

White Paper

“Business Intelligence - The Evolution from Within”

Intuitive Business Intelligence

February 2018

Self Service Analytics

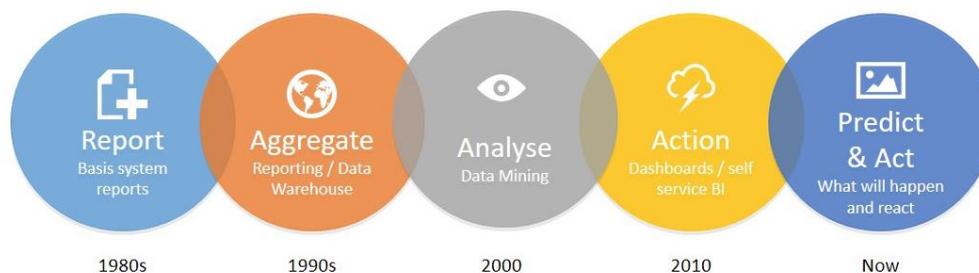
Building on the introduction and growth of classic Business Intelligence (BI) tools and the implementation of many data warehouse projects, the market for improved data visualisation and dashboard creation tools became established 7-8 years ago. New software companies created an array of products offering to 'set business users free' by allowing them to analyse data without being reliant on their IT department or specialist BI developers.

8 years on, have these tools lived up to their promises of giving business users easy access to the data they need? Unfortunately, a recent report from the Eckerson Group seems to suggest otherwise:

"Despite its promise to liberate users from reliance on their IT department, self-service analytics is not that easy to achieve. Many companies that have deployed self-service analytics have become inundated by a tsunami of conflicting reports, spreadmarts, renegade reporting systems and other data silos. These companies have learned that the goal of self service is not unfettered liberation from IT, but rather a partnership that balances freedom with control, flexibility and standards, governance and self-service"

Source: Eckerson Group 2017

The Evolution of Business Intelligence



This white paper explores some of the reasons why self-service analytics aren't working and proposes some alternative options that might.

White Paper Background

This white paper has been written in collaboration with Stinus Andersen, Head of Information Systems Services at Morson International. It draws on his practical experience of implementing and rolling out a very successful data visualisation project which now distributes critical business information to managers, consultants and, most importantly, major clients across the organisation.

Since 1969 Morson International has helped engineers worldwide to find their perfect job and helped companies to find the right people for their business. Specialising in the supply of technical engineers and support operatives, Morson is skilled in creating bespoke recruitment solutions for projects of any scale. Operating across 12 verticals in the engineering industry, Morson International is recognised as an industry leader.

The white paper also reflects our experience of working with a number of leading software developers to integrate dashboard solutions into their software solutions

Business Intelligence Drivers

The driver for business intelligence is to present business users relevant data which allows them to make better decisions and achieve organisational goals. The explosive growth of alternative internet connected devices such as smartphones and tablets means that business users are now much more technically savvy, using technology in all aspects of their lives from booking holidays to ordering a taxi. They increasingly expect the same level of service from their own organisations.

In addition, and due in much part to the economic downturn which started in 2008, companies are leaner and senior leaders are expected to engage at a strategic level across the business. This means that senior leaders now need to collaborate more closely with other leaders in the business, and ensure that their activities are aligned to organisational goals.

A good example of this is the HR department which has evolved from being an in-house recruitment team, to a full service and support function. HR managers want to engage with the rest of the business to prove their value and help operational managers drive business success.

The diagram below illustrates how the role of HR has evolved and will continue to evolve, with more emphasis on providing a valued-added service to the rest of the business, aligned with the organisation's overall strategic objectives.

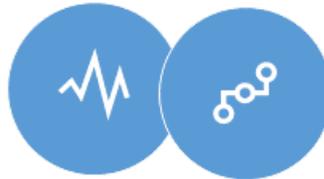


Fig 1: The Evolution of Service Functions within organisations

This changing role of senior leaders and other team members means that business users need rapid access to reliable, relevant data in order to meet these challenges. Forrester Research (see below) has discovered that 73% of firms want to use data to drive all of their business decisions. However, only 29% are good at turning that data into action. Our experience with clients and partners seems to indicate that even this figure is overstated, and that perhaps only 10% of the businesses that we first come into contact with are good at turning data into action.

Most firms don't consistently turn data into action

73%
of firms aspire
to be data
driven



All possible
data

All possible
actions

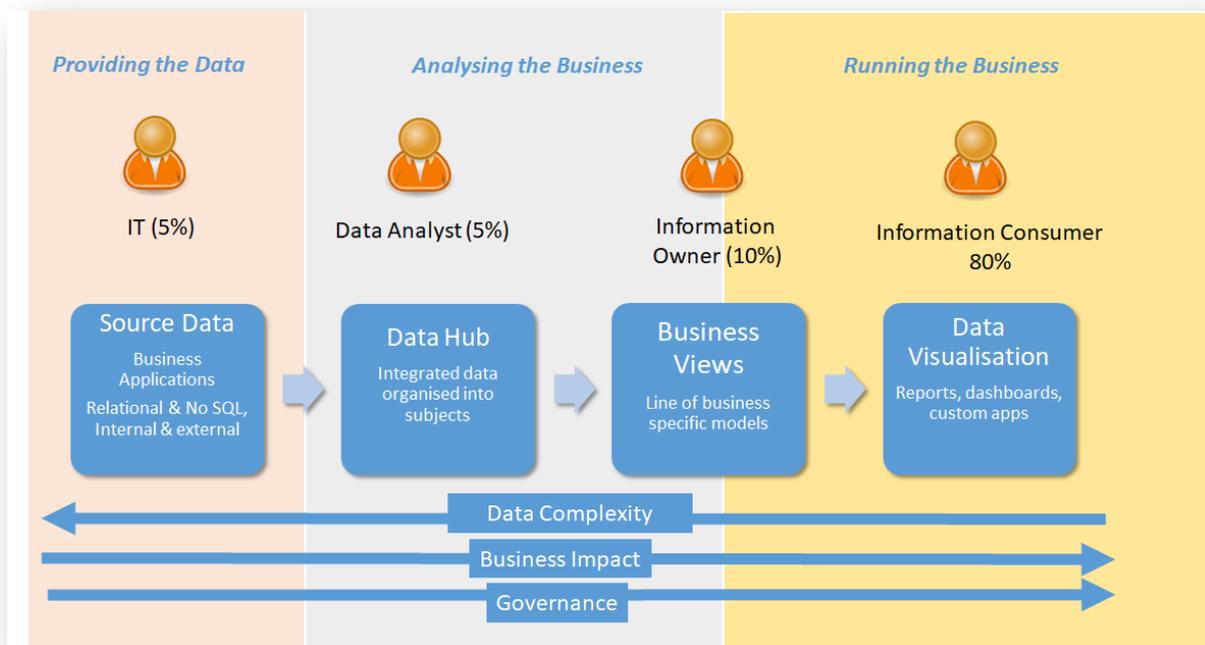
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Source: Forrester's Global Business Technographics Data and Analytics Survey 2015

Why isn't the new world of self-service BI delivering?

1. The traditional BI deployment model doesn't work in practice

The traditional BI deployment model has 4 main groups of users:



IT Specialists

They may only represent a small proportion of users but have traditionally been the ones who are in charge of managing the data. They predominantly have also been in charge of selecting BI tools for the business.

Data Analysts

The traditional users for BI have been data analysts, who were the first groups to engage with BI. They have far more of a focus into business modelling, have complex data needs and have traditionally provided reports to the information owners, or line-of-business (LOB) managers.

Information Owners

These are typically in LOB functions who want to produce custom business views of data for information consumers in the business. They want to undertake analysis but have a low IT skill level and don't want to spend large amount of time manipulating the data.

Information Consumers

Information consumers, the people in operational business roles, do not prioritise which BI tool should be used. What motivates them to engage with BI projects is access to the specific data they need in an easy to digest, easy to manipulate format. Getting the information to these people has the maximum impact of any BI data visualisation project.

To make sure the solutions work in this traditional setup, IT provides the data which is organised into a logical set of functions by the data analysts based on the criteria set by the information owners. However, in our experience the model breaks down, usually due to time and pressure constraints with other IT requirements.

There are many challenges to making this deployment model work in practice:

- Data is not useful in its raw format
- IT team / data analysts get overloaded with requests for different reports, formats, views and analysis
- Tools that are chosen by IT are often too complex and time consuming for information consumers.
- A one size fits all approach to reporting means that individual requirements aren't met, and actually the solution doesn't really meet any one particular requirement fully.

2. IT under-estimates user difficulty using BI tools

Business Intelligence tools have been available now for more than 30 years, so you would expect to hear of a multitude of successful BI projects that support the strategic needs of business users, but that is not the case. In addition, self-service BI panacea that promised to change this doesn't seem to be delivering.

There is a major disconnect between IT and business users when it comes to Business Intelligence.

A Business Week Research study into 406 U.S. IT Executives and 675 Business Executives found that 55% of business users, contrasted with only **18% of IT users** found difficulty in finding the information they require when using Business Intelligence.

Source: BusinessWeek Research Services

3. The failed evolution to self-service BI

It seemed logical then to move from business intelligence solutions delivered via a centralised control approach to self-service BI. The aim of this was to provide easy to use visualisation tools sitting on top of something like a data warehouse that users could then create their own views of the data. This meant that in the market we saw a migration away from legacy enterprise BI tools (such as Cognos and Business Objects) to data visualisation tools such as Qlik and Tableau.

There was an assumption in the market that data was easy to self-serve and these products were liked and widely used by the IT and analyst communities. However, there was an issue in that many business users found these products far too complex and there was still the issue of IT analysts being a bottle neck within the business. So users in many organisations have reverted back to Excel. Even in large-scale operations MS Excel is still the reporting tool that is most widely used, even though this was never what it was designed for.

So is there a solution?

The Morson Approach

At Morson International, there has been an investment in understanding the available data, and how it can be used to drive business performance and the performance of individual recruitment consultants. The resulting data warehouse services all dashboard reporting for the organisation. This was achieved through the information owners actively working with the IS team with the goal of creating a long term sustainable solution. The outcome is one central repository in the business for all reporting data.

Morson has leveraged this valuable data asset by making extensive use of the data filtering capabilities of the Intuitive dashboard software. This means that all of Morson's recruitment consultants use the same core set of dashboards, but these are automatically filtered so that each individual is served with the data that is appropriate to their role. Only 6 core dashboards are used to serve personalised data to 250 consultants. The benefits of the approach that Morson has taken are numerous:

- Efficiencies in dashboard creation have greatly reduced the burden on the IS team
- Dashboards have driven compliance and data quality as the data is visible across the organisation
- Dashboards continue to drive performance across the organisation, due to the visibility and accuracy of the dashboards
- The ability to create and publish client specific dashboards have become a major competitive differentiator

Morson has shown that BI projects can be successful, deliver business benefit and continued return on investment provided that the project goals are well defined and that there is an investment in understanding the available data.

Packaged Dashboards

In most organisations, data for reporting purposes is extracted from business software applications that are widely used across the organisation such as accounting or HR. These applications are typically well established, relatively user friendly and accessible to business users. It seems logical for dashboards to form an integrated part of the solution.

Since all line of business applications have similarities in the data, packaged suites of dashboards can provide an out-of-the-box solution that answers real-life problems in an easy to understand interface. These packaged dashboards allow an organisation to shortcut the process of understanding the available data, allowing BI dashboard projects to be launched more quickly and for less investment.

As a general rule of thumb 80% of the packages are used out of the box whilst 20% are customised.

The key benefits of this approach are as follows:

- Pre-integrated to partners existing software solutions
- Pre-defined data extracts, components & dashboards
- Fast to implement
- Level of project risk reduced

The new Key Success Factors for BI and data visualisation

Focus on Data-Driven Decision Making

Packaged dashboards can give much better access to information and can be a catalyst for an improved performance culture across the organisation. Whilst the organisation shares common goals and interests in their data, each part of the organisation will have its own unique perspective. When we start to leverage the data at a much wider level, we can gain insight, not only into current performance, but also how that compares to our position in previous periods and how rapidly we are making progress towards our goals. This is what we refer to as data-driven decision making.

One size really doesn't fit all

In many BI implementations, dashboard visualisations are aimed at senior executives. However, the real business benefit is achieved when the solution is offered to people at all levels within an organisation, as demonstrated at Morson International:

- The CEO monitors his KPIs on dashboards created specifically for his smartphone, and can drive performance from the top down.
- Consultants have an automatically filtered, consistent set of dashboards that monitor performance
- Clients can log in to their personalised dashboards that deliver data on project KPIs



This example illustrates perfectly how different people need different information views and perspectives in order to fulfil their role and achieve optimum performance for the business.

To achieve real efficiencies, then the dashboard should be created only once – with the data being filtered and controlled by in-built security to ensure good data governance.

Data Governance and GDPR

And a final word on GDPR. The new GDPR requirements mean that there is an increased focus on data governance. This is particularly the case with sensitive data such as that held in a corporate HR system. It is essential that dashboards can be securely filtered to ensure that the appropriate level of detail is provided when distributing confidential client and employee information.

Conclusion

The much-anticipated benefits of self-service Business Intelligence have failed to deliver for two main reasons:

- Data is not delivered in a structured easy-to-use and accessible format in most organisations
- End users do not have the time or skills to create data visualisations using complex over-engineered tools from scratch

Based on our experience, and that of our clients, we recommend the following steps to overcome these issues:

- Use a BI specialist (individual or team) within your organisation to develop the initial data visualisations in collaboration with the business users as these are the people who have an overview of all of the company data.
- Dashboards can easily be rolled out to multiple users, using advanced data filtering techniques. Filtering ensures that each dashboard delivers personalised, actionable information that helps deliver data driven decision-making
- Implement packaged dashboards that relate to one key application area of the business (e.g. HR) and then grow out from there by adding in new datasets and connections. Packaged application suppliers have in-depth knowledge of their data and can ensure that the dashboards are fit for purpose.
- Develop different dashboards that are relevant to different roles within the business – for example high level KPIs for the executive team that are optimised for mobile devices, and detailed data-intensive dashboards for operational management.

About Purpose Software

Purpose Software is the UK's leading supplier of integrated data solutions to the managed services and print reseller industry as well as being a registered partner of Intuitive Business Intelligence. With three different product lines, CBS, 2serv and FORZA, the company offers the industry's widest range of current business software solutions that deliver real and sustainable business benefits for resellers of every size. Purpose Software has unrivalled technical expertise and works closely in partnership with customers to ensure that software solutions increase productivity, drive efficiency gains and maximise profits. For further information please visit www.purposesoftware.co.uk or www.forza-erp.com

About Intuitive Business Intelligence

Intuitive Business Intelligence is a global provider of Data Visualisation Tools for Application Developers and Software Resellers. Formed in 2010 by a team of highly experienced entrepreneurs and software developers the aim of Intuitive BI from the outset was to create a different type of BI solution. The team recognised that for Business Intelligence to deliver, companies needed easy to use tools that could be deployed to all employees and beyond organisational boundaries to customers and suppliers. Intuitive BI sells exclusively through its network of value added partners around the world.

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