

What will data do next?



From gleaning a deeply focused view of customer behaviour to helping us save energy, data is making a difference to our daily lives. **Ada Guan**, CEO of Rich Data Corporation shares how data and artificial intelligence (AI) are on track to make a significant impact this year.

We are living in an era defined by data and this year will bring about an explosion of new AI capabilities as businesses across every sector ask what deep learning and hybrid learning models can deliver in terms of tangible consumer and business benefits.

Behavioural analysis

For a long time, retailers could only observe customer behaviour from afar; attempting to create a profile of shoppers based on sales and stock data. This year will bring about a “telescope to microscope” shift in how businesses use data to analyse customer behaviour, as new technology allows businesses to get up-close-and-personal with their customers.

For example, a retailer that is losing buyers but gaining browsers can understand their shoppers more deeply by leveraging mobile movement data collected from store visitors who opt into a Wi-Fi network. With new learnings around how customers move through the store and interact with certain products, shops can figure out how to arrange their products in a specific way or train staff on new ways to interact with shoppers and convert browsing to buying.

Getting close to customers will become easier and easier as AI advances in its ability to continuously learn from large sets of behavioural data, both past and present, to create a more accurate picture of each customer and respond accordingly. As behavioural analysis evolves to encompass emotional AI as well, companies will get even more ways to provide a personalised shopping experience with service that anticipates customers’ every need.

Smart home

From voice-controlled personal assistants like the Amazon Echo to intelligent

refrigerators that can order milk, the promise of the smart home has largely been in answer to consumer needs for comfort and convenience — until now. This year, we can expect a larger focus on how smart home technology, rooted in data and the Internet of Things (IoT), can drive Asia-Pacific’s goal to be more energy-efficient, particularly in light of China’s exciting moves to become a global leader in renewable technology.

When data enables us to understand patterns of living, energy savings are simple to achieve. A smart thermostat that knows the weather and what time you’ll be home, as well as how likely a resident is to turn the heat up or down depending on the season, time of day and other conditions, can automatically adjust to its most energy-efficient settings. A smart refrigerator or washing machine might monitor its own power consumption to recommend more eco-friendly habits or issue an alert when it’s time to buy a replacement.

AI will be key to enhancing the value that IoT can bring to our lives. Focused AI processing power will no

doubt experience exponential growth this year, off the back of record-breaking AI chip investments last year; which will in turn enable us to process greater and greater amounts of sensor and usage data collected from smart devices more quickly and increase what it can learn from observing and analysing patterns. Smarter, AI-driven communication between these sensors and devices will in turn create the foundation of a distributed mind network that’s ready to support households and utility companies in being kinder to the environment.

As AI and machine learning continue to impact every area of business in the coming year and far beyond, companies that want to capitalise on data must keep in mind three key points — be imaginative in asking which data and patterns can reveal new insight; source data telescopically and microscopically, from inside and outside the business; and always assume that data can do more.

Only then can enterprises be ready to make the most of the next wave of data possibilities. **ra**



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