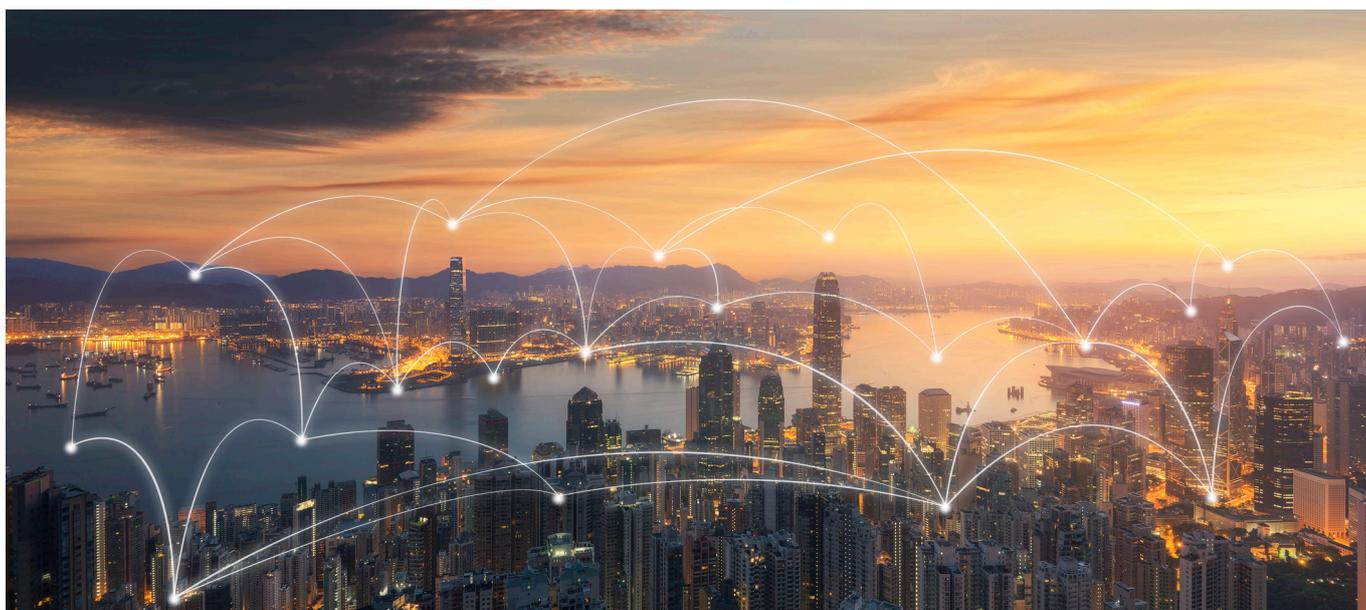The Customer Experience and Insight (CXI) Research Group presents

Privacy in practice
Leveraging big data post-GDPR

Privacy in practice: leveraging big data post-GDPR

Each year new technologies or trends are set to disrupt the sector, but this time those technologies have set in motion major policy changes that are forcing industry to rethink practice on a global scale.

By Associate Professor Sean Sands

Retail seems to attract disruption. A few years ago it was mobile, and virtual reality is poised to take off in the near future. Meanwhile, we are likely still at the beginning of big data and machine learning's period of disruption. Put simply, big data is exponentially increasing managers' ability to measure – and hence know – every facet of their business, as well as to directly translate that knowledge into improved decision-making and performance.[1]

Consider a department store like Myer, which has been on this journey for some time. A manager in a store or at the national support office can always track which items sell and which do not; the Myer loyalty program can be used to identify which customers have purchased which items, segmenting them accordingly; and, once online stores opened, data could be collected on which items customers viewed, which carts were abandoned, and which campaigns received the best clickthrough rate.

Eventually, algorithms were developed which could learn from and adapt to customer behavior, making intelligent recommendations to customers about products they had a higher probability of buying based on the information known about the customer. We have all heard the story of how Target supposedly exposed a teen girl's pregnancy through big data, predictive modelling and targeted communications.[2]

Regardless of whether the Target story is true, retailers are collecting a lot of data from their customers. According to some estimates, Walmart collects around 2.5 petabytes (1 petabyte = 1,000,000 gigabytes) of information *every hour* about transactions, customer behaviour, and devices.[3] And with voice technology becoming mainstream as devices like the Amazon Echo, Google Home, and Apple HomePod connect consumers to retailers at the point of decision within their homes, cars, and even hotel rooms,[4] the amount of data potentially available for collection is only growing. In fact, Gartner estimated that 8.4 billion IoT devices would be connected in 2017, with the rise in the 'IIoT' or 'Industrial Internet of Things' driving a 28 per cent increase in IoT security spending in 2018, up to US$1.5 billion.[5]

The day is not too distant when online and offline data could provide retailers with a complete view of the customer – arguably too complete, in fact. While the lure of *big* data is tempting, it is *better* data that retailers should be focusing on gathering; at the same time, they must avoid overstepping the boundaries of consumer tolerance and thus undermining trust, which is currently 'in tumult' across Australian institutions.[6]

BIG DATA
BENEFITS AND BEST PRACTICE

Big data is being generated through many sources, and several can be particularly useful for retailers. Internet traffic (e.g., clickstreams), transactions (in-store and online), user-generated content (e.g., social media), and loyalty data can all help retailers gain and retain shoppers. Other forms of data provide operational and logistical advantages.

For example, Tesco is integrating data from in-store sensors to monitor the temperatures of fridges and freezers across their network. Every machine is monitored centrally and predictive algorithms can be used to determine when a particular unit will need servicing, ultimately reducing operating costs.[7]

With the many sources of data available, the problem becomes *collecting the right data* and *using it in the right way*. Doing so

can drive significant gains in customer experience. Think about Netflix as an example: with over 100 million subscribers, Netflix has a wealth of data available to improve the customer experience. They use this data to make recommendations to customers about which programs will be of interest using a segmentation strategy based on 'taste clusters'.[8] In fact, some figures suggest the Netflix recommendation system drives 80 per cent of the content watched on the platform, allowing the company to drastically reduce its promotion costs.[9]

NOT JUST TRUST: POLICY AND PRACTICE IN TUMULT

Not all companies have Netflix's positive reputation when it comes to predictive analytics based on big data. In addition to the Target example cited earlier, Orbitz has generated negative publicity through its practice of showing higher-priced hotels to customer searches originating from Apple computers.[10] Meanwhile, in the new 'smart' landscape, products such as the Amazon Echo are raising concerns due to technical glitches resulting in the unexpected recording and sharing of confidential consumer data.[11] While the inherent privacy breach in such examples is damaging enough when it comes to consumer trust, there is also a widespread concern about companies selling data in the wake of this year's mainstream attention to the Cambridge Analytica scandal, which has been called a 'human rights problem'.[12]

Consumers seem to agree, with a recent sociological study finding that half (57 per cent) of Australian consumers are concerned about their online privacy being violated by corporations.[13] Most of them (78 per cent) want to know what social media companies do with their data and many of them (67 per cent) actively try to protect their online privacy, with women being particularly concerned. Nonetheless, the majority of consumers continue to feel powerless in this regard, with only 38 per cent believing they actually have control over their online privacy.[13]

While clear opt-out policies have long been the standard solution, the European Union has recently gone much further in attempting to address this problem with the General Data Protection Regulation (GDPR), instituted in May 2018. This regulation applies to every retailer who has customers within the European Union. Penalties for violating it are steep – up to 4 per cent of the offending company's annual global turnover, with a cap of €20 million. Yet even if you don't do business within the EU right now, it's important to understand the basics of this regulation. The GDPR is just the beginning of global data regulation and wide-ranging consumer data privacy laws. Once other countries see its implementation, it will likely become the model for more regulations across the globe.

ADJUSTING TO THE NEW PRIVACY LANDSCAPE

There are some very common practices retailers need to revise to comply with the GDPR's principles and requirements, including:

1. **Opt-in consent.** It's common practice to add new customer email addresses to your email marketing lists unless the customer opts out during checkout, but that will no longer be legal for EU customers. Instead, you will have to get *explicit consent* from consumers, and this consent must relate to a *specific purpose*.[14]

2. **Clear communication.** Customers must be given easy and direct access to information about how their data will be used when they opt in. Essentially, whenever you give a customer the opportunity to opt in, you must provide (e.g., link to) an easy-to-understand data and privacy policy. This means you may need to get a *plain language* communications specialist to review your current privacy policy to ensure compliance.[15]

3. **Customer control**. All data subjects have the right to access their data, as well as the so-called 'right to be forgotten'. This means that you must erase all data about a customer upon their request or if you no longer have a legal *right to* or *operational need* for the data to provide services in line with the original purpose for which the data was collected.[16] Customers also have the right to transfer their data or receive a copy of it under the 'right to data portability'.[17]

4. **Supply-chain management**. One of the most cumbersome aspects of the GDPR may relate to *third-party services* and data. For online retailers in particular, it is common to rely on third-party services to collect, organise, interpret, and use the data we collect (e.g., A/B testing, target marketing, demographic profiling, geographic data, etc.). To comply with the mandates of the GDPR, you must fully understand what data each service collects and how they use it. You must also be able to collect, transfer and delete all customer data on request in line with the rights outlined above.[18]

WHEN THE DUST SETTLES

The future of privacy may remain tumultuous for some time to come, as the consumer trust crisis and GDPR kick off a new wave of innovation. One possible vision for a post-GDPR privacy landscape involves blockchain, which looks like a promising avenue for returning the power of customer data to the hands of the customer while also potentially improving both data security and analytic capabilities. Whether or not this potential comes to pass, however, it is certain that retailers will need to carefully manage the realities of collecting and using customer data in the post-GDPR world in order to continue to benefit from the strategic and operational advantages that big data offers without damaging consumer trust.

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Sean is Co-director of CXI and Associate Professor of Marketing at Swinburne Business School.

Sean has delivered seminars globally on retail innovation, design thinking and customer experience strategies. He has assisted brands in mapping customer experiences and developing an understanding of the customer journey, expectations, needs and desires. Sean frequently presents at industry conferences on the future of retail and consumer behaviour. His research expertise includes strategy, service design, customer experience design, advanced research methods, new product development, pricing research, and market segmentation.

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About CXI Research Group

The Customer Experience and Insight (CXI) Research Group is part of Swinburne Business School.

CXI is a full-service research group that conducts leading-edge research centred on experience to build customer-led strategy and innovation.

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