



END-TO-END CASH LOGISTICS SOLUTION



Cash Management^{.iQ}

.iQ Family Product



80

countries
where activities
are carried out

25+
YEARS ON
THE MARKET:

400+

talented
professionals

25+

years of
partnership
with Diebold
Nixdorf

1500+

international
customers

7

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

90+

partners
worldwide



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 25 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 Clients:

- 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.

Cash Management^{iQ} software solution



Centralized cash management system is a cornerstone of modern banking infrastructure with a great impact to overall KPIs of financial institution. The importance of cash availability cannot be underestimated as banknotes and coins are still a main payment method worldwide.

High and increasing demand of cash by end-customers forces banks and cash service providers to increase cash efficiency of retail chains, smaller merchants and other enterprises. It motivates financial institutions to establish efficient cash management infrastructures, to reduce expenses and bring profit.

Cash Management^{iq} is an innovative software solution for online cash monitoring and forecasting for any cash point, including:

- Cash centers and vaults;
- Bank branches;
- Retail outlets and enterprises;
- ATMs and payment kiosks;
- Automated teller safes and deposit machines;
- Other cash points.

Cash Management^{iq} helps to ensure:

- Automating of procedures related to cash orders and cash point replenishment.

- Cash needs forecasting based on historical data.

- Optimizing Cash-in-Transit visit numbers and associated service costs.

- Increasing the level of security and control over CIT services.

- Ensuring the availability of selected currencies and denominations for all cash points.

- Increasing self-service terminal availability and reducing the downtime.

The solution fulfills all needs of credit and finance institutions relating to cash management including collection and distribution processes. At the same time, it can also help facilitate the logistics of transferring bills, coins, and other values between bank branches and vaults.

System functionality



CASH POINT MONITORING

Obtain information about cash balance and cash demand in real time by currencies and denominations. Monitoring parameters are fully customizable for all types of cash points.



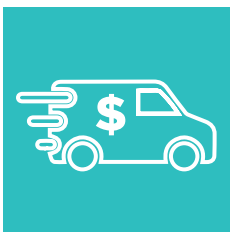
CASH DEMAND FORECASTING

Cash demand is calculated based on historic data for any cash point (object) or the entire cash-demanding infrastructure. The users of the system can define specific time periods, such as paydays, days of cash collection, big public events and other anomalies to ensure forecast accuracy.



REPLENISHMENT SIMULATION

The specialized CIT simulation tool improves cash order efficiency. Analyze cash orders dealer productivity by comparing ideal and factual data. Improve the accuracy of expense calculation for each object.



CASH ORDER AUTOMATION

Initiate, coordinate, and track the process of cash and valuables transportation using a single user interface. The proactive notification system provides the operator with detailed order execution updates in real time.



CIT MANAGEMENT

Build CIT teams with available personnel, assign individual tasks and generate operation route sheets. Set of specialized CIT equipment (cassettes, bags, etc) may be assigned to any individual operation. Other functions include security seals management, generating reports and other documentation, plus, checking work flow status via notifications.



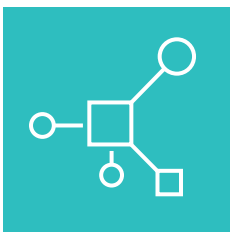
AUTOMATED RECONCILIATION

Form electronic journals and compare cash flow statistics of different cash points. Accounting of night depository, overages and shortages when receiving cash at the cash center. Special accounting of worn-out, fake and out-of-cassette notes is also available.



COMPLEX ACCOUNTABILITY

Report generation of cash replenishment, withdrawal, deposit, current and left cash in all currencies and denominations for every cash point, cash point group and entire networks. Analyze overall cash processing effectiveness using precise data.



BROAD INTEGRATION CAPABILITIES

The system supports the integration of banknote processing systems and barcode scanners. Cash Management^{.iQ} may be integrated with core banking and other IT systems to get actual and most precise data. It can also work with other .iQ solutions to ensure remote cash capture, automated currency exchange and payments transactions.

Software system architecture

The software solution Cash Management^{iQ} consists of 5 modules, each covering a separate type of cash management operational processes.

CASHPOINT MONITORING^{iQ}

The main system module, ensuring cash flow monitoring at each cash point. Its Cash Forecasting mechanism helps estimate cash demand, while CIT Simulator help to improve cash replenishment planning based on «what-if» logic.

CASH ORDER^{iQ}

CIT activities planning module automates operational and documentation processing for the whole replenishment procedure from cash order till its execution.

VAULT^{iQ}

The module helps establish an effective cash center operation environment to obtain cash handling excellence.

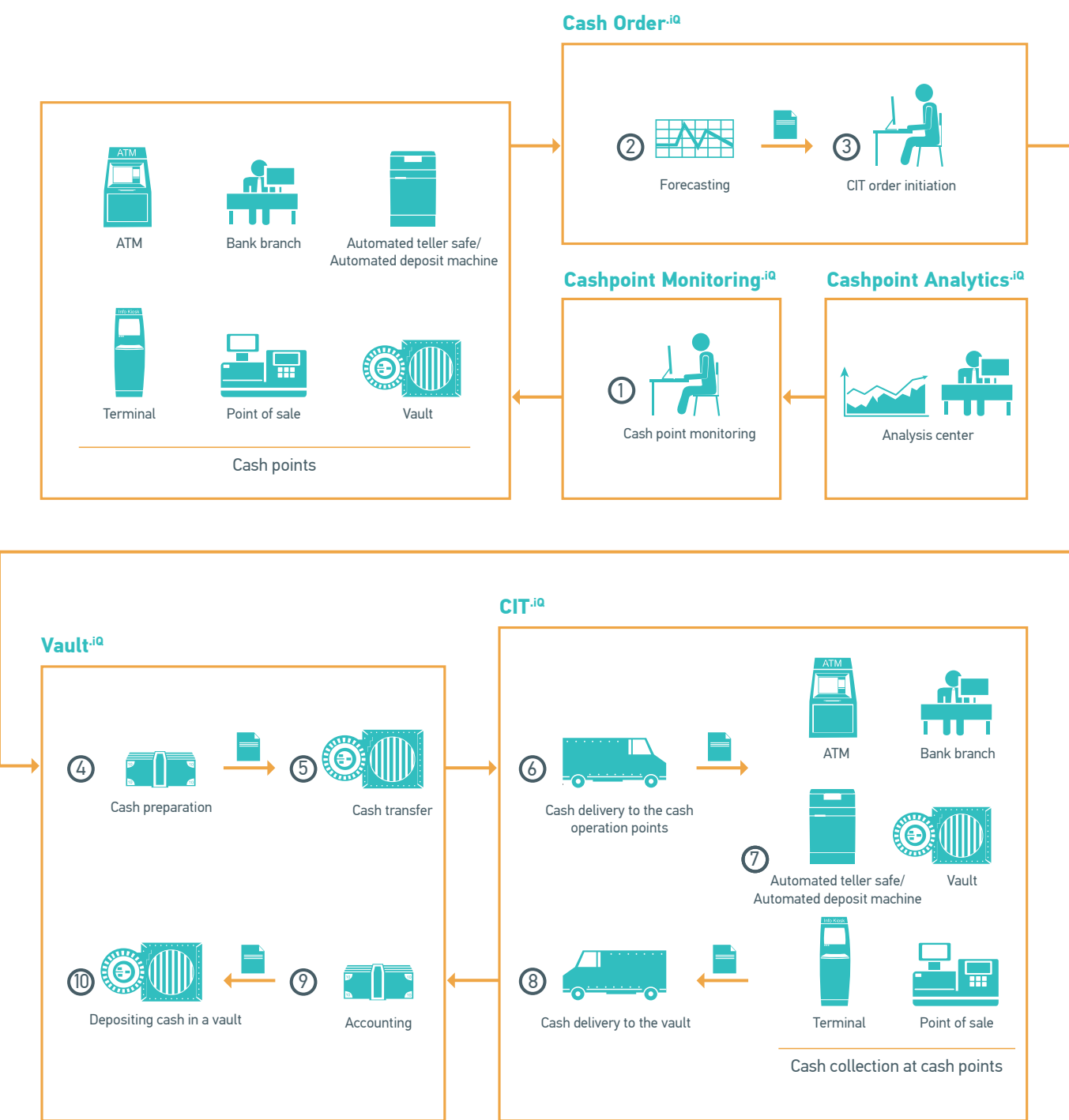
CIT^{iQ}

The module of CIT management can be to form Cash-in-Transit teams, assign tasks, set the schedule and calculate all associated expenses (labor cost, fuel, transport depreciation), for all planned and emergency operations.

CASHPOINT ANALYTICS^{iQ}

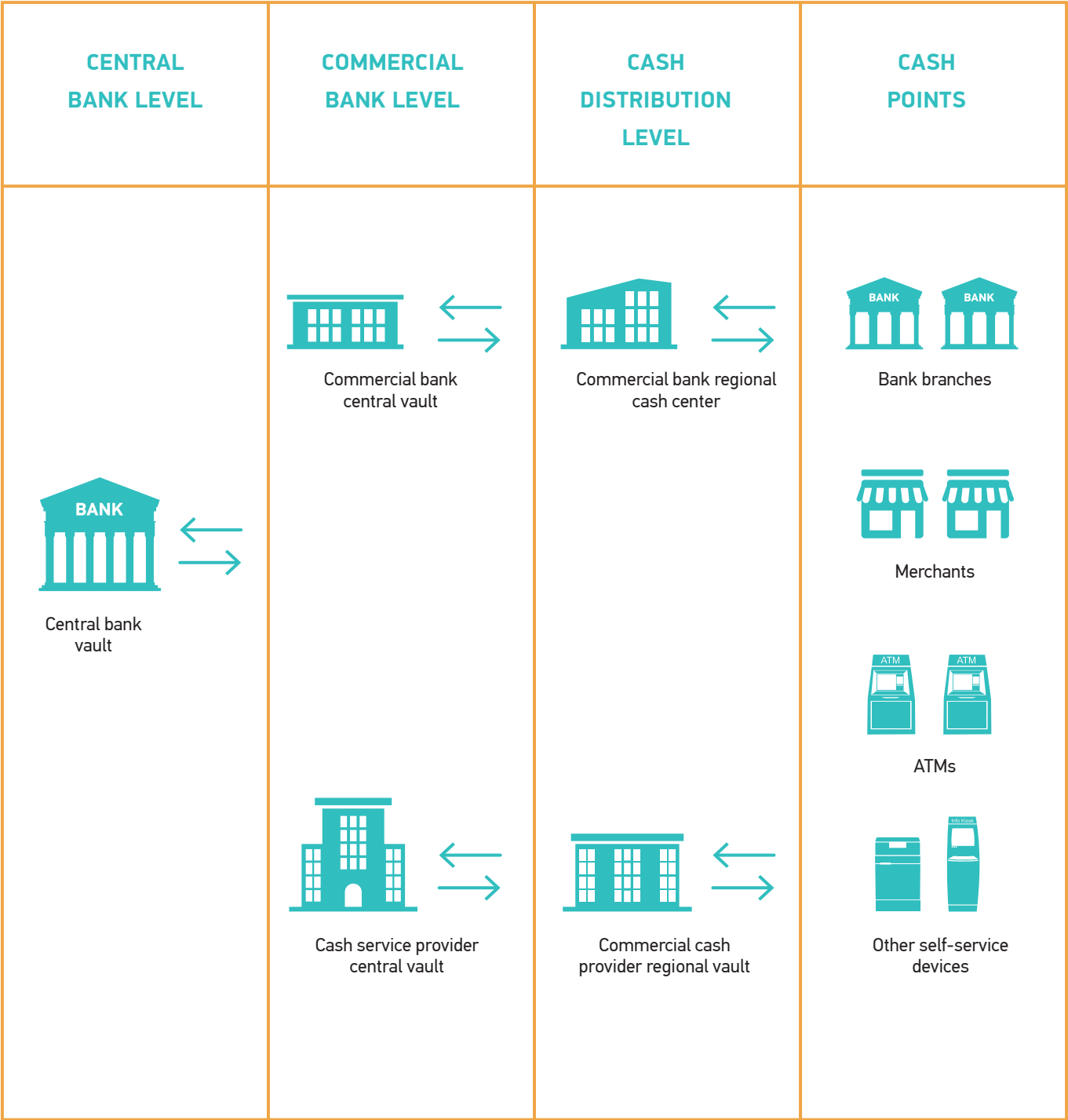
The module generates complex reports of the system workflow, achieving key performance indicators and other aspects of cash and valuables logistics.

There is a set of configurable roles with unique functionality for in-house or third-party personnel, including central bank or retail employees.



Applying the solution

The specialized solution Cash Management.iQ can be used by different commercial and state-owned organizations to build an effective IT environment for cash management.



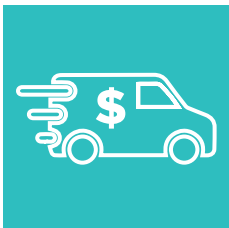


BANKS AND OTHER FINANCIAL INSTITUTIONS

Using a modern cash management system, financial institutions can ensure a high level of cash availability at all cash points in the zone of responsibility. Meanwhile, expenses are reduced to a minimum, including interbank cash rent fee and insurance costs.

At the same time, the system helps establish effective communication between the financial organization, central bank vault, cash centers of other banks and, essentially, their clients through retail outlets and enterprises.





CIT SERVICES

Independent CIT services gain an effective tool for management of cash-related processes, workforce and assets within a self-learning system of cash demand forecasting, enhanced with CIT operation planning functionality.

Optimizing CIT operations ensures higher cash availability, saves resources and increases the effectiveness of operational processes. This allows the company better manage risks associated with business development.





LARGE AND MEDIUM RETAIL CHAINS

Retail representatives may also benefit from the innovative cash management solution. By utilizing their current cash resources better they reduce the need for additional resources provided by the bank. This allows diminishing cash rent fee and insurance costs.

Meanwhile, retail outlets and service providers gain access to a specialized Cash Management^{iQ} user interface, where merchant is provided with option to order required currencies and denominations.



Integration possibilities



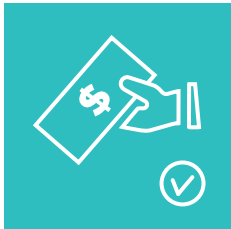
FOREIGN CURRENCY ACCOUNTING

The Cash Management^{iQ} system is integrable with the ATM currency exchange solution FCX^{iQ}. It allows accounting the number of currency exchange operations and the amounts of foreign cash-in-use, within the cash management system. Other functions include calculating the profitability of currency exchange, to recognize the best cash points to provide this service.



AUTOMATED REMOTE CASH COLLECTION

The solution can be used with software products for ATS (SmartSafe^{iQ}) or ADMs (Cash-In-Box^{iQ}) management. Therefore, Cash Management^{iQ} can be used to account automated cash collection in retail. It allows tracking the amounts of available cash for retailer and plan CIT services in an optimized way. Such integration also allows estimating the cash-in-use, allowing banks to better manage the risks associated with lack of cash.



CASH AVAILABILITY REPORTING

Integrating Cash Management^{iQ} with the service management system Service Desk^{iQ} allows accounting incidents associated with cash unavailability at a self-service terminal network. Such issues may occur for a number of reasons, including errors of service personnel or CIT staff. Calculated losses analysis experienced by the bank allows drawing up a reclamation to the service provider and demand compensation.



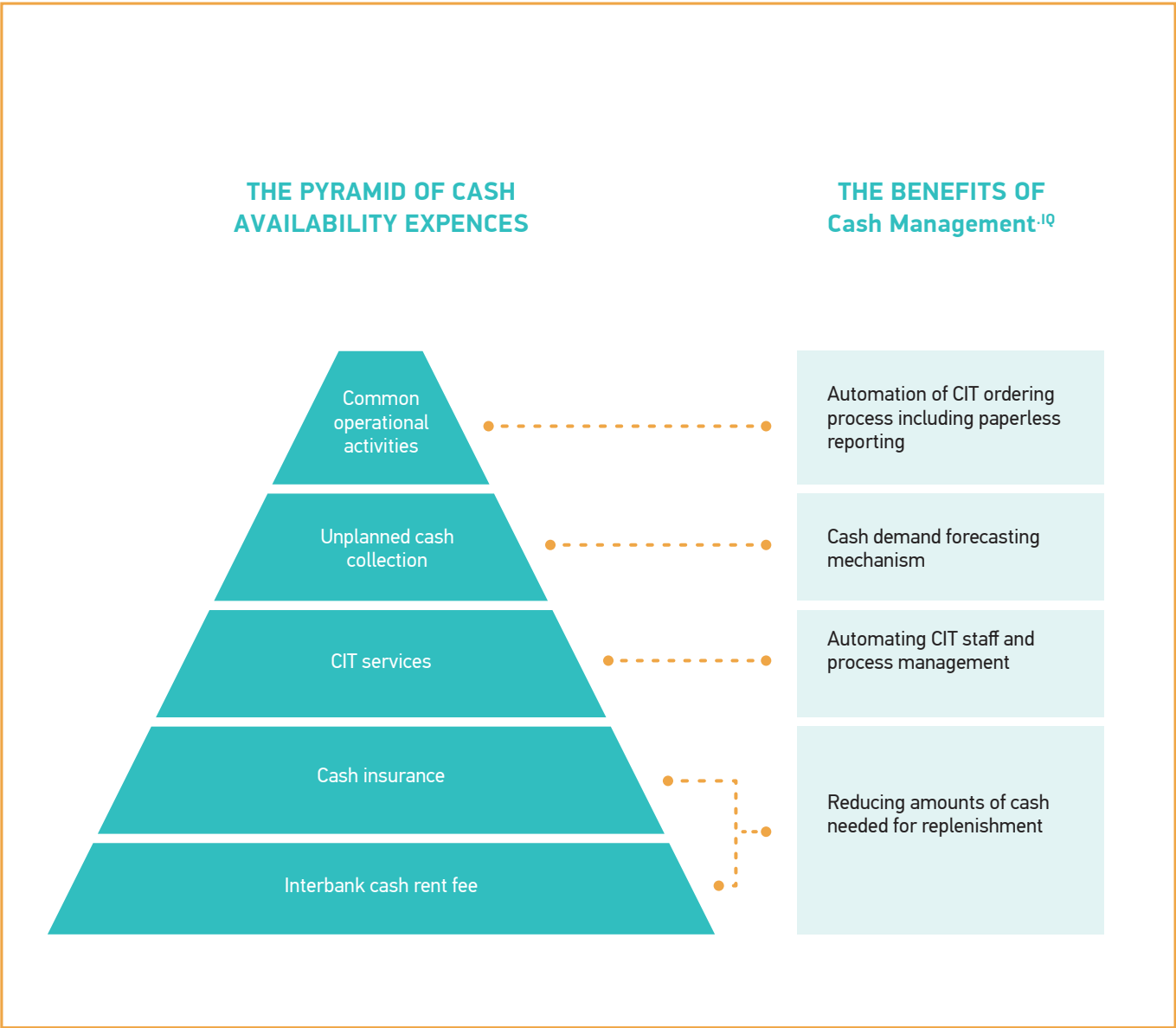
TRACKING OF MAINTENANCE AND CIT ACTIVITIES

SST access control functionality provides enhanced possibilities of tracking personnel presence at cash point. It includes access control for self-service terminals and restricted zones of bank branches or vaults. Such level of transparency significantly improves security of cash replenishment and cash collection operations, at the same time facilitating the resolution of conflicts associated with equipment maintenance. Personnel authentication can be performed via a remote electronic lock platform or a face recognition solution.

Cost reduction and ROI

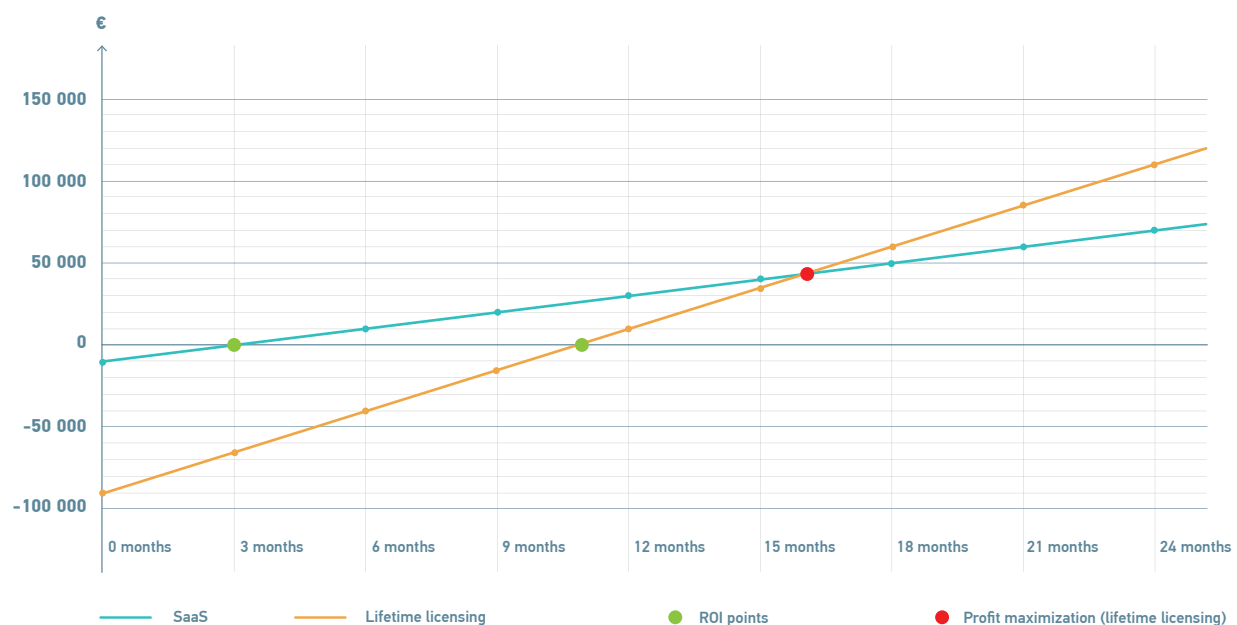
Deploying and utilizing the Cash Management^{iQ} system allows minimizing the costs of:

- CIT services due to optimized planning and reducing the number of unplanned operations.
- Cash replenishment due to optimized planning of cash resources and reducing of unused cash in ATMs, bank branches and vaults.



Depending on interbank cash rent fee, cost of cash insurance and expenses related to the workforce and transportation, Cash Management^{iQ} may save up to 500-1000 euro per single cash point annually.

The Cash Management^{iQ} solution may be acquired as a lifetime license or as a Software-as-a-Service model. The SaaS model provides a complete return of investment in 3-6 months.



Software lifespan	0 months	3 months	6 months	9 months	12 months	15 months	18 months	21 months	24 months
Software savings (€)	0	25 000	25 000	25 000	25 000	25 000	25 000	25 000	25 000
Implementation expenses (lifetime licensing) (€)	90 000	0	0	0	0	0	0	0	0
Implementation expenses (SaaS) (€)	10 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
Return of investments (lifetime licensing) (€)	-90 000	-65 000	-40 000	-15 000	+10 000	+35 000	+60 000	+85 000	+110 000
Return of investments (SaaS) (€)	-10 000	0	+10 000	+20 000	+30 000	+40 000	+50 000	+60 000	+70 000

These calculations are approximate, should not be considered as a commercial offer and reflect only general differences in the format of solution delivery.

Related products



The solution Cash-In Box^{iQ} 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.



The SmartSafe^{iQ} system allows managing ATMs and additional peripheral equipment, as well as automation of operations, related to the cash deposit and withdrawal in the bank offices, mail and other organizations.



FCX^{iQ} is the software solution allowing to carry out operations of currency exchange at Diebold Nixdorf ATMs. Furthermore, BS/2 offers expanding ATM functionality in multivendor environment.

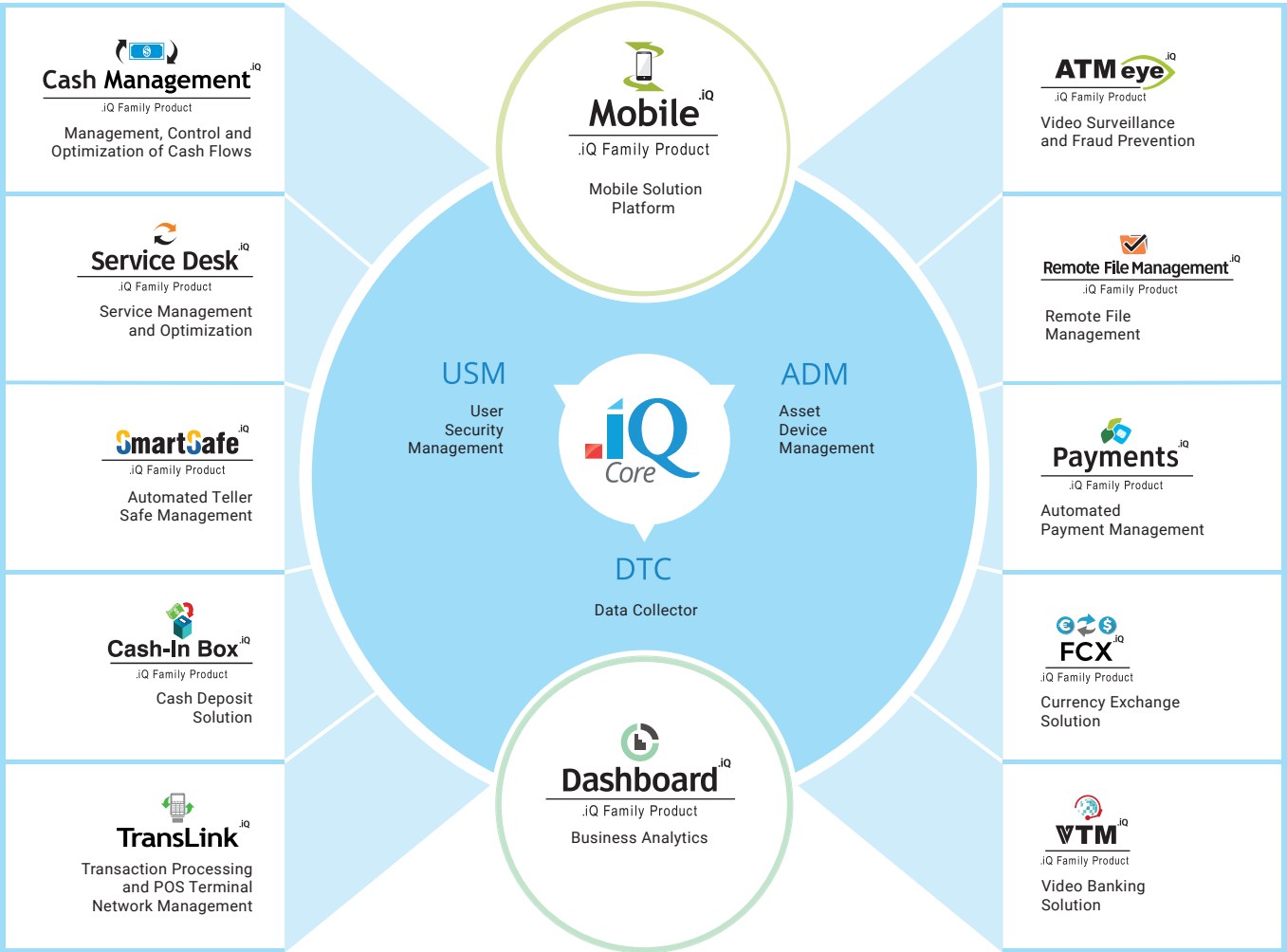


ATMeye^{iQ} is a comprehensive solution to improve the security level of self-service devices. It includes a video surveillance system with facial recognition functionality, as well as the sensors that react to any unlawful actions against terminals.



Payments^{iQ} is a software solution for arranging payments (utilities, taxes, fines), selling any types of electronic services (tickets, vouchers, etc.), automating retail banking and managing networks of self-service devices such as information or payment terminals and ATMs.

Product family of .iQ





JSC "PENKIŲ KONTINENTŲ BANKINĖS TECHNOLOGIJOS"
Kareiviu str. 2, Vilnius, LT-08248, Lithuania
E-mail: info@bs2.lt | Tel.: +370 5 266 45 95 | www.bs2.lt