, the calculation of commission rewards, the control of the presence of funds in national and foreign currencies in the bank.

Electronic translations. Electronic money transfer automation allows you to speed up the transfer process and make it secure, with the ability to send the money transfer with a written message and a notification of delivery.

Internet banking: Internet banking allows remote management of funds available in the card account. A browser is used to perform operations, which means that there is no need to install the client part of the system software.

Call center information system. Call center automation allows employees to increase their work efficiency, manage the entire process of working with customers, and optimize the process of interaction between bank departments.

Management of depository operations. It allows monitoring and management of deposit operations with individuals and legal entities on the entire spectrum of agreements and transactions on attracting funds to savings accounts.

Management of credit operations. Providing services for loan transactions with individuals and legal entities, complete automation from receiving a loan order to closing a loan transaction.

Conduct management accounting. Analysis of budget performance; creation of management reports and analytical materials, management accounting according to various standards.

Calculation of working with securities. Automating depository and brokerage services for clients, concluding certain transactions, keeping a book of securities, drawing up documents to clarify the procedure for calculating interest on securities.

CONCLUSION

Bank information systems are the lifeblood of modern financial institutions. These sophisticated systems manage vast amounts of data, facilitate transactions, and ensure smooth operation across all aspects of a bank's operations. They are characterized by:

Complexity and Integration: Bank information systems are highly complex, often consisting of multiple interconnected subsystems that manage various aspects like customer accounts, lending, payments, securities trading, and risk management. They are built on robust architectures and integrate seamlessly with internal and external systems, like payment gateways, regulatory bodies, and customer interfaces.

Data Security and Confidentiality: Banks handle sensitive financial data, making security a paramount concern. Information systems must implement rigorous security measures, including encryption,

access controls, and robust firewalls to protect against unauthorized access and cyber threats. Data privacy regulations like GDPR and CCPA demand strict adherence to data protection and confidentiality protocols.

Real-time Analytics and Business Intelligence: Modern bank information systems incorporate powerful analytics tools that allow banks to analyze data, identify trends, and make informed decisions. This enables proactive risk assessment, personalized customer services, and efficient resource allocation.

In conclusion, bank information systems are the cornerstone of modern banking, playing a crucial role in operational efficiency, customer service, risk management, and regulatory compliance. They are constantly evolving, leveraging new technologies to provide secure, reliable, and innovative solutions that power the financial world.

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