intact
SOFTWARE

THE POWER OF BIG DATA

HOW TO USE THE DATA IN YOUR BUSINESS
TO AID STRATEGIC DECISION MAKING

Contents

WHAT IS BIG DATA?

It is one of those 'buzzwords' that has been kicking around for a few years now but what does it actually mean.

'Big Data is the extremely large data sets that may be analysed computationally to reveal patterns, trends and associations.'

It's not the amount of data that's important, it's what organisations do with the data that matters. The insights gained through analysing large volumes of data can be game changing—especially when those insights are applied to the strategic planning process.

Big Data may sound like a daunting and frankly irrelevant concept. It is often seen by some small and medium enterprises (SMEs) as the preserve of corporate giants who use their massive computing power to analyse huge volumes of complex information to guide their every move. In simple terms however, it simply involves extracting relevant business data and analysing it to gain actionable insights that make you more money. Today's data tools now make it easier than ever before to extract and interrogate your data in a very cost effective, easy to manage fashion. This makes Big Data a powerful force for all business managers.

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Whilst many businesses are still failing to embrace the power of Big Data those that do are gaining a competitive advantage.

A recent McKinsey analysis of more than 250 companies over a five year period revealed **that companies that rely heavily on data for making marketing and sales decisions can boost their ROI by 15-20%**

hold dear . . .

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A further report found that **organisations actively embracing the use of Big Data post revenue growth rates 50%** higher than those that fail to. (Dell Research)

BIG DATA BRINGS BIG OPPORTUNITIES⁕

> **"**You can't manage what you don't measure.**"**
>
> *W. Edwards Deming*
> *& Peter Drucker*

THE FANE

Many companies remain largely unaware of the opportunities that Big Data presents.

Every day your system discreetly records every key stroke, transaction and sale line. Many businesses fail to treat this as a massive, untapped asset. If you know how to extract and interrogate this data, the benefits are significant.

01.
FASTER, BETTER
DECISION MAKING

02.
COST
REDUCTION

05.
BETTER
MANAGEMENT OF
YOUR SALES FUNNEL

BIG DATA ANALYTICS

03.
PROCESS
IMPROVEMENTS

04.
ENHANCED
CUSTOMER ANALYSIS

1.

FASTER, BETTER DECISION MAKING

- Instant access to accurate, real time and relevant information will allow you to become more agile and responsive.

- Big Data analysis gives you the means to identify trends and patterns, whether by demographic breakdown, geographical spread, spending amount, product or service preference, purchasing channel, buying trigger, timing or other factors.

- Decisions become data driven versus relying on intuition alone, making them more balanced.

- Unearth valuable insights that would otherwise remain hidden.

2.

COST REDUCTION

- It will allow you to identify wasted resources and more efficient ways of doing business.

3.

PROCESS IMPROVEMENTS

- Reduce the time spent on reporting. Concentrate your time on information analysis or acting on issues as they arise.

- The use of a centralised information system makes information transparent and accessible across the organisation. This will allow departments to work collaboratively, sharing data and insights that can be used to formulate strategies that are more unified and better focused on achieving corporate goals.

4.

ENHANCED CUSTOMER ANALYSIS

- Use the power of Big Data to give customers what they want.

- Identify, track and monitor customer purchase patterns, preferences and interests to effectively segment your customers. This will allow you to tailor your products and/or services to their needs.

- Use Big Data to calculate Customer Lifetime Value (CLV). This involves tracking the costs and revenues for each customer to identify those that are most profitable versus those that are eating up resources for very little return. According to the Gartner Group, using Big Data to understand CLV can be tremendously important to growth. Their statistics show that typically 80% of a company's profit comes from 20% of its customers.

- Use Big Data to identify emerging demand trends. Establish competitive advantage by tailoring your operations to cater for these trends before your competitors.

5.

BETTER MANAGEMENT OF YOUR SALES FUNNEL

- Using key metrics, sales managers are able to keep track of the number of opportunities or leads in the funnel, the arrival or acquisition rate of these opportunities and how long they were in the funnel before a sale was secured etc.
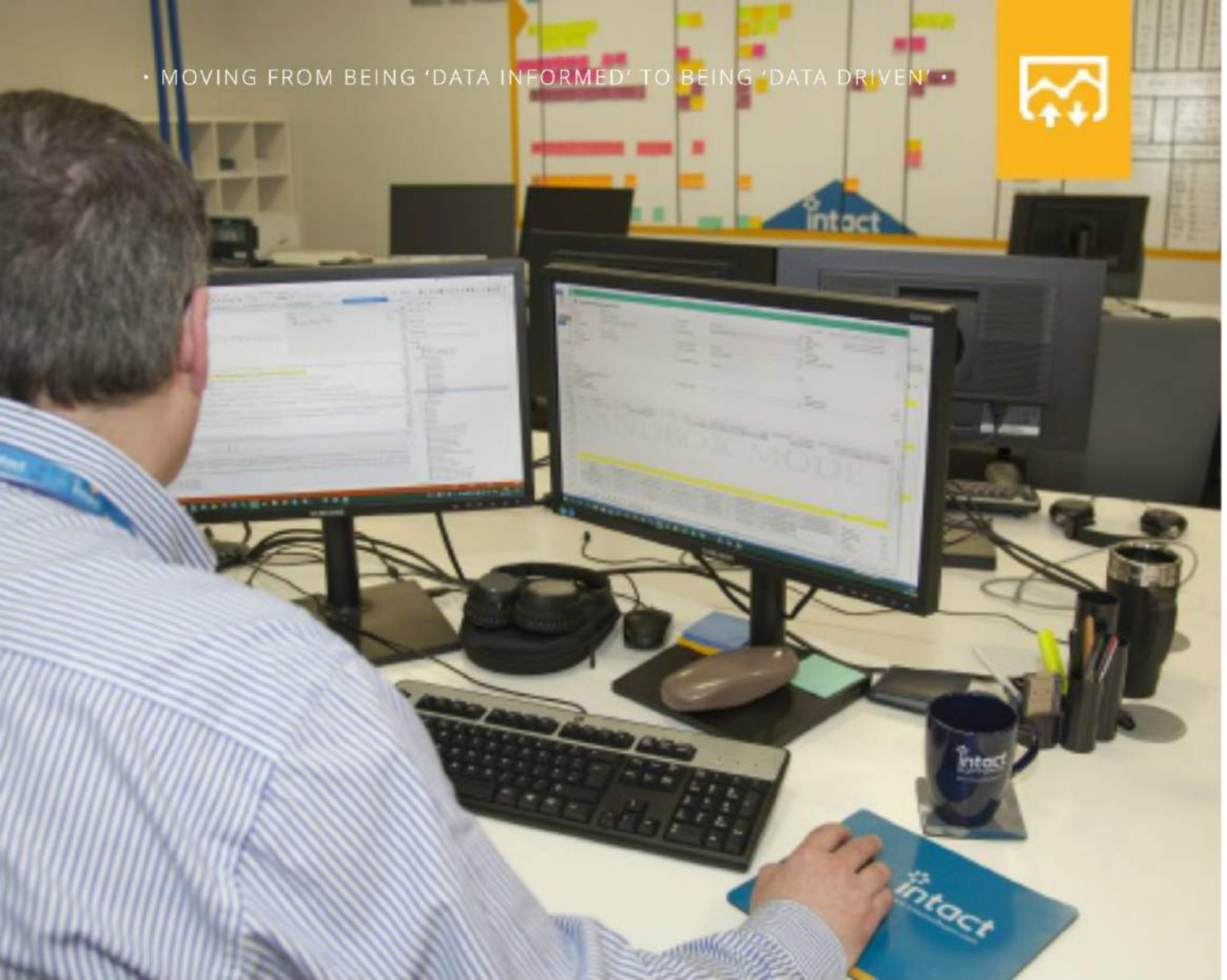
MOVING FROM BEING 'DATA INFORMED' TO BEING 'DATA DRIVEN'

Lack of data tends not to be the issue in organisations but knowing how to extract and use this information strategically is often the main stumbling block.

The sheer volume of information now available has resulted in data that is raw, unstructured and complex. This makes it more difficult to comprehend how best to collect, manage and analyse this data to deliver valuable and actionable insights.

However, the process of setting up a Big Data analytics program is quite simple if you employ the right set up procedures from the outset. Once set-up, your system eliminates the mind numbing job of extraction and management of your data leaving you with a continuous flow of actionable, real-time insights.

Before you think about the best analytic tools to employ for your business, there are a number of best practice preparatory steps you should work through to ensure you extract the maximum value from your analytic tools.

A Clean, Integrated Dataset

- A database is only as reliable as the information that has been entered in the first place. If you start off using irrelevant, incomplete, misleading or inaccurate data then you can guarantee that the output will add very little value to your business. Rubbish in = Rubbish Out

- Ensure you cleanse your data and strip out the rubbish in your system. However, before making any changes be sure to back up your database. Also, it's important to assign this task to knowledgeable employee/s who understand what data is potentially missing from your system. Only your knowledgeable, experienced staff will be able to spot data inaccuracies and correct them.

- Once your database is in working order, it will be easier to maintain. Always continue auditing and cleaning up your database and never stop searching for areas of improvement.

Start with the problem

- Exploring huge amounts of data with analytic tools can be lots of fun (?) and offer lots of insights. However, it can be a waste of time and resources if the results do not translate into something that solves real-world business problems, such as maximising floor space to drive incremental sales.

- To help you define the actionable data you wish to extract, carry out a brainstorming session with your team. Ask them to complete this sentence: 'I wish I knew'. Using the concept of 'I wish I knew' will uncover the strategic, essential information that can be answered through Big Data. It will define the indispensable information you need to move forward.

A Plan of Action – Micro to Macro Management

· How will you action your insights effectively? You must have a clear plan in place to action your insights. Think of it as a cycle of continuous improvement.

1. Use Big Data to **identify key trends**. If you look at nitty gritty weekly reports this will not give you the big picture you require to make strategic decisions. Decide that once a quarter you will do a deep dive into a particular area of your business and run trend analysis to identify appropriate insights. For example, for Q1 you could focus on customer segmentation, Q2 product performance etc. This will definitely yield quicker and better results than trying to take on too much, too soon.

2. Decide what **action** you should take to address the related issue or capitalise on the opportunity. Leverage your insights in a timely manner and remember the action you decide to take is not set in stone. Think of it as a test bed, where you trial alternative options to find the best solution that responds to that particular insight.

3. Set up **micro reports** (i.e. weekly or in the form of alerts) to identify if the action you have taken is making a positive impact and should be permanently implemented in the business.

Identify
Key Trends

Testing - Take
Appropriate Action

Analyse for a
Defined Period

Implement/
Amend Action

· For example, your trend sales report identifies that over the last 5 years the value of paint sales has been decreasing year on year and paint sales now occupy 15% of total sales value, however your paint range occupies 30% of your floor space. This may cause you to change your store layout to give further space to more profitable or faster selling lines. This can be carried out as a test, which you report on weekly, for say 3 months. You will then review the outcome at the end of this period and decide whether this should be a permanent change you instill in your business.

The Human Element

If you are looking to realise the true value of your data it is important to remember the human element is just as vital as the technology you use and the data you are working with. Individual and organisational considerations become the bridge from data to insights to action.

Those who benefit most from their Big Data deployments are those that ensure all stakeholders in the company are committed to data-driven decision-making. For that to happen, leaders must be willing to create a responsive decision-making process and streamline decision-making layers from top to bottom for their team to be effective. As the process recommends trialing solutions you ultimately remain in control. Your team should have a clear decision making process in place to enable and push them to look for continuous improvements across your organisation.
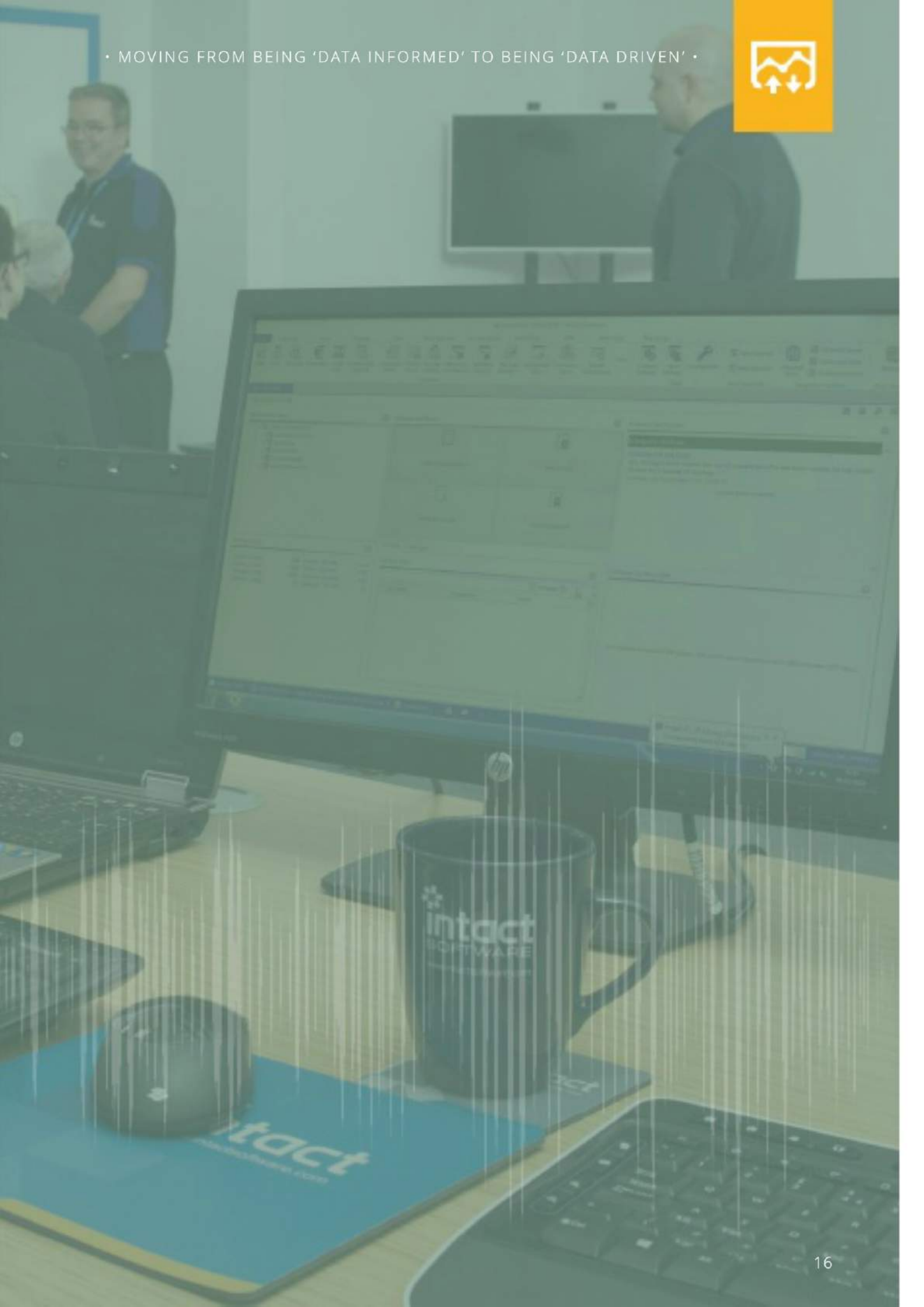
BIG DATA IS NOT THE PREMISE OF BIG BUSINESS

Excellence is doing ordinary things extremely well and Big Data can provide every company, regardless of its size, with the insights that facilitate this.

Whilst the analytic tools now available to extract Big Data are much more cost effective it should be remembered that some older 'legacy' business systems often lack adequate data integration or the availability of the modern analytic capabilities that create value.

Other business systems require 3rd party analytic tools to integrate with a company's main business system. They extract the data from the main business system and import it into the 3rd party analytics tool to facilitate analysis.

Today's modern ERP and business management systems, more often than not, provide Big Data analytic capabilities within the system. This is often the preferred option for companies as the analytic tools complement and work seamlessly with all other areas of your business system.

Before you start researching the vast array of analytic programmes and tools available, speak to your current system's provider to ascertain what analytic capabilities they offer. If they don't offer any or if it isn't up to scratch, what 3rd party analytic tools can they integrate with? It is important to ask this question as there is limited value derived from using analytic tools that don't integrate with your business system.

YOUR ANALYTICS EXPERT

After going through the preparatory steps noted in section 3 you will have a solid understanding of the objectives of your analytics programme and what you wish to measure.

Your system's consultant or the provider of your analytic tools, will then take this one step further. For example, the Intact ProServe consultancy team will meet with you and your team to discuss and define your analytic requirements.

During this process your consultant will discuss with you the industry standard analytics most commonly used by your peers. They will then work with you to define what you'd like to measure or report on and the aspects you wish to further drill down into. As a standard feature of Intact Software, the Data Drill provides interactive data mining and analysis answering questions like 'who was your top sales rep in a particular region?' or 'what was your most popular product line sold?' The customisable nature of this tool enables your users to perform ad-hoc analysis of data in multiple dimensions, thereby providing the insight and understanding they need for better decision making. You will be empowered to manage your business intelligence requirements without the ongoing need for expensive consultancy.

For example, out of your review process with your team and system's consultant you specify that you wish to look at sales value for the last year by rep. The analytics are set up and a couple of months later you wish to interrogate this figure by looking at the product split by rep. Within Intact iQ you can drill down to the level you require quickly and easily. You are only limited by the data in your system and the imagination of your users.

This is reassuring as once you set up your business intelligence model for your system you have complete control, ensuring you have a model in place that you can flex to cater for any future changes.

ANALYTICS HIGHLIGHTS

The marketplace for Big Data analytics software can be a confusing place. Capabilities such as regression analysis, decision trees, association rule analysis, classification and time series analysis are common terminology for a data analyst.

Do not get bewildered by the functionality or terminology. Stay rooted in what you want to achieve and measure and let your analytics provider worry about how they will extract this data for you.

However, to ensure the selected analytic tool/s, and thus your Business Intelligence Model, is user friendly and adopted by all users across your organisation it is important to ensure the tool/s you select houses the following highlights:

Customisable Design & Interface

Your analytic tool/s should allow you to easily tailor your system to measure and show your own critical performance indicators; at group, role and user level.

Security

Ensure access to your Business Intelligence Models can be controlled by you. You can restrict data access by segmenting users according to your predefined groupings.

Total Analysis Breakdown

This will enable you to look at the holistic picture and then easily drill down to constituent parts. Ensure the programme allows you to combine several criteria to interrogate data.

On-screen Filtering

Information can be further refined by sorting, grouping and filtering to the level you deem necessary quickly on screen.

Comparative Analysis

This will allow you to compare data from a previous day, week, month, period or year to identify trends and gaps.

Graphical Analysis

Integrating company-wide or department KPIs using graphical analysis on centralised dashboards is a pertinent way to keep analytics top of your employee's minds.

build great products

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delight our custome

Moving forward, Big Data will become an integral part of almost every industry.

Applications that are essential to managing data are only going to become more accessible, affordable and user-friendly. It is certainly going to be easier for firms of all sizes to tap into Big Data and achieve greater results. Nevertheless, those that start to embrace Big Data and their respective analytic tools now will benefit most in the future.

To find out more about Big Data and the solutions Intact Software can provide to help you capitalise on this growing trend drop us a line at info@intactsoftware.com or log onto www.intactsoftware.com

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THE INTACT DIFFERENCE

We believe your ERP system should provide you with the tools to unlock your true business potential. We also firmly believe Intact iQ, our 3rd generation ERP software, can empower you with the systems and information you require to unleash that potential.

Built and supported in Ireland and the UK, Intact iQ is all about helping great businesses like yours take control, drive sales and improve margins.

Our mission is to organise your business information into an easy-to-use, single system where it can be leveraged to enable efficient daily operations. We give you the unified tools and functionality you need to be independently more operationally effective and to grow accordingly.

Aimed at scaling SMEs looking for greater controls and flexibility, Intact iQ is a full .NET application that comes bundled with a toolset that facilitates the nuances that often exist in a growing company. Our unique personalisation layer enables perfect fit automated business processes and role-based tailored screen design. It's all about what you want to do and how you want to do it.

Intact iQ excels in many verticals across supply chain management, engineering, wholesale/trade counter/ePOS, Service, Job, Project and Enterprise Asset Costing & Management. Its 'Total Integration' layer supports always on communication between it and any other 3rd party system you may currently use.

"
Best practice for a business should never be dictated by a software company. Many businesses grow and succeed because they have a unique or familiar way of working.
We encourage that ethos and have built software to support it at all levels.
"

Justin Lawless, CEO, Intact Software

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To find out more about how Intact iQ can help your business succeed and grow log on to www.intactsoftware.com or email us at info@intactsoftware.com