AI in the retail sector: the South African conundrum

Artificial intelligence is being successfully deployed in the global retail sector, but it needs to be used carefully in the South African context, taking into account specific market characteristics

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Developments in the technology sector have shown how information can be analysed and used to create value for those who can draw insights from it. One of these innovations is the growing deployment of artificial intelligence (AI) in the retail sector.

The potential benefits of using AI in the retail sector cannot be overstated. Globally, retailers have been able to use it to analyse consumer purchasing behaviour to better understand their market and improve their offering to consumers. Whether the same benefits can be realised in the South African retail sector depends on the peculiarities of the South African consumer.

Data accuracy

To deliver actionable insights, AI needs access to vast amounts of data. This depends on having a high level of connectivity among consumers. Since more than 30% of the South African population does not have access to the internet, it is uncertain whether retailers would be able to use AI to make accurate assessments of purchasing patterns, preferences and similar aspects of consumer behaviour. Lack of data may also negatively impact a retailer's ability to tap into new or under-serviced segments of society.

In addition, adopting AI in the retail sector will require large volumes of 'clean' data. The ability to implement insights gained from AI depends on whether the machine learning software has access to quality data. Incomplete or duplicate data can be wasteful and result in limited returns when used to, for example, roll out a campaign. Bad data can also contain inaccuracies or inconsistencies which can limit the value of the information and could result in decisions being made based on incorrect assumptions.

The South African population is comprised of various social, ethnic and racial groups. In the context of AI, any algorithm used to assess inform-ation must have sufficient amounts of clean data for analysis.

The diversity of the population creates a challenge in this regard, as there may not be sufficient data to create informed profiles on consumer habits for a particular type of consumer. The question for a retailer in this context is whether the particular AI tool it intends to deploy can provide the type of data which it can use to gain actionable insights for its business.

" It is important for retailers deploying AI to ensure that the data used for analytics is free from bias, errors, and other bad components. This should be assessed during the planning phase. **"**

Understanding the potential risk and shortfalls of the technology before implementation is central to ensuring a successful and meaningful deployment of AI.

Take-up challenge
Another factor relevant to the success of any AI deployed in the retail sector is how widely consumers use the various platforms that allow the AI tools to analyse their data.

For example, Alibaba, the world's leading ecommerce retailer, uses AI to facilitate facial

recognition payments. To make this possible, consumers have to agree to their images being processed in this way.

In a similar adoption in South Africa, South African retailers would need to gain the trust of the consumer to allow the use of their image.

" An AI tool which requires consumers to agree to provide certain information may encounter a stumbling block. **"**

Time to adapt
While AI is not a new technology, its use in the retail sector is fairly recent. In sectors like retail,

where we often see a slower rate of adoption, a 12-, 18- or 24-month AI adoption plan might be too little, too late.

End goal
Ultimately, the use of AI must be meaningful and add value to a business.

Retailers must ensure that, beyond looking for AI to assist their businesses to increase revenue, the AI tools they use will align their interests with those of the consumer.

A successful deployment of AI requires retailers to ensure that whatever technology they use primarily meets their consumer's needs. **SR**

" Because AI operates on the basis of machine learning, the technology itself is changing at an exponential rate. Delaying the decision to adopt AI technology may mean a retailer will miss an opportunity to properly establish itself as the 'retailer of choice' among consumers. **"**