

**NCR PERSPECTIVE**

# The future is happening – fast

*By Paul Race, Director of Financial Industry Communications, NCR*

**Focusing on technology in isolation isn't a reliable guide of future success**

Consumers' appetite for new technology is seemingly insatiable. Whether it's the latest smartphone, portable computing device or social networking platform, there are regular press reports on the newest technology phenomenon that is transforming the way we communicate, work and play.

What does this mean for retail banks? Where should we place our 'technology bets'? The history of innovation is littered with examples of technologies that promised revolutionary change but failed to deliver. Focusing on technology in isolation isn't a reliable guide of future success. Rather it is crucial to understand and integrate changing consumer trends with emerging technologies.

Trends such as time starvation, individualism, connectivity and tribalism all provide pointers for technology development. Ultimately, does a particular technology address an emerging consumer need? Does it make something simpler, faster, more convenient? Will it help your bank deliver a differentiated experience that your customers value?

This is the challenge being addressed by NCR Labs, NCR's advanced development group. A multi-disciplinary team of hardware and software engineers, technologists, user interaction designers and even psychologists, the group is tasked with building visions of the future that explore emerging, potentially disruptive technologies and the roles they could play in how consumers interact and transact with businesses across multiple industries.

## **Looking beyond the technology**

One such technology is Near Field Communication (NFC), which is set to transform consumers' lives. You may be aware of the various trials of this technology, but have you considered the broader implications of widespread adoption? How will it integrate existing self-service, online and mobile channels?

From the consumer perspective, NFC will provide fast, convenient, secure proximity transactions using

a familiar, trusted device. The introduction of NFC will make the vision of an e-wallet within a cell phone a reality. Equally, consumers will be able to pre-stage ATM transactions, which will reduce queuing time, and 'smart posters' in branches will be able to transfer product information to customers' phones for viewing later.

From the business side, the threat of card skimming and cloning – fraud enabled by the use of magnetic stripes – is removed by the transition to NFC contactless payments. Furthermore, issuers will be relieved of the cost of managing a card base.

NFC will give consumers levels of power and convenience never seen before. It will also provide innovative service providers with opportunities to satisfy the needs of the next generation of customers – combining public and private channels to provide services that are meaningful and valuable. Beyond banking, NFC will transform the way we travel and shop, with the cell phone becoming the boarding pass at the airport and replacing traditional plastic cards at points of sale.

NFC is nearer than you might think. All major handset providers have said they will move to NFC and although initial costs may seem high, existing handsets can also be upgraded using NFC-enabled micro SD cards.

## **Innovating in service delivery**

Service delivery is another area benefiting from self-service innovation – and a key component is to improve *availability*. An ATM on a high street may be available for more than 98% of the time, but if it is down for an hour on a Saturday night the implications for customers are far greater than if this occurs at six o'clock the following morning.

The NCR Labs team is working on self-learning software algorithms to take predictive maintenance to the next level. Modelled on the human body's reaction to infection, AIS (Artificial Immune System) algorithms recognise patterns of status codes from the various modules within the ATM and enable management systems to predict a likely failure of a device before it happens. As the name suggests,

**NFC will give consumers levels of power and convenience never seen before**

these algorithms 'learn' over time, providing ever more sophisticated and accurate predictions of service interruption.

Proactive, intelligent, predictive service management allows banks to anticipate service needs and challenges before they arise, and address them at a time that will minimise the impact on customers.

### Improving levels of convenience

Industry leaders recognise the importance of customer service in attracting and retaining customers. As people adopt increasingly busy, mobile lifestyles, their time becomes more precious. The introduction of intelligent deposit solutions has enabled individuals and businesses to use the self-service channel to carry out previously time-consuming transactions more easily and quickly.

NCR recently introduced a new Scalable Deposit Module that reduces transaction time by around 50%. Users can deposit up to fifty cheques and/or notes through the same slot, a feature that significantly improves service levels.

These improvements are made possible by the integration of several unique technologies – from engineering innovations that reliably 'de-skew' both currency (typically made of soft paper) and cheques (typically made of stiffer paper), to software algorithms that recognise the difference between cheques and currency in a split second, in a single pass through the transport.

### Learning from others

Innovation isn't necessarily about being first. It can be about being first in your market or your industry. NCR's APTRA™ Self-Scheduler is a solution adapted from the company's work in the healthcare sector that facilitates cross-channel interactions. As consumers increasingly become multi-channel users, equally at home using self-service, the internet, mobile technology or indeed a branch, there is a need to consider how the various channels can interact with each other to enable efficient transactions that meet customer needs and enhance retention.

APTRA Self-Scheduler enables consumers to book an appointment at a time and branch convenient to them using online banking. They receive confirmation via e-mail and an SMS reminder on the day of the appointment. When the customer arrives at the branch and logs their presence at a self-service kiosk, a targeted promotional campaign can be delivered

via digital signage in the waiting area.

It has been proven to significantly reduce customer 'no shows', improving branch staff productivity and driving revenue growth by increasing product sales.

### Your guide to the future

There's much more to come. Business to Business (B2B) and Business to Consumer (B2C) thinking is no longer a strategy for growth. Going forward all industries, including banks, need to recognise we're living in a Consumer to Business (C2B) world. This is a world where we put the customer at the centre and respond to their presence – where they are, their preferences, how they want to interact. According to Buzzback Research 2010, 88% of consumers say they are more likely to choose a company that enables them to personalise interactions across multiple channels.

*"Self-service, online, and mobile technologies have revolutionised the way we live"* explains Mark Grossi, Vice President of NCR Labs. *"Web 2.0, on demand content, cloud-based services and social networking will extend the range of services and the speed of introduction."*

The challenge, as always, is to stay ahead of the game. NCR started working on web-based ATMs 10 years ago. At the time people questioned whether this was the way forward. As Grossi points out, however, this is part of the challenge he faces, *"Innovation is about creating value in anticipation of future demand. When NCR Labs first exposes new concepts, some people are highly sceptical, but part of our role is to challenge current thinking, to identify the differentiated solutions of tomorrow."*

As well as being prepared for the wholesale adoption of NFC, NCR is now challenging banks to consider the opportunities provided by online virtual worlds. *"Five years from now we could be looking at a very different type of browser – the interface we use today may become a thing of the past,"* says Grossi. *"Online banking is set to change, with richer more immersive experiences."*

With the rapid take up of new technology, the challenge for service providers has never been greater and the window of opportunity never smaller for those who wish to differentiate themselves by using technology to provide outstanding customer experiences. ■

*If you would like more information on the innovation being driven by NCR Labs, e-mail paul.race@ncr.com.*

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