

# Cash Deposit Optimization





**80**  
countries  
where activities  
are carried out

**25+**  
YEARS ON  
THE MARKET

**7**  
affiliated  
companies  
in Azerbaijan,  
Estonia, Georgia,  
Kazakhstan,  
Kyrgyzstan,  
Latvia and  
Uzbekistan

**300+**  
talented  
professionals

**700+**  
international  
customers

**25+**  
years of  
partnership  
with Diebold  
Nixdorf

**90+**  
partners  
allaround  
the world



# Competence at the core

The company Penkių Kontinentų Bankinės Technologijos (BS/2) is the part of Penki Kontinentai group of companies, provides services in 80 countries, creating software solutions which help automate and optimize your business.

For more than 26 years, we are developing specialized innovative software and technological solutions for banks, financial institutions and retail companies. We are offering high-quality IT products that meet your customers' needs.

## Our Services:

- Software development, sales, installation, support and systems integration services
- IT service outsourcing
- Maintenance and repair of banking, telecommunication, acquiring and retail equipment
- Monitoring of IT infrastructure
- Staff training and consulting
- Spare parts supply
- Sales of specialized equipment for banking and retail companies

## Certificates:

ISO 27001, ISO 20000, ITIL V3, PCI PA- DSS.



## Our customers:

- Banks and financial institutions
- Retail companies
- Gas stations
- Postal services
- Other companies (casinos, hippodromes and others)

## International Recognition and Awards:

### Diebold Nixdorf / Wincor Nixdorf

- Innovation SPIRIT banking 2018
- Special Achievement Banking 2000, 2013, 2014, 2017.
- Best Banking Solution 2012, 2013, 2016.
- Best Banking Service 2002, 2003, 2012, 2013, 2014.
- Most Innovative Software Solution 2004, 2005.
- Most Innovative Concept 2002, 2003, 2004, 2005.

### ATM Industry Association

- Best ATM Security Technology 2002.

### Lithuanian Confederation of Industrialists

- Innovation Prize 2016.
- Lithuanian Product of the Year 2001, 2005, 2006, 2007, 2008, 2012, 2017.



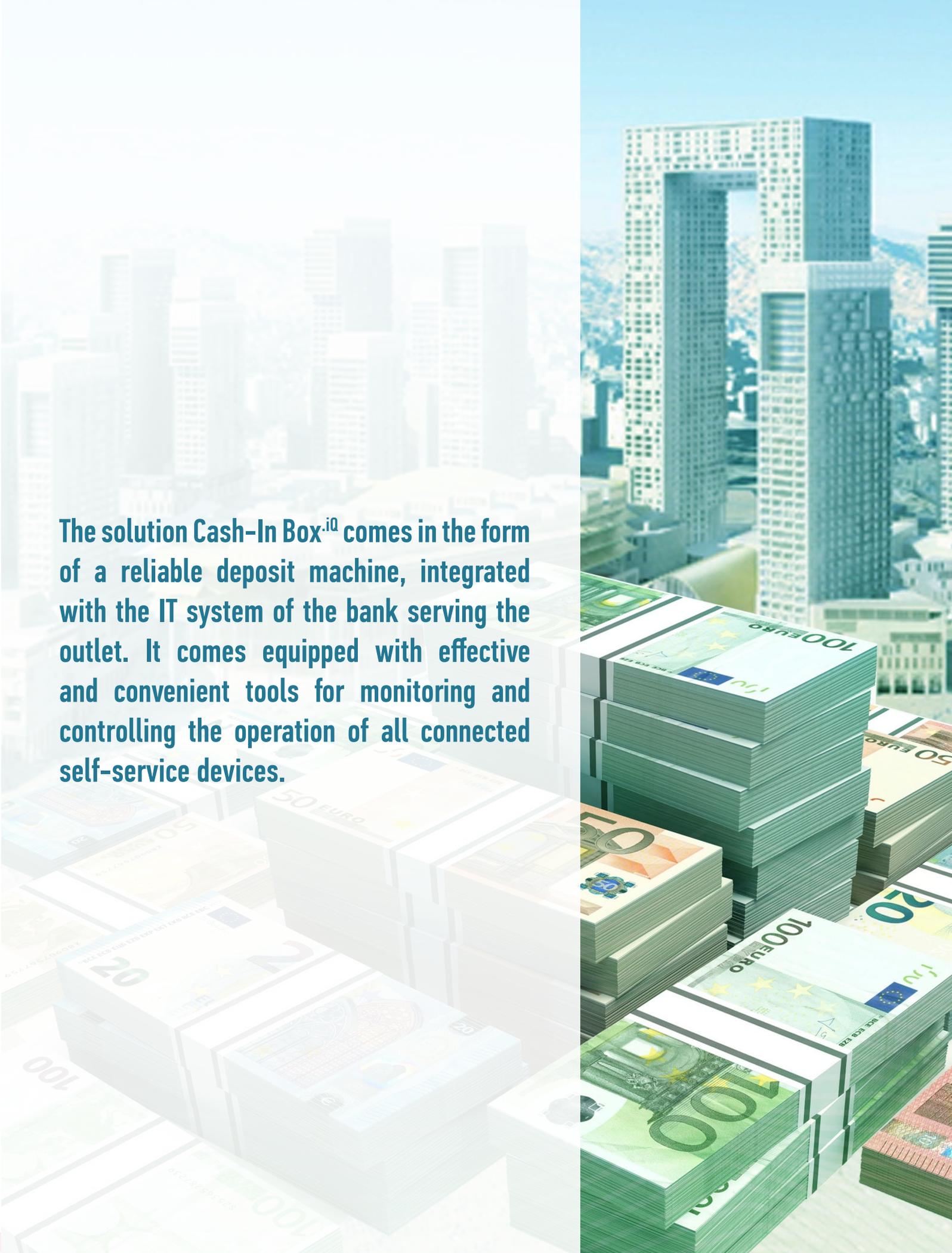
# Simple and convenient cash deposit

**Cash has historically been and remains today the main payment instrument in the world.**

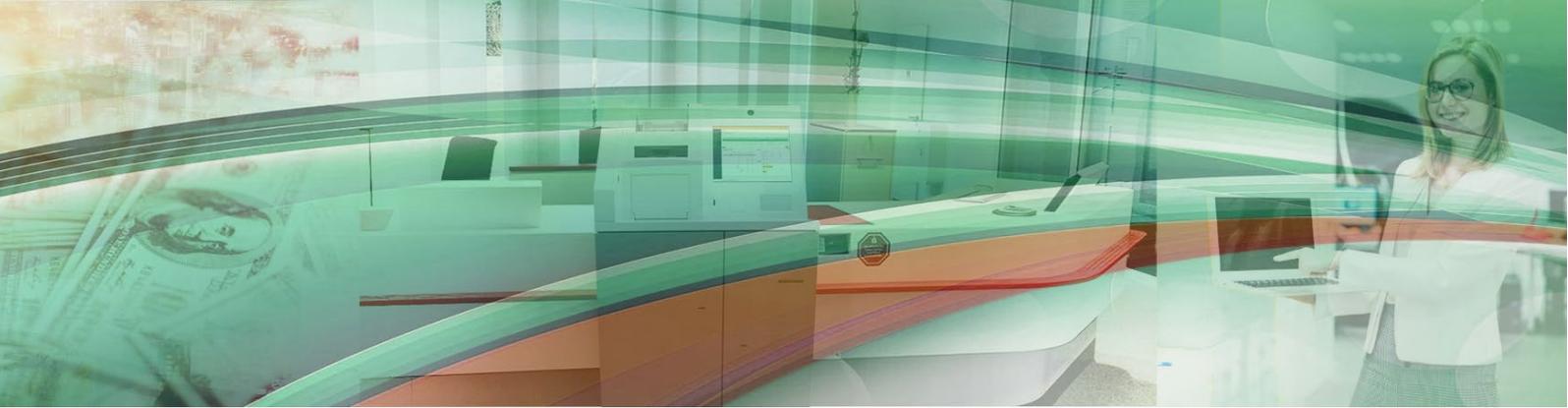
Money supply increases by an average of 11% per annum, which makes the issue of effective cash flow management extremely urgent for banks and outlets. According to a study conducted in the United States in 2013, representatives of over 43% of retailers in the country said the main problem for the development of their business is insufficient optimization of cash operations.

The need for an effective solution for cash and coin deposits majorly comes from retail outlets, as they are places where cash accumulates most actively. Independent system integrators can act just as effectively as banks and CIT services, offering their solutions directly to the client.

BS/2 is a comprehensive hardware/software solution for optimizing the deposit process and cash collection at retail outlets, bank and post offices, as well as in other organizations accepting payments from individuals.



The solution Cash-In Box<sup>iq</sup> comes in the form of a reliable deposit machine, integrated with the IT system of the bank serving the outlet. It comes equipped with effective and convenient tools for monitoring and controlling the operation of all connected self-service devices.



# Functional Benefits

## Benefits for depositors

---



### Instant crediting

The funds deposited using the Cash-In Box<sup>iQ</sup> solution are automatically credited to the account, which completely removes the responsibilities of further storage and transportation of funds from the depositor. This allows immediate access to the funds for further payments.



### Simplicity and reliability of use

The deposit machine has a user-friendly interface for easily validating and depositing funds, without requiring any prior knowledge or skills from the depositor. This is especially important when individuals who have not received any special training use the self-service devices.



### Various identification methods

The system authenticates the user by personal ID number, biometric data, etc. Minimizing the risk of operational errors and shortening the time required for depositing funds.



### 24/7 deposit

The depositor can choose the most convenient location and time for depositing, avoiding queues and other inconveniences. Eliminating the need to base schedules on the operating time of CIT services.

# Benefits for service providers

---



## Secure money storage

The device is equipped with reliable tools for recounting and validating notes, which excludes the receipt of counterfeit money. Special mechanisms ensure the safety of cash during storage and collection.



## Advanced monitoring tools

Cash-In Box<sup>iQ</sup> provides the ability to monitor the technical condition of devices and the level of cash stored remotely. The notification system informs the operator about reaching the storage limits in real-time.



## Large capacity

The self-service device allows storing up to 17,000 banknotes, which considerably exceeds the capacity of standard ATMs and electronic cashiers. This allows for a more flexible approach to planning and organization of cash collection, even with a large flow of depositors.



## Comfortable CIT

The Cash-In Box<sup>iQ</sup> solution allows you to authorize the employee of the cash collection service and automatically prepare the needed documents. The device itself provides convenient access to the safe and greatly facilitates the unloading of funds.



## Functionality and access management

Access rights management ensures security and ease-of-use. The system provides several user roles (operator, collector, administrator and client), each of which has a certain set of available actions.



## Business analytics and reporting

Cash-In Box<sup>iQ</sup> allows you to generate reports on the operation of the entire network of self-service devices in technical and financial terms, as well as export data to integrated business intelligence systems or Core banking system.

# Deposit machine

## *Cash-In Box 17*



*Cash-In Box 17* is the primary deposit machine included with our solution, which meets all the safety standards of cash storage. This reliable and easy-to-use ADM is the perfect self-service solution for customers who do not have much experience using such devices.

## Technical Capabilities of *Cash-In Box 17*:

- Cash capacity - up to 17000 banknotes
- Cash loading module capacity - 500 banknotes
- Escrow module capacity - 300 banknotes
- Rejection module capacity - 100 banknotes
- Cash processing speed - 1050 banknotes per minute
- Ability to adjust cash processing speed - from 17 to 21 banknotes per second
- Currency check - 4 machine-readable signs (including serial number reader)
- Receiving 10 currencies in “mix” mode
- Cash counting without depositing
- Accompanying document printer for each operation
- Intuitive user interface



# Solution application

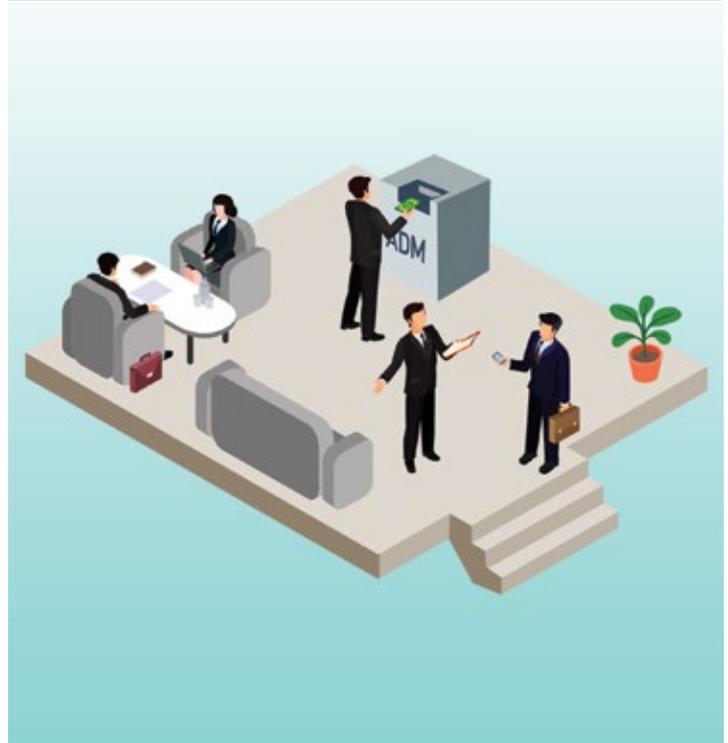


## Establishment of points for the deposit of legal and private funds

### Traditional service



### Self-service



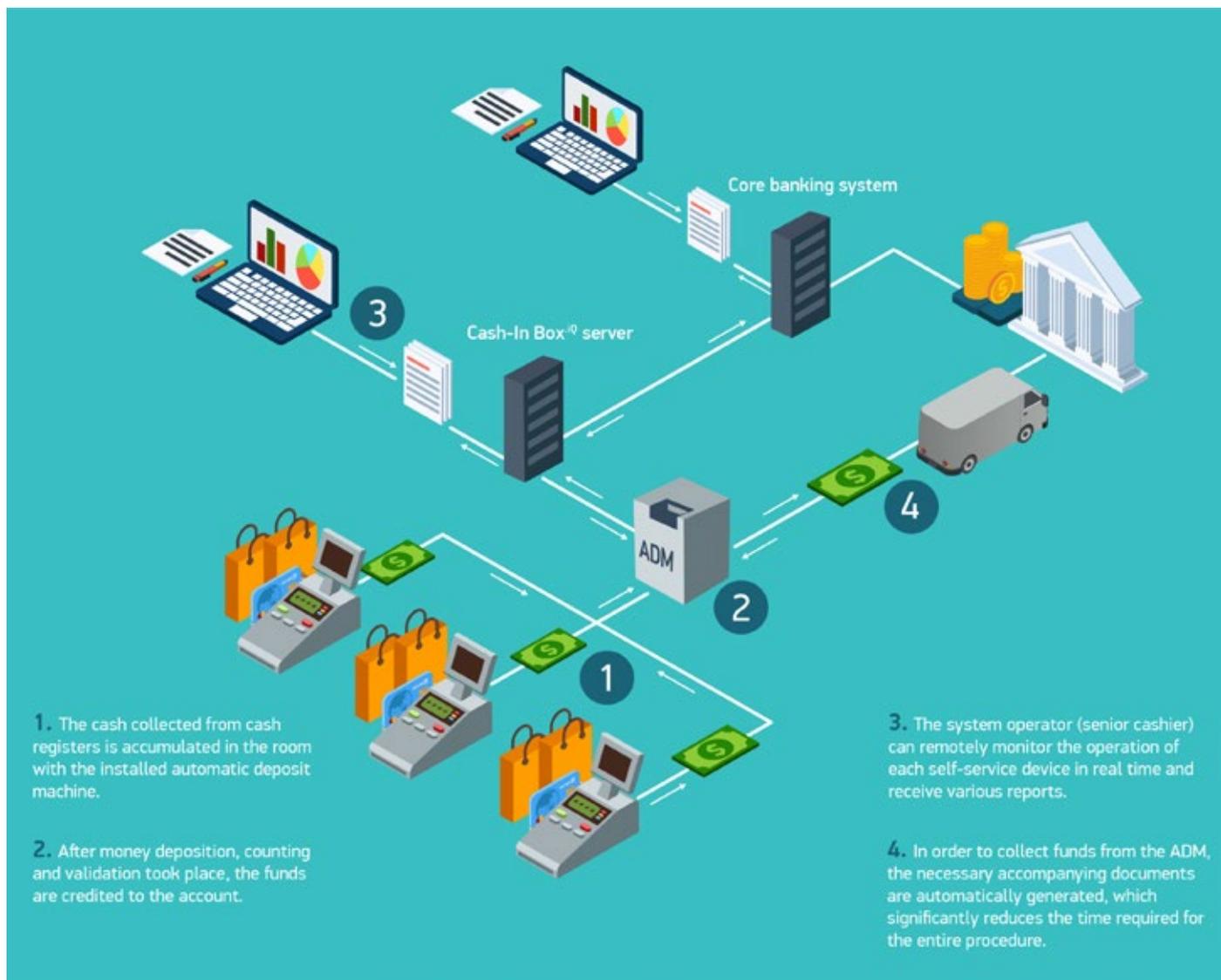
Automatic deposit machines connected to the Cash-In Box<sup>iQ</sup> system can be placed in open access areas and provide process for depositing funds in a self-service mode.

A user interested in using the deposit machine (a representative of a commercial organization or an individual) must choose one of two operating modes: recalculation, validation and return of funds or recalculation, validation and deposit of funds into the account. To speed up the process, the self-service device offers several identification methods (by ID number or using biometric data). The security software of the device can work concurrently with a specialized

monitoring solution (ATMeye<sup>iQ</sup>), which records all operations for depositing funds and the actions of the depositor, as well as any unlawful intruders.

Establishing a network of deposit machines allows service providers (banks and other organizations) to ease the workload of traditional branches, providing higher quality services at convenient locations for the customer. Additional functionality can be implemented to accept various payments (utilities, payment for goods and services), within the framework of a separate solution, which allows the service provider to receive a commission from every transaction and increase the profitability of the network of self-service devices.

## Cash collection from large retail outlets, bank branches or other organizations



The Cash-In Box.iQ solution for commercial structures (bank branches, stores, post offices, casinos, sports or entertainment complexes) offers a more transparent system of working with cash, avoiding operational errors and preventing abuse by personnel.

In accordance with the established policies, the cashier transfers the cash to a separate office space for recalculation, verification of the authenticity of notes and finally for depositing funds. The system identifies the cashier by personal code, ID documents or using biometric data. Cash-In Box.iQ credits the funds instantly to the specified account. During this

entire process, detailed information about every step is stored in the systems database.

For the transportation of funds, employees of the cash collection service use a special bag equipped with a mechanical lock. Thanks to the sealing mechanism and a special locking device, only the authorized cash-collector can withdraw the bag safely. However, the collector cannot access the cash directly at any part of this process.

# User roles

For ease-of-use, the system includes several user roles, each having its own interface. It can be configured to the requirements and working procedures of a particular organization upon request.

## ■ Depositor (cashier)

This role, depending on the application of the solution, is intended for employees depositing cash from the cash register systems into ADM, installed in the back office, or for bank customers who independently deposit funds at special deposit points. Depositors can choose from various scenarios and authorization methods for working with the device, including by unique client ID, login and password, RFID key, NFC or biometric data.

## ■ Senior Cashier

The senior cashier has the ability to control the operation of all deposit machines installed on site, monitoring the operability of the devices and the amounts of cash in bags. Additionally, the senior cashier is able to receive various operation reports for the entrusted devices, and, if necessary, to participate in the recalculation and depositing of funds, confirming each operation.

## ■ Cash Manager (Analytic Manager)

The cash manager role provides the ability to control the work of the deposit machine fleet from the perspective of a bank or an independent CIT service. This employee tracks the amount of cash collected in the bags of each device, predicting the need for cash collection and issuing cash collection orders. In addition, the cash manager analyzes various anomalies in the behavior of depositors, adjusting the schedule of collection and assessing the efficiency of the work of deposit points.

## ■ Cash Collector

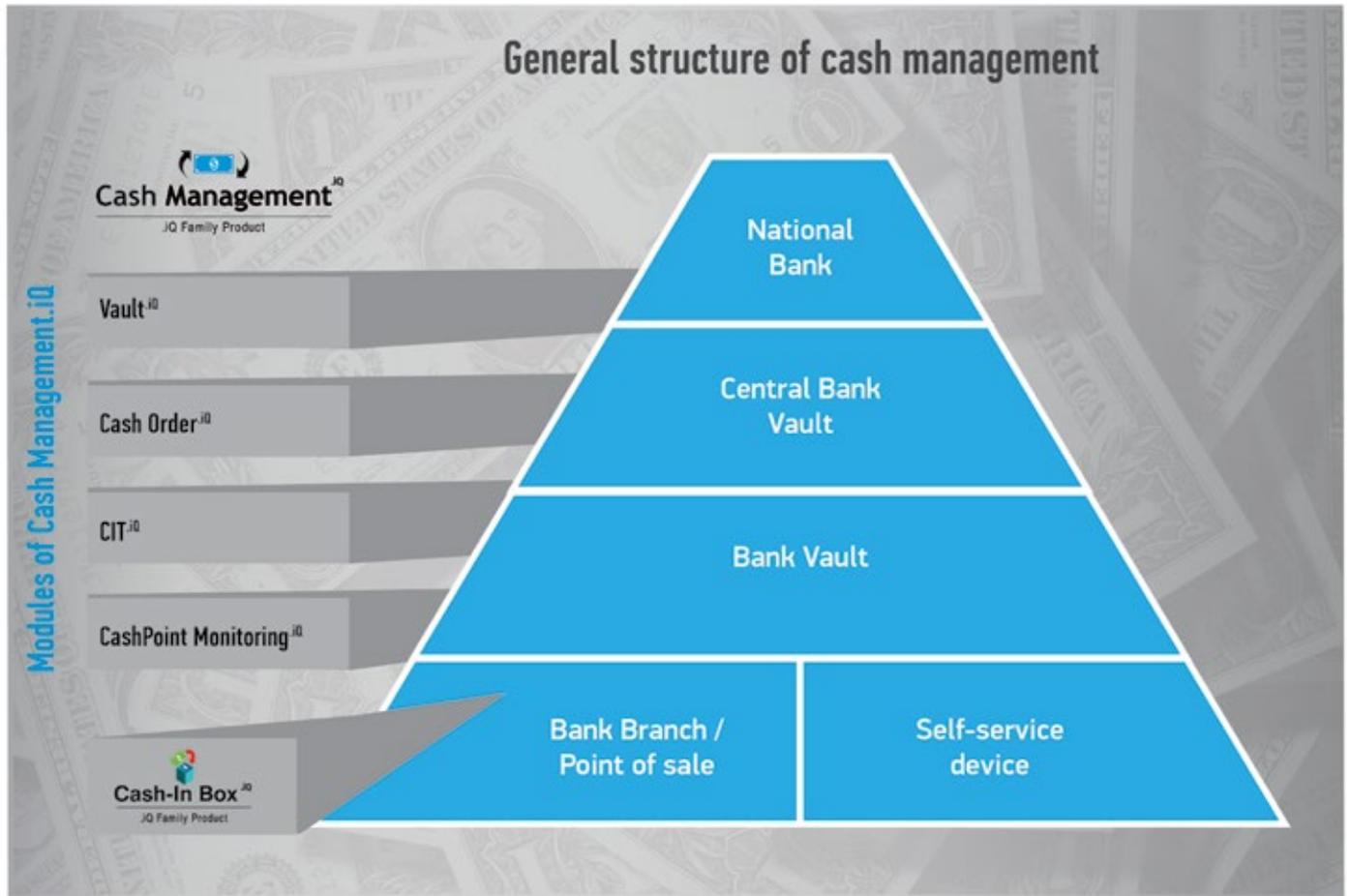
This user role is for employees of cash collection services. The solution offers several authorization methods, including personal ID number of the collector or using biometric data. After collection, the solution automatically generates the needed documents for the CIT officer.

## ■ Service Engineer

The service engineer has the same set of authorization methods, which include ID number or biometric data. After authorization, the service engineer can perform the necessary maintenance: disconnect the device, perform repairs or replace the device.

## ■ System Administrator

This role is for the employee, monitoring the operational status of the entire system, the correctness of data transmission and other parameters. In addition, the system administrator has the ability to perform remote software updates, upload and backup data, as well as other specific actions.



# Cash flow management

The Cash-In Box<sup>iQ</sup> deposit solution can be an important part of the cash management infrastructure of large organizations: banks, micro-credit organizations, retail chains, casinos and gambling companies.

Integration with cash management systems of banks or independent cash collection services can significantly optimize cash delivery: reduce the level of unused cash and ease the schedule of cash collection teams.

BS/2 recommends using the Cash-In Box<sup>iQ</sup> solution concurrently with the Cash Management<sup>iQ</sup> system, capable of predicting the demand for cash at each endpoint (ATM or other self-service device, bank branch

or store), managing delivery orders, automatically forming tasks, routes and collection crews. Cash Management<sup>iQ</sup> makes it possible to calculate the practicability of cash collection at each point and significantly reduces the costs associated with the work of personnel and depreciation of specialized transport and equipment.

# Related products



SmartSafe<sup>.iQ</sup> - is a cost-effective multi-vendor software solution for automated teller safes that helps to manage all cash operations from deposits and withdrawals to currency exchange. In order to provide the video surveillance function, the solution can be integrated with the ATMeye<sup>.iQ</sup> system that allows taking photos of the ATS zone triggered by various events (cash operations).



ATMeye<sup>.iQ</sup> - is a comprehensive solution that provides additional safety and video security for self-service devices that helps to protect against any type of criminal actions.



Cash Management<sup>.iQ</sup> - is a .iQ line software solution, developed to automate and optimize the cash flow related processes at all cash deposit and withdrawal points. It allows maintaining optimal cash amounts throughout the whole network of ATMs, ATSs, vaults and bank branches. The monitoring tool provides an opportunity to get real time information regarding current cash balances on self-service devices.



Payments<sup>.iQ</sup> - is a full-featured software solution for organization of utilities and loan payments, various fees, e-services, ticket sales using self-service device network infrastructure.

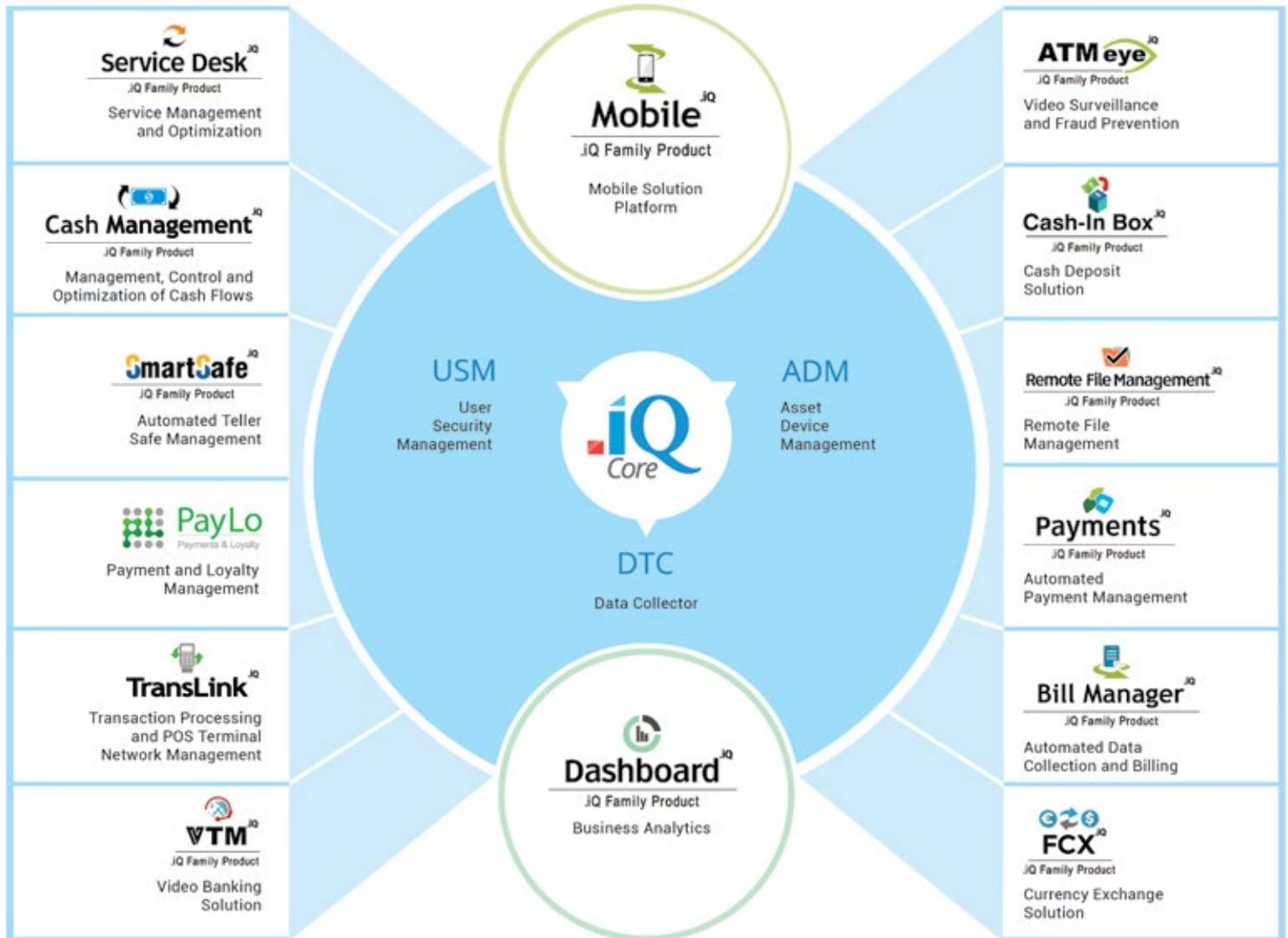


Dashboard<sup>.iQ</sup> - is an intellectual module of .iQ family products that provides data gathering function and visualizes it as vivid reports for analyzing and making decisions.



Mobile<sup>.iQ</sup> - is a set of mobile solutions designed exclusively for .iQ family products in order to provide mobile access to various information resources and services.

# Product family of .iQ





---

**Penki kontinentu bankines technologijos**  
Kareivių st. 2, LT-08248, Vilnius, Lithuania  
E-mail: [info@bs2.lt](mailto:info@bs2.lt) | Phone: +370 5 266 45 95 | [www.bs2.lt](http://www.bs2.lt)