DIGITAL CONNECTED SERVICES

PROACTIVE SERVICES IN
THE AGE OF THE CONNECTED ENTERPRISE

An NCR white paper

NCR

1. THE NEW RULES

It's 5:20 on a busy Friday afternoon. You need to grab a few things at the grocery store, pick up the kids, and rush home to make dinner before heading out for a movie. Oh yeah, and there is the money you need to give to your niece for her birthday.

Unfortunately, everybody at the store has the same idea as you, and the checkout lines are long. Wouldn't it be great if you could quickly and securely check yourself out using a scannable code on your phone? Better yet, wouldn't it be great if you could pre-order the food and have it waiting at the store? Then, while you are walking out the door, send a money transfer to your niece from your mobile phone, and check your balance to make sure you have enough cash for your weekend plans.

This is not the future. This is today. This is how deeply the Internet of Things (IOT) is embedded in every fabric of our lives and how reliant we have become on it to be available whenever we need it and secure when we use it. And when one of those devices or transactions fails to operate properly, it can affect everything else in our busy lives.

Across the world of business services, the same rules apply.

Internet of Things (IOT)... Big Data... Robotic Process Automation (RPA)... Artificial Intelligence (AI). These buzzwords represent the concepts and strategies businesses will need to adopt to successfully and radically transform. As technology enables machines to get smarter and map more human processes and workflows, indispensable manual processes will become automated.

The sooner this happens, the better.

Consider an automated scenario practiced by leading services organizations, such as NCR. An indication of a potential problem comes from a digitally connected machine to the service organization. That information is digested by the system. Chatbots answer simple requests. A workflow gets triggered. A script gets run. A patch is remotely distributed. Ultimately, the problem is preempted and machine failure doesn't occur. The whole process ran autonomously and in real-time with no human involvement from the employee, the consumer, or the service provider.

This services delivery is enabled by monitoring service conditions, collecting relevant data connected to specific performance outcomes, and analyzing potential impacting events which are embedded into a secure framework.

It's no surprise that good things happen when service organizations minimize human dependencies on both sides of the interaction. Think better staff utilization, improved availability, enhanced security, and reduced costs across all digitally-connected transaction channels, both for consumers and businesses.

As IOT converges with the service industry, one thing is certain: adding an estimated 26 billion connected devices by 2020 will not only impact the field service industry—it will knock it off its feet.
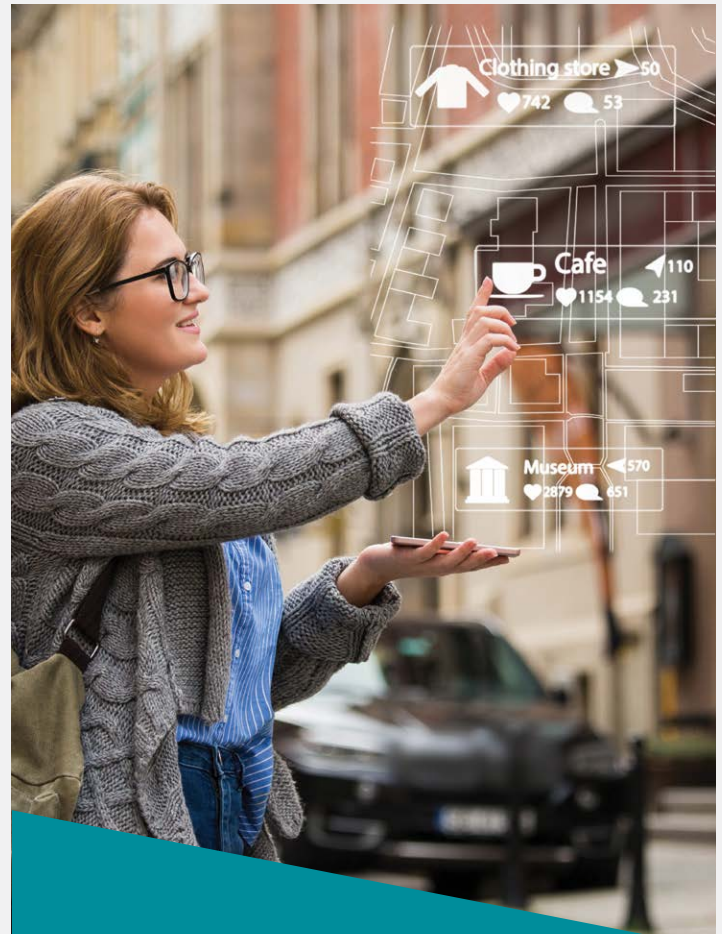
"Our bottom-up analysis for the applications we size estimates that the IoT has a total potential economic impact of $3.9 trillion to $11.1 trillion a year by 2025. At the top end, that level of value—including the consumer surplus—would be equivalent to about 11 percent of the world economy."

(McKinsey)

2. CONSUMER EXPECTATION OF AN OMNIPRESENT, ALWAYS-ON DIGITAL BUSINESS MODEL

This is where the future is headed—a holistic digital-connected device environment. It is table stakes for satisfying consumers who increasingly have expectations about seamless commerce. Today's omnichannel consumers are very comfortable with the role self-service devices (e.g. self-checkout register, mobile apps, check-in kiosks) play in their lives. Whether they walk into their local bank branch or retailer, check in at a hotel, or shop online, consumers expect an always on, always secure experience. They also expect infrastructure niceties such as functional Wi-Fi networks, comfortable temperatures, optimized lighting, and more—all of which are increasingly also connected to the digital environment.

84% of millennial customers have used a self-service portal for customer service.
(Microsoft)

64% of consumers have switched providers in at least one industry due to poor customer service.
(Accenture)

52% of companies are still using manual methods to handle field service.
(Salesforce)

3. THERE'S A QUANTIFIABLE BUSINESS PROPOSITION FOR EVERY MOMENT OF UPTIME AND DOWNTIME

The complexity inherent in an IOT device-centric environment often can produce more complex problems. There is a correlation between the proliferation of IoT devices and an increase in service incidents related to these devices, putting even more of a premium on availability than ever before.

There is an additional benefit to these data-rich, available, devices. Every day, each device generates significant amounts of data, from standard functioning and workload data, to component sensor data, to fault and error data, to consumer behavior data. Every device is unique, and the data they produce is also unique.

The collection and analysis of data from devices and transactions allow for a more holistic view of the customer experience. Every transaction tells a story about how devices and the network are performing, and what the customer has actually experienced, such as wait time or successful resolution through video chat.

Bringing all of these devices together provides rich data and insights, which are the "currency" for the future of managed services.

"Your business isn't a set of products and services that you provide digitally to consumers. Instead, Forrester recommends that you view your bank or credit union as a part of a consumer's personal value ecosystem that consumers can piece together based on their needs, wants, and desires."

4. MOVING TOWARD A FULLY AUTOMATED SERVICE AND RESPONSE SYSTEM

By leveraging the data each device generates, service companies can develop a better understanding of standard and non-standard performance behavior. This enables them to prepare for and execute service activity more efficiently, and in many instances, predict failure and proactively service devices while minimizing avoidable disruptions to the user experience.

When service organizations know exactly what devices are contained within the four walls of a branch, store, or restaurant, they can deliver data-driven processes and look at transactions "holistically" rather than just examining discrete devices to see whether or not they are functioning properly. Back-end processes like data analytics, remote monitoring, machine learning, and data visualization can work together to identify patterns and to trigger workflows in response to those patterns.

"As the IOT grows and matures, service will no longer be about just fixing machines or devices. Service will encompass systems such as business applications, enterprise resource planning (ERP) and customer relationship management (CRM), as well as data warehouses and, yes, even people."
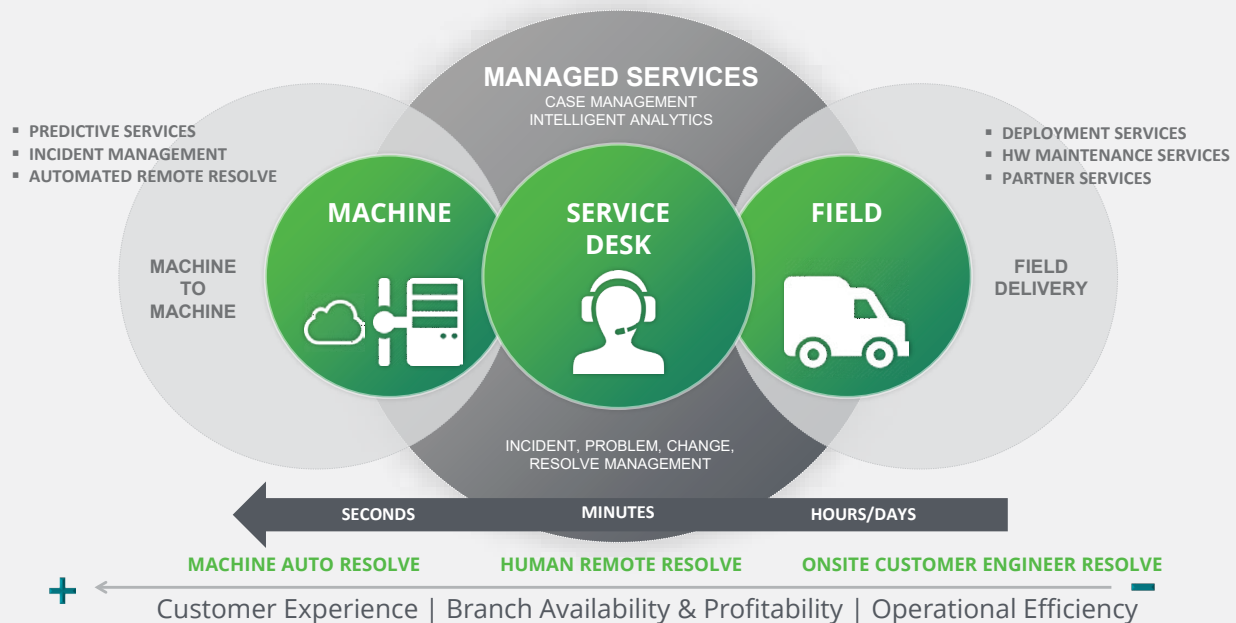
The benefits of these analytical results are real and measurable. Reliability. Predictability. Security. Availability. Optimal Total Cost of Ownership. Modernization of equipment and assets, CRM, ERP, and more cut across the organization and provide value for the entire C-suite.

"Data" has been quoted as the "new currency". This couldn't be further from the truth; however, how data is interpreted to bring business outcomes focused on improved store reliability, security, availability and many more performance metrics in order to yield a better organizational infrastructure to support the new digitally enabled and "always-on" shopper.

5. DIGITAL CONNECTED APPROACH TO SERVICE DELIVERY

In order to support a holistic service platform, NCR has designed a modular approach to process system optimization. This platform provides the insight into your business with four main areas of focus:

MONITOR

24x7 coverage for monitoring device status is a baseline for any high level service offer. Remote monitoring of a digital connected device environment allows NCR to detect faults, responsive service activity, and monitor business processes, security incidents and other events.

MAINTAIN

To "maintain" service providers need to perform more prognosis and diagnosis remotely and be proactive in addressing network issues before they happen. In the instance where a service technician is required, s/he is equipped with the right training, proper parts, and correct instructions to rectify the situation promptly and efficiently the first time s/he is dispatched.

"Maintain" also addresses critical services outcomes like predictive maintenance for hardware (including multi-vendor), sensors, mobile devices, network components, and end-user computing (EUC).

By knowing potential failures before they actually occur, NCR can schedule replacement of the failing component to coincide with off-peak periods, providing less disruption and failed customer interactions.

MANAGE

Higher-level actionable insight and knowledge is the hallmark of "Manage". This is achievable through a suite of carefully designed and executed ITIL-based (with emphasis on IT Service Management) set-up, problem and account management activities.

At any given moment, a digital-connected device environment is enabling hundreds or thousands of interactions. Being able to capture and analyze these interactions provides powerful data that can be used to improve profitability and better serve customers.

Managed Service providers combine varying data types to obtain higher level insights. When analyzed together, data can help reveal new patterns of usage that were not available before. For example, analyzing "stations" with multiple failures, data changes, and mobile disruptions, can have an impact to the customer experience.

SECURE

With news of financial breaches affecting almost every industry, it's no surprise how important it is to secure the physical and digital security of the framework environment using industry leading security infrastructure, tools, and best practices.

NCR brings a deeper level of security and defense by focusing threat mitigation with hardware security measures, as well as logical security practices like whitelisting, OS and application updates, image management and disk encryption. Paired with monitoring, maintaining, and managing the environment, managed security services reduce risk across multiple threat vectors and drive asset and data protection. They help with regulatory compliance and system availability.

With the proliferation of IoT devices, there is simply no easy way to keep up with security without a comprehensive solution in place. Research conducted by the Ponemon Institute and Absolute Software reveal a few startling truths:

- Enterprises are overwhelmed by endpoint alerts
- Insecure or off-line endpoints are difficult to detect
- A majority of companies cannot determine compliance for endpoint devices
- Volume and severity of malware-infected endpoints have increased over the past year
- Out-of-date or unpatched software is the most common endpoint security gap

6. GETTING BACK TO YOUR CORE BUSINESS

For a world that never stops, Digital Connected Services are NCR's latest Retail offer that allows you to:

- Build a better customer relationship
- Improve staff productivity and store efficiencies
- Enable marketing activities to drive store profitability, leading to a strengthened store brand.

Organizations that move beyond buzzwords and focus on the execution of a Digital Connected Services framework will redefine what service means and how it's delivered, paving the way for the next level of omni-channel commerce. Moving towards an omni-channel commerce model requires a paradigm shift to service delivery leveraging technology drivers such as IOT, Big Data, AI and RPA.

Fifty-five percent of endpoints are vulnerable to a data breach involving sensitive or confidential data.
(Ponemon and Absolute)

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 Atlanta, 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.