

# Empowering the millennial consumer

## Key trends driving the future of self-service

Are you aware of the tremendous technological and social changes that will transform the way you do business? This primer from the head of NCR Labs, the company's test bed for future innovation, will help you tap into the self-service trends, driven by today's young consumers, that will have a huge impact on the future of Canadian payments. **BY MARK GROSSI**

Imagine a world where information is not only at your fingertips, it's all around you – a world where advertising posters are able to identify you and offer information, advice and discounts tailored to your unique needs; a world where the surface of a counter or desk can provide you with product information and the services of your own personal virtual assistant; a world where your smart phone – if it's still called that – will be an amazing digital passe-partout, containing personal documents such as your health card or driver's license, while allowing you instant access to your financial information and enabling you to pay for whatever you'd like, wherever you are, with a single touch or tap. While these things may sound like science fiction they are rapidly becoming science fact. Such things as Near Field Communication (NFC), cloud computing, 3D technology, and the newest generation of bar codes are beginning to impact the way we conduct our lives and do business around the world. The transformation we've seen in marketplaces over the past few decades will pale in comparison to the changes that these and other new technologies will usher in.

The convergence of Internet, point of service and mobile technologies is creating a major consumer shift toward self-service as the preferred way to interact with businesses. In all industries, businesses are adopting some sort of multi-channel strategy based on self-service, and new business models are emerging that are entirely self-service. This change is being driven by consumer demand for speed, convenience, and endless choice, and the demands of business for cost, speed, and competitive advantage to meet revenue/sales objectives.

How is this going to change the payments industry? Here is my snapshot of some of the leading trends paving the way for the future.

### Rise of the empowered digital consumer

At NCR Labs our work is driven by consumer trends. Some of the most significant ones shaping the payments industry are instant gratification, connectivity, and tribalism. These trends have created a new generation of consumer, one who has grown up immersed in sophisticated technology. Younger consumers, known as millennials or digital natives, only know a world powered by the Internet – one that offers instant gratification and endless choice. They want service to be ubiquitous and they are drawn to businesses that understand their needs and give them what they want, when they want.

This new consumer is helping drive a fundamental shift in Canada and around the world. The traditional Business to Consumer (B2C) business model has switched to Consumer to Business (C2B), placing consumers in the driver's seat, dictating the terms. Average consumers have more technology at their fingertips than their favourite retailer or bank. When they choose to spend their money, they turn to the sophisticated technology at their disposal to help guide them in making the best decision at the best price. They're going online to research products and services, sharing information with their friends on Facebook, or Tweeting their every thought.

Business has provided the new consumers with a wide variety of options, and they are deciding how and where they want to interact with business – because they can. If they're in a shopping mall, surfing the net at home, using a kiosk, navigating with a GPS device – they want to decide how they want to do business, and they want to have the same seamless experience no matter where they are. They may be out there in cyberspace but they still want a relationship with their favourite businesses. Their concept of loyalty has changed. They are looking for more sophisticated customized service. They want business to leverage the technology at their

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disposal to deliver a unique experience at the best price/service with their needs in mind.

This empowered consumer is driving the need for unlimited bandwidth to power all the things they want to do with technology. Cloud computing is continuing to evolve and roll out across business. It's like a power grid that offers scalable and inexpensive IT services and resources to companies when they need it. It's driving a revolution in computing. Communications and computing are also converging with new IP and data services. It will turn our world into an entirely wireless place with no restrictions on getting to your information.

### **The magic bullet**

Most of us can't live without the device we carry around with us, whether it's our Blackberry, iPhone or now the tablet. Whatever our device looks like today, it's likely to transform into something similar in the future but with much more power and functionality.

NFC is a fascinating technology that allows two devices to communicate using short-range high-frequency wireless communication. We've been waiting for NFC to enter the mainstream and we foresee widespread adoption in the next two years. Currently more than 500 million mobile devices around the world are NFC integrated, and with native support in Android and iPad, it's set to grow dramatically. It is the magic bullet that will turn the latest configuration of the smart phone into a mobile wallet or personal agent, allowing consumers to tap their device on another device or on an NFC reader to make payments wherever they like, whether it's at the bank, in a restaurant or at home on their computer or television. NFC will provide access to unlimited information to anything that has an NFC reader.

Imagine a trip downtown to meet a friend for a concert. On entering the subway, you click your device on the NFC reader at the turnstile to pay for your fare.

Need some reading material for the ride? No problem - simply tap your device at the NFC reader at the newsstand to pay for your magazine. As you stand on the platform waiting for your train, you spot an interactive poster from a footwear designer you like. Deciding to get more information, you tap your device on the poster's QR (Quick Response) barcode to see what styles are available to you, based on your shoe size. As you leave the subway, you tap your device at an ATM to transfer cash onto your smart phone. Then meeting your friend, you tap his device to pay him for the concert ticket he bought you.

### **The virtual service centre**

The tablet has changed the average consumer's concept of computing. The latest surface technology offers an immersive computing environment where consumers can receive instant information just by tapping their device on the surface. This type of technology offers multi-touch/gesture, visual and audio feedback – and it could transform the branch, ATM or kiosk into a virtual service centre. For instance, surface technology in a branch could allow consumers to tap their NFC device on a financial product they're interested in. It would auto-populate the appropriate areas of the application, and could offer personal one-on-one service, perhaps via a personal virtual assistant who would know the customer, understand her needs and guide her as she completes the transaction.

NCR is also exploring removing the screen from the kiosk or ATM to allow the information to be projected onto the surface using a mini-projector. Our human memory is almost limitless for pictures. Security could also be enhanced via a visual PIN like your favorite photo, replacing the current alphanumeric option that we have today.

### **Next generation social media**

We are connected today on an almost incomprehensible scale. This move towards virtual communities is driven by a

social macro trend called tribalism that is changing the face of global business.

To illustrate the speed of adoption, let's take Facebook as an example. If Facebook were a country, it would be the third largest in the world, ranked behind China and India. It took two years for Facebook to reach an audience of 50 million. By comparison it took television 13 years to reach the same size audience.

The latest smartphones are now being designed with special buttons for social media integration to make it even easier to keep in touch with your Facebook network, Twitter feeds, etc. This trend will only continue to evolve and be integrated with the latest consumer technology such as augmented reality and GPS.

### **The impact on your business**

How do you ensure your business keeps up with the pace of technological change without investing unwisely? As you look at new technology there are a number of questions you should consider.

Firstly, will it solve a real issue, perhaps by reducing cost or improving customer service? If successfully implemented, will it fit with your strategic vision and business needs?

Secondly, and perhaps even more important, are the consumer considerations. Does it allow customers to do something to enhance their experience – make it easier, simpler, more intuitive?

Finally, is the technology mature enough to warrant investment? Is it robust? Has it been proven in applications of similar size and complexity, or is it still in the initial hype phase?

If you get these three dimensions to line up, you are much more likely to be successful and continue to offer the most exciting and meaningful innovation to your customers. **PB**

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*Mark Grossi is the vice president of NCR Labs, which is based in Scotland and supported by satellite labs in the U.S., China, Hong Kong and the Philippines. NCR Labs is a test tube for future ideas and a catalyst for innovation throughout the company. It identifies, incubates and applies disruptive and emerging technologies with an eye towards their eventual use in the creation of innovative business-relevant solutions. NCR Labs identifies possible solutions that will be needed by the marketplace three to five years from now.*