

Analytics Trends to watch out for in 2017

As we round off on the first quarter of 2017 we are already seeing increased analytics deployment in medium size companies and application in core decision making processes within big corporations.

A number of sceptics have even dismissed analytics because of the recent election in America where all indices pointed at a Clinton win but we all know how that went. Bringing it back home what could be the implications in Nigeria's 2019 elections and census.

Let's not be too quick to dismiss the power of data as it has evolved in the last several years taking dominance in board and management decision making. Research by BlackSentry indicates big data and business analytics market growth at 11% in 2016.

Increased use of unstructured Data

Any data that does not have a pre-defined data model or is not organized in a pre-defined manner is referred to as unstructured data. It is estimated that 81% of all data is either semi-structured or unstructured. This includes emails, word processing files, PDFs, spreadsheets, digital images, video, audio and social media posts - all of which are critical in deducing organisational insight.

Many have argued that if data has some form of structure but is not helpful to the processing task at hand, it should be characterized as "unstructured. However, worthy of note is that while structured data analytics describes what's happening, unstructured data gives you the why.

The demands for deeper insights by organisation can be satisfied by unstructured data and eased by the availability of tools to analyse such a large variety of data previously not readily available. However, machine learning and data visualization tools are now making it possible. In 2017, with these tools improving exponentially in quality and decreasing in cost, we expect to see far more companies putting unstructured data at the top of their agenda.

The emergence of Embedded Analytics

Embedded analytics is probably the fastest growing area of Business Intelligence (BI). Embedded analytics consist of any consumer-facing BI

and analytics tools that has been integrated into software applications, operating as a component of the native application itself rather than a separate platform. Embedded analytics will allow end users utilize higher quality data because the standards of governance are improved. They can also pinpoint insights quicker as time is not wasted requesting reports from external agents, and it allows findings to be distributed to those who need it across the organization.

We expect the popularity of embedded analytics to grow mainly in the banking and online retail markets. Gartner's 2016 Embedded Analytics Report also recently found that 87% of application providers claimed embedded analytics is important to their users, up from 82% in 2015.

Evolution of the Data Scientist

A recent study by Forrester revealed businesses will invest 300% more in artificial intelligence (AI) in 2017 than they did in 2016. This has significant ramifications for analytics, with machine learning able to analyse data at a scale human simply couldn't previously accomplish. As Forrester notes, it will 'drive faster business decisions in marketing, e-commerce, product management, and other areas of the business by helping close the gap from insights to action.

Interestingly, we are observing increased demand for data scientists in other sectors such as utilities and healthcare. The Forrester 2015 survey also discovered 51% of data and analytics decision-makers did not require the assistance of a technologist to obtain data or analyse it. We expect this to rise this year to 66%.

Other challenges analytics specialists will have to deal with are the new technologies and methodologies in problem solving. The economic recovery has driven an increase in the adoption of open source solutions as an entry strategy and gradual evolution to enterprise scale deployments. This means a great demand for statistical and analytic skill from existing staff or need for additional manpower.

Fundamentally, analytics is about using statistical model to do something differently. I am very sceptical of off-the-shelf analytics products that claim all you have to do is load in your data and it will spit out actionable insight.' In the short term, data scientists are unlikely to be replaced, however, as more of the traditional reporting and queries are carried out by AI, we expect to see many data scientists see their role become more creative over the next year.

Behavioural Analytics Advances

Advertising is most effective when the market has been segmented and the message targeted. The prospect segmentation by personality presents opens a new window of opportunity as against the tradition use of age and gender which is unreliable in today's world. A survey by Aberdeen Group indicated a 36% higher conversion average and a 21% stronger lead acceptance employing personalized advertised. We expect the continuous upsurge in the volume of raw event data spawned by the digital world to encourage newer applications of behaviour analytics.

The ecommerce space in Nigeria has since embraced behavioural analytic however other industry like the Retail industry will observed increase application in operational decision making. Security agencies are expected to employ this in identifying identity theft and financial crimes involving multiple banks such as anti-money laundering.

An interesting vertical expected to grow in its application is telecommunication and utilities particularly energy trying to understand their how consumers act and why. This will enable accurate predictions about how their customers are likely to act in the future and the right offering for such a consumer.

With marketers now furnished with analytics and tools that can judge people's personality we should expect to see refined product offerings at the precise time needed.

Prescriptive will take over from Predictive Analytics

Predictive analytics dominated 2016 but organisational demands is compelling the need for prescriptive analytics, with Gartner estimating a market growth to \$1.1 billion by 2019.

Prescriptive analytics employs insights revealed by predictive analytics and provides a call to action based on what it finds. It analyses current data sets for patterns and evaluates the outcomes of the multiple scenarios that could be enacted based on decisions that could be made based on the data, providing decision makers with hypotheticals as to the impact of each option.

Just 10% of organizations currently use some form of prescriptive analytics according to Gartner, this is even far less within the Nigerian market but will grow by 25% by 2020 globally. One thing is certain we expect more adoption this year with strong signals already coming from banks that recently went national.