

USING BIG DATA AND BUSINESS INTELLIGENCE TO IMPROVE RETAIL PERFORMANCE



Introduction

The phrases 'big data' and 'business intelligence' have been around for decades. But while many companies claim to take the concepts seriously, few understand them well enough to maximise their business potential.

This white paper discusses the ideas that lie behind these terms, the importance to the retail sector of data gathering and analysis, and how technology is now available for all businesses to unlock these data-driven insights. It also looks briefly at what the future may hold for those organisations smart enough to start using their data intelligently.

Big data and business intelligence explained

Most organisations today collect large amounts of market data, from sources such as website, social media, and business transactions. They come in a variety of formats (stock counters, emails, audio and video) and may stream into the business in real-time – often in huge volumes.

Yet while good business practice dictates that gathering this 'big data' is essential, more important is the question of what you should do with it.

Business intelligence (BI) is the analysis of that data to help company managers, executives, and other staff in appropriate roles make better, more strategic business decisions. And given the incredible volume and variety of data to analyse, this is often done using the latest technological software – allowing users to gather the information themselves without having to rely on paid experts to extract it for them.

The importance of intelligent big data use - in the retail sector

Organisations in the retail sector arguably have the biggest opportunity to make the best use of business intelligence. With more data being available than ever before (thanks to the increasing popularity of online shopping and social media) every little detail regarding products, customers, marketing, and sales can now be stored and made ready for analysis.

We've seen the transformation of the industry over the last decade thanks to giants such as Amazon, using analytics to improve performance. By being smart about data collection and structuring the unimaginably high volume of details stored, they can take millions of rows of sales receipt and transaction information (for example) and extract insights such as what products are popular, how many are selling, where in the country they are selling best, at what time of day, and to what types of customer.

The sales analysis opportunities presented using big data can therefore provide a company with invaluable real-time information on their performance – identifying trends and opportunities, and helping to drive business strategy. More profitable areas of customer focus can be identified; appropriate internal strategic goals can be set; and visibly achievable incentives can better help staff productivity, efficiency and performance.

Best of all is that retail business intelligence is not limited by company size. You don't have to be an organisation the size of an Amazon to collect, store, and analyse data to drive your business in a more





successful direction. You just need to realise that with the vast amounts of varied retail data available, you will need a solid integrated software package to turn the information into insights.

GATHERING HUGE VOLUMES OF DATA MEANS NOTHING IF YOU DON'T PLAN – OR HAVE THE ABILITY – TO DO SOMETHING WITH IT. THERE ARE POTENTIALLY THOUSANDS OF INSIGHTS AVAILABLE IN THIS INFORMATION TO HELP STEER ANY RETAIL BUSINESS TO DOMINATE THE MARKETPLACE. ALL 'BIG DATA' REQUIRES IS A LITTLE BUSINESS INTELLIGENCE (AND INTEGRATED SOFTWARE) TO UNLOCK IT.

Justin Sherwood | Managing Director of Seriun

How to use integrated software for insight

A good retail sales performance management software package should be able to bring together data from numerous sources and systems, giving users as much context from the real-time data analysis as possible.

For example, the integrated software needs to be able to handle both streaming data (arriving from connected devices, such as footfall counters) sales information, customer satisfaction levels and social media data (important for sales, marketing and customer support insights). In addition to the normal 'streams' of data, additional slower changing data, such as demographic data can enhance the insight. Business data such as work rota, sales target or KPI (Key performance indicators) assist with commission and performance management.

The correct platform and software solution can deal with the data appropriately and in line with your business strategy.

Questions to ask are:

- Where is the data stored and how will it be managed? (looking especially at data security, storage size and cost efficiency)
- What are the technological specifications of the platform? (considering parallel processing, clustering, in memory data storage and processing, high connectivity, etc)





Aside from selecting the right software, consider how the insights can assist your business growth. Implementing a strategy for how your business will respond or implement the operational changes required to gain a return on the business insights garnered.

What the future holds for business intelligence and big data

There will always be two constants in the retail industry: products and customers. Yet the available data surrounding the relationship between these two will continue to evolve, as will the business intelligence approach needed to mine the data for insights.





Data sources are likely to be in constant flux, thanks especially to changing trends in social media use (and updates on the platforms themselves) which could see customer insights remaining dynamic. Changing sales processes could also result in new data becoming available for capture and analysis.

Perhaps most importantly, the increasing cyber security threat and impending legislative clampdown on data privacy breaches will lead to 'big data' users having to ensure their processes and software are compliant.

Due to come into effect on 25 May 2018, the EU General Data Protection Regulation (GDPR) is officially described as being the "most important change in data privacy regulation in 20 years." 1

And while offering greater protection for the data of EU citizens, it also means far harsher legal repercussions for any companies that breach the new rules.

Businesses looking to harness big data should therefore make sure that they continually audit their business intelligence approach to stay compliant and avoid problems – or work with a professional IT provider who can ensure the processes and software provide optimum insights with minimum risk.

Seriun

Seriun provides support to local and large organisations, and invest in leading systems to deliver exceptional services to thousands of working people.

Our experience with 'big data' ensures that we can offer our clients (such as O2) a professional business intelligence approach. Making use of our integrated software package 'Intellistream', clients get the real-time retail insights they need (such as sales performance, target and commissions management through gamification, inventory status and marketing performance) to make faster, more effective business decisions.

¹ EUGDPR.org

