



VISION MANAGEMENT SOLUTION

THE MOST ADVANCED MANAGEMENT SOLUTION ON THE MARKET TODAY, FUTURE-PROOFED TO SUPPORT CONTINUOUS GROWTH AND EVOLUTION IN THE RETAIL BANKING ENVIRONMENT.

TAKE OUT THE GUESSWORK ON PERFORMANCE MEASUREMENT

With the emergence of consumer experience as a major competitive differentiator for retail banks, careful measurement of your self-service channel performance is more important than ever. Selfservice devices have become the go-to solution for providing a more immediate and low cost channel for consumer service. With constant pressure to reduce costs and increase efficiency, self-service is a key area that requires careful management and analysis in order to maintain excellent consumer experience and drive increased revenues.

Measuring business performance, operational efficiency, and cost control in real time are table stake requirements and NCR Vision can do it all. With a complete end-to-end view of your network devices, Vision gives you the information and data you need to take more intelligent, decisive actions in the right areas, at the right times.



Vision turns data into information so you can make sure your self-service devices, such as ATMs, are meeting the needs of your consumers, all the time.

TABLE OF CONTENTS

- [1 VISION'S NEW INTERFACE IS DESIGNED BY REAL USER ACTIONS](#)
- [2 OFFER YOUR CONSUMERS A CONSISTENT EXPERIENCE ACROSS ALL OF YOUR SELF-SERVICE CHANNELS](#)
- [3 TURN YOUR MAINTENANCE PLAN INTO INTELLIGENT SERVICE MANAGEMENT](#)
- [4 VISION MANAGEMENT SOLUTION ARCHITECTURE](#)
- [5 VISION ARCHITECTURE](#)
- [6 VISION FEATURES](#)
- [7 EMPOWERED DECISIONS, POWERFUL RESULTS](#)

1. VISION'S NEW INTERFACE IS DESIGNED BY REAL USER ACTIONS

In retail banking, availability is essential to consumer loyalty, which is why device performance and expedient fault resolution are critical elements that support the success of this key metric.

Availability is about making sure the right transactions are offered to your consumers in the right place, at the right time. It is no longer good enough to just be available; you must be able to translate availability data into better business decisions, such as number of devices needed, location and additional service offers to improve future consumer interactions.

Vision will give you up to a 3% increase in ATM or device availability, through faster fault awareness and diagnosis.

Maintain amazing consumer experience by maximizing your device availability with custom thresholds and alerts, such as low cash balances or number of expected transactions, each according to how you want to manage your business. Vision's updated, actionable dashboards allow you to set your goal targets and monitor them in real-time.

You can be sure you're making the best possible management decisions at both strategic and tactical levels. NCR Vision is able to analyze and correlate multiple data inputs and presents the information you need for empowered decision-making.



3%
**Increased
availability**

**Go beyond improving operational
performance and begin to focus on
future consumer engagement.**

2. OFFER YOUR CONSUMERS A CONSISTENT EXPERIENCE ACROSS ALL OF YOUR SELF-SERVICE CHANNELS

NCR Vision can manage and monitor almost any piece of networked, multi-vendor equipment that can accommodate the NCR Vision agent. So, it's possible to monitor branch equipment like Teller Cash Recyclers, Interactive Teller machines, as well as ATMs.

Data showing branch activity can be fed into the Vision database and applied in a variety of ways. As an example, the data can be accessed and used to accurately measure the results of a marketing campaign designed to migrate a particular transaction type from teller to self-service device. Transaction volumes of each channel can be directly compared as frequently as data sources permit.

The new Vision Management Solution is a modular, platform based solution, allowing customers to plug in one or many modules for a completely customized solution. The collection of these individually licensed modules work together to provide a comprehensive management solution for your self-service network.

NCR Vision gathers and tracks all incident management data from the self-service channel, and presents it in a format that is actionable and allows for easier and smarter business decision making.



3. TURN YOUR MAINTENANCE PLAN INTO INTELLIGENT SERVICE MANAGEMENT

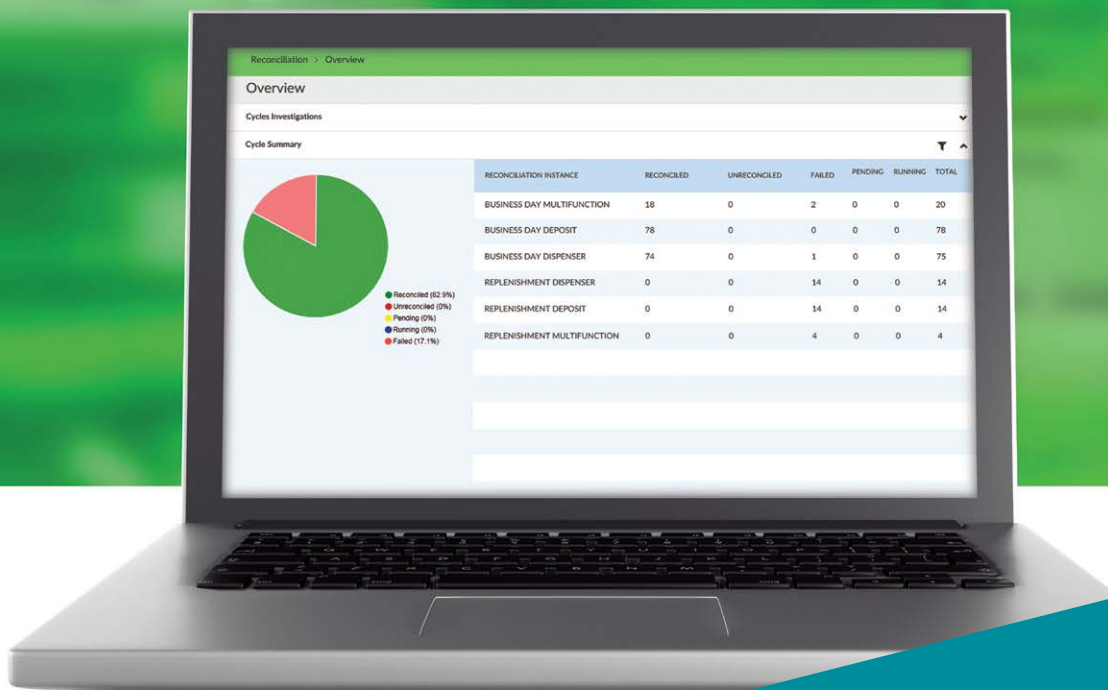
Speed of incident resolution is based on the effectiveness of the help desk and their coordination of servicers.

Vision can automate many help desk operations, passing fault and diagnosis information directly to servicers and instigating service dispatches.

Vision has the ability to issue automated remote commands to bring a device back into service without the need to send a technician on site. Financial institutions running this type of automated diagnosis gain significant benefits in cost and in exceeding SLAs, by freeing help

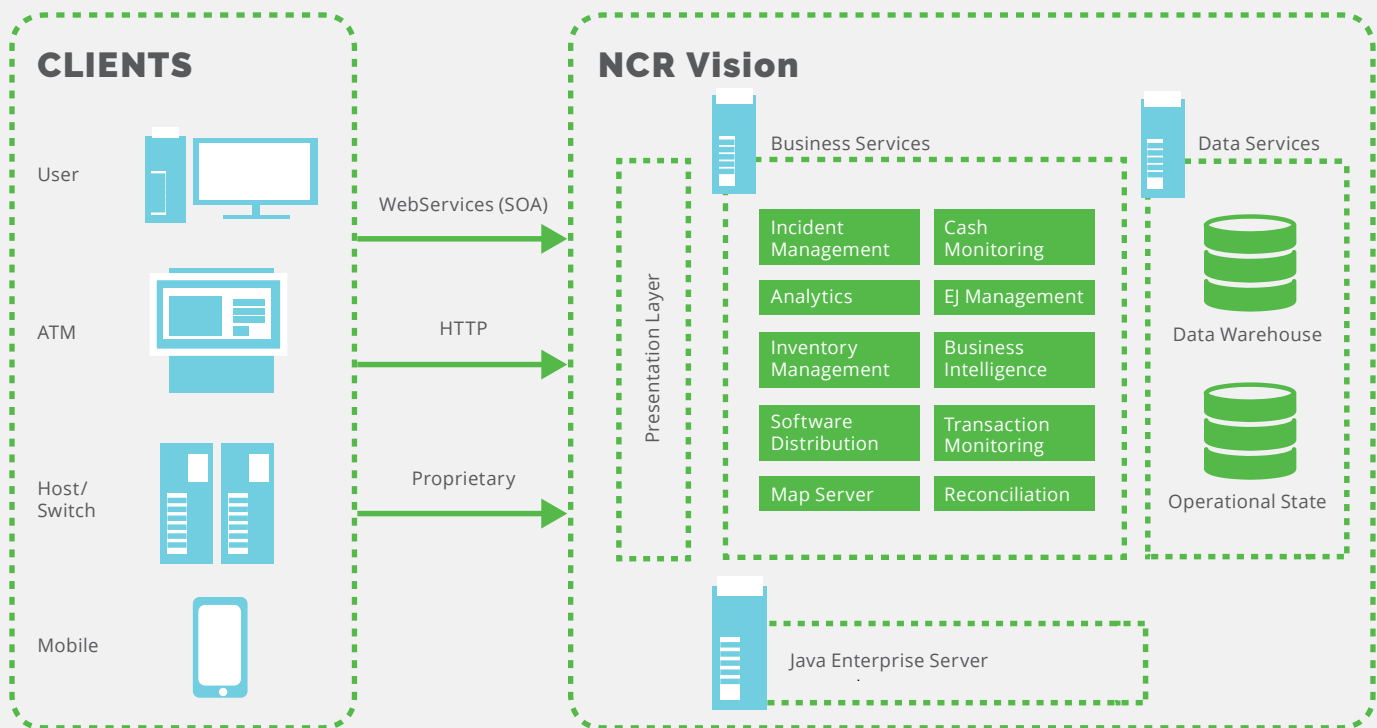
desk staff from simple, routine tasks and reducing the number of First Line Maintenance dispatches.

Remote control capabilities allow staff to operate the ATM without the need to be physically at the ATM. Reprising files, event logs, running processes and taking screen shots can all be achieved at remotely by support staff. Vision's Inventory Management and Software Distribution applications allow you to efficiently and accurately plan and administer upgrades and replacement strategies.



Vision helps turn your support teams into a proactive, efficient organization resulting in a more reliable, consistent consumer experience.

4. VISION MANAGEMENT SOLUTION ARCHITECTURE



5. VISION ARCHITECTURE

Vision is built on a new technology stack with scalable architecture to support various deployment methods such as on-premise or SaaS. The architecture of NCR Vision is designed to address almost any type of self-service device, so it is much more than a hardware management tool. Software agents, equipped to deal with a wide variety of devices and network infrastructures, are used to capture and transport device information to a server. Integration and analytics capabilities in the Vision server is then used to correlate all of this information for display and reporting.

Vision's new modular approach allows for customization of your network management needs so you can run your operations your way.

This approach utilizes a unified platform that gives organizations the ability to deploy and manage a variety

of self-service applications while leveraging common interfaces, data repositories and business activity monitoring toolsets. It delivers a consistent set of services and data that is the same for everyone.

NCR Vision architecture has been developed in such a way to allow easy extensibility and incorporation of new technologies. Integration with third party software vendors is much more flexible and collaborative.

NCR Vision provides unrivaled insight into what is really happening in the self-service network, and helps achieve significant advances in availability, consumer experience and business performance.

6. VISION FEATURES



Combined Business and Operational Data Analysis

Vision provides visibility into both operational data (availability, transaction counts) and business data (unserved customers, missed transactions). Vision's broad information spectrum provides you with the data you need to identify hidden relationships between different performance-influencing factors.



Real-time Updates of Key Performance Indicators (KPIs)

Vision provides visibility into the KPIs that gauge the daily success of your network operations. Vision's KPIs allow you to analyze your network's most important metrics at a moment's notice, thus enabling you to make strategic and tactical responses faster than ever before.



Geographic Data Correlation

Vision's availability map provides you with a geographic display of your network's assets. It allows you to quickly identify the state-of-health of individual assets at the street level. When the availability map is viewed in broader displays, it allows you to quickly track the aggregated health of your networked assets.



Inventory Management

The Inventory Management application provides a comprehensive listing of all devices, their main components right down to serial numbers and firmware revisions, software systems and PC Cores. Regulatory audits, maintenance planning and upgrades are now easier and faster than ever before.



High Performance Incident Management

Vision provides comprehensive incident management capabilities including robust automation, tracking and a full audit trail of the incident life cycle. The dashboard displays an at-a-glance view of the network's performance against KPIs, in real time.



Multivendor Capability

Vision's scope of support extends beyond the management of NCR ATMs. Vision supports assisted or self-service networks with a diverse range of device types, suppliers and network structures. It provides multi-vendor management of ATM's based upon CEN XFS standards. Vision uses software agents to gather data from multiple vendors' ATMs as well as branch devices, kiosks and other consumer-facing managed clients.



Cash Level Monitoring

Cash management teams can use this on an overhead display to show the network status in terms of which machines are low in cash or about to go out of cash, which deposit bins need emptied, etc. Executives or help desk administrators can use the map during the business day to assess how effective the staff and tools are at ensuring the ATMs never run out of cash.



Software Distribution

Software Distribution provides a comprehensive solution for in-house control of software applications and risk mitigation reporting to stop fraudulent activity.



Remote Commands

The remote commands functionality allows you to remotely browse ATM file system, view and capture customer facing ATM screens, place devices in and out of service and perform remote service and task management.



Dashboard Analytics

Enables real time comparisons of how transaction volumes are trending now on a given population of ATMs compared to how they did at a benchmark period of time. Users will see visual trending overlays on this dashboard of the different transaction types which will help to indicate which transaction types are being most utilized.



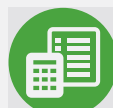
Transaction Monitoring

A critical mechanism for detecting abnormal transaction patterns for each device in question. Alerts provide immediate notice to the help desk know a device may be running low on cash earlier than expected or may have stopped performing transactions for some unknown reason.



Electronic Journal Management

A key module that provides the ability to search, and view electronic journal records in real-time, that are automatically uploaded from the devices.



Reconciliation

Reconcile system logs with Electronic Journals and multiple other data sources to determine unreconciled transactions and the source of customer disputes.

Vision enables you to improve your network management efficiency and performance, leading to lower operational costs, increased revenue and excellent consumer experience.

7. EMPOWERED DECISIONS, POWERFUL RESULTS

Decisive action

NCR Vision reduces time consuming technician site visits by enabling pre-emptive actions along with remote management and command functions. Precise handling increases availability, reduces operational costs and improves overall consumer experiences.

Easy to use—by anyone

Business managers, non-technical users as well as operations specialists will all find NCR Vision easy to use. It's user interface can be personalized to suit different job roles or individual users. Vision's modern user interface is designed with real user input and provides the experience the market expects of today's software applications.

Maximize availability and increase revenue

NCR Vision will help you maximize availability in the broadest sense, not just by detecting and managing, often automatically, the rapid resolution of device failures, but also by showing you which transactions are being demanded in which locations and which services are the most popular. This exposes any gaps in your coverage where new revenue could be earned.

Transform your consumers' experience

You can transform the quality of your consumers' experience and make it a positive competitive differentiator with NCR Vision. This is accomplished by achieving higher availability across your network and by being able to track consumers' choices and behavior in terms of transactions selected and successfully completed across multiple points of service.



CONTACT US AT NCR.COM TODAY

WHY NCR?

NCR Corporation (NYSE: NCR) is a leader in omni-channel solutions, turning everyday interactions with businesses into exceptional experiences. With its software, hardware, and portfolio of services, NCR enables nearly 700 million transactions daily across retail, financial, travel, hospitality, telecom and technology, and small business. NCR solutions run the everyday transactions that make your life easier.

NCR is headquartered in Duluth, Ga., with over 30,000 employees and does business in 180 countries. NCR is a trademark of NCR Corporation in the United States and other countries.

NCR continually improves products as new technologies and components become available. NCR, therefore, reserves the right to change specifications without prior notice.

All features, functions and operations described herein may not be marketed by NCR in all parts of the world. Consult your NCR representative or NCR office for the latest information.

NCR is a registered trademark of NCR Corporation in the United States and/or other countries. All brand and product names appearing in this document are trademarks, registered trademarks or service marks of their respective holders.

© 2017 NCR Corporation Patents Pending

17FIN8585-1217

ncr.com

