



An introduction to Business Intelligence: overcome everyday data issues

Transforming data into
business insights

Introduction

The vast majority of companies generate large amounts of data. Some companies might generate more than others, but the importance of data is in its quality, not quantity. Not taking advantage of the potential benefits of your data can leave you at a competitive disadvantage, it can impact your profitability and it can compromise your ability to make informed decisions.

The ability to turn raw information into actionable intelligence is crucial to understanding how to better serve customers and streamline processes, reduce costs and improve profit margins.

What is Business Intelligence?

Business intelligence (BI) leverages software and services to transform data into actionable insights that inform an organisation's strategic and tactical business decisions. BI tools access and analyse data sets and present analytical findings in reports, summaries, dashboards, graphs, charts and maps to provide users with detailed intelligence about the state of the business.

The term Business Intelligence often also refers to a range of tools that provide quick, easy-to-digest access to insights about an organisation's current and forecasted state, based on available data.



Everyday signs your
business needs business
intelligence

There are a number of tell-tale signs which indicate that business intelligence is lacking within a business:

1. You lack actionable data

The data your company generates is likely stored in multiple systems which contain vital information, such as an ERP system, customer relationship management (CRM) system, spreadsheets and other third-party systems.

2. Reports are created manually or require IT support

Creating manual reports or relying on your IT team to build custom reports can take days and by the time it hits your desk, the information may no longer be useful. This time delay can impact an organisation's ability to make quick decisions regarding day-to-day operations and inevitably lead to missed opportunities.

3. Spreadsheet, spreadsheets, spreadsheets

Analysing data through confusing spreadsheets can be frustrating. It's a highly manual process that is prone to error and often delivers outdated and inaccurate data.

Often there are different versions of one spreadsheet, which are all being updated by different people at different times. This will inevitably lead to version-control issues and the possibility of multiple versions of the truth. Overall, using spreadsheets to analyse data is inefficient and can be ineffective, making analysis far more difficult than it should be.

4. Reliance on static reports

The reports you collate from your systems and spreadsheets lack the ability to perform trend analysis or deliver high-level data-driven insights. The information they do provide is referred to as 'static'.

Static analytical reports don't allow you to dynamically manipulate your data. Once a report is set up, you can't change its basic structure. This may be okay for things like monthly and quarterly reporting, but if you want to dig deep into your data for analysis, static reports are insufficient.

5. An absence of Tactical Information

Management can identify directions they want the organisation to take. Often these are expressed as Key Performance Indicators. But to use KPI's you need to repeatably get access to this information in a timely and reliable manner. For example, looking at effective hourly costs, inventory turnover, average support resolution time.

Examples of insights provided by BI

Here are just a few examples of insights and advantages that can be provided through business intelligence:

Senior Leadership

BI can provide senior leadership with the overview they need without having to wade through the detail, such as sales pipeline value, employee engagement levels, revenue and much more.

Operations

BI tools can help not only track budgets, but give visual insights into financial data, potential problem areas, and overall business health.

HR

BI can help organisations understand everything from salary analysis and diversity within the business to trends in absenteeism and staff turnover.

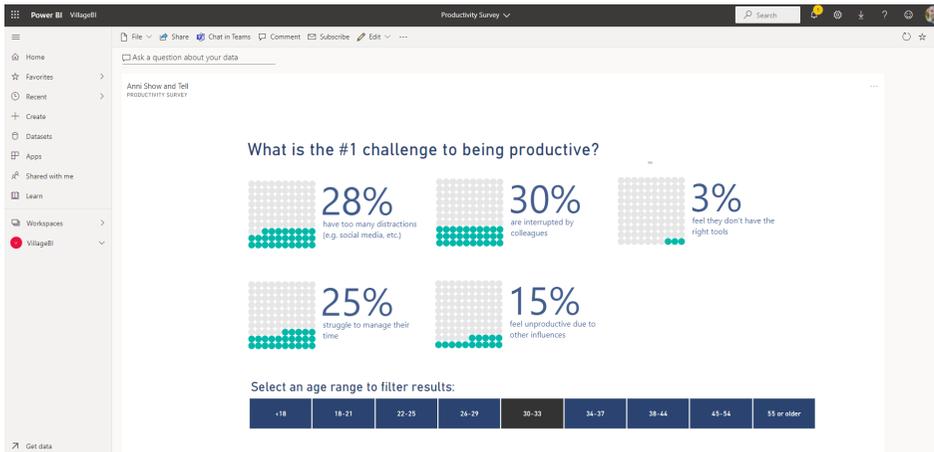
Sales

BI can help improve sales KPIs dramatically through visualising the sales cycle, displaying conversion and churn rates, tracking the pipeline, total revenue, and more.

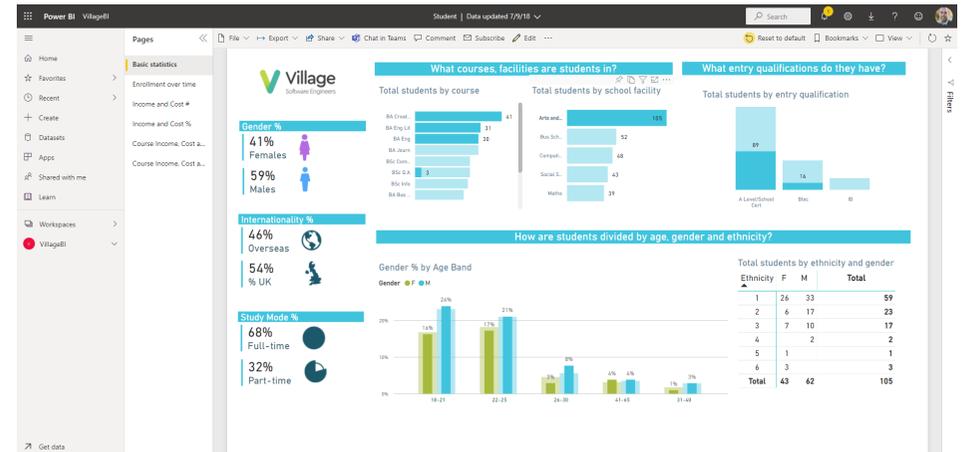
Marketing

View all marketing KPIs in one place so you can track engagement and performance, as well as conversions, cost per lead, website traffic, and analytics.

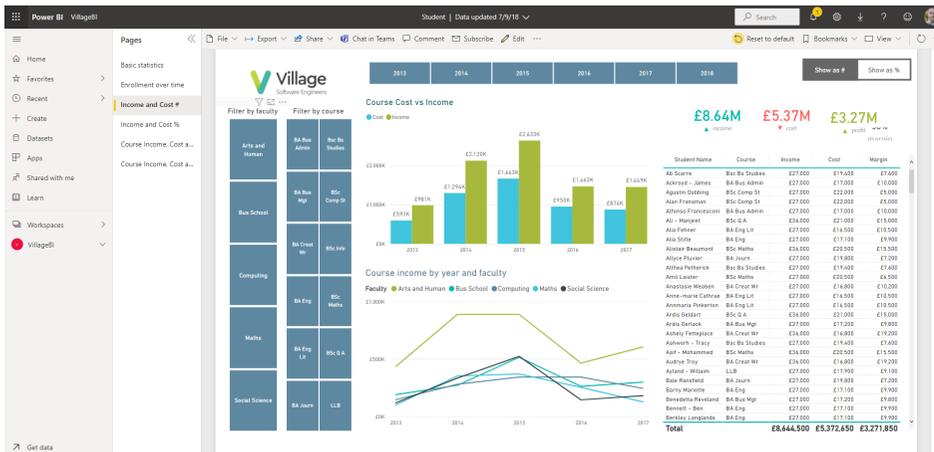
Examples of Business Intelligence dashboards



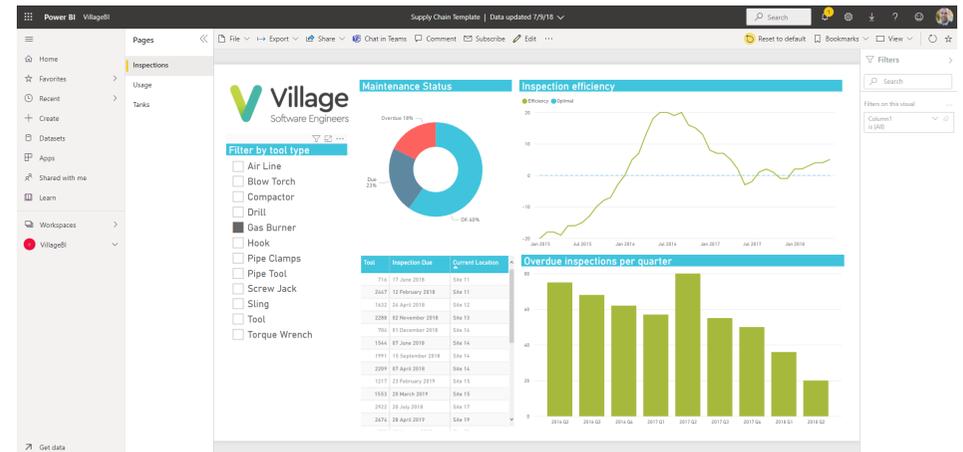
Example: employee productivity BI dashboard



Example: student analysis BI dashboard



Example: customer analysis BI dashboard



Example: supply chain analysis BI dashboard

Benefits of BI for transforming business insights

1. Aggregates all data into 'single pane of glass' view

BI aggregates the data from your company's various systems and gives you an easy-to-analyse single source of truth that can be used to help make more effective business decisions based on facts. It lets you ask questions of your data and keep drilling down to find out more.

2. Report generation at the click of a button

BI provides end-users without IT skills or technical knowledge access to data and makes it easy for them to generate their own reports at the click of a button. Reports can be scheduled for specific times and are easily customisable with just a few clicks.

3. Enable informed decision making across the business

BI empowers a company's entire team – at every level of the business – to access and analyse data and start making more informed decisions based on facts. It puts management objectives front and centre.

4. Fast decision making based on real-time data

BI delivers accurate insights based on consolidated, real-time data and presents it in a way that is easy to understand. A good BI solution assembles your assorted datasets and provides lightning-fast information as a single grid, dashboard, chart or graph.

5. Totally flexibility to create, manipulate and view data through dynamic reporting

BI provides users with dynamic reporting. Dynamic reports can be created, manipulated, and modified at will. They are designed to give you the information you want, when you want it. You control how you view your data by adding, filtering and changing the information you see.

6. Forecast future performance based on historical data

BI provides forecasting and predictive analysis. Typically reporting tells you "what you have done and where you are" – modern BI solutions take your current data and use statistical methods to accurately forecast and predict future performance, truly enhancing your business decision making.

Real-world examples of BI at work



Rutland Cycling leverages BI

Rutland Cycling, one of the UK's leading cycle retailers, had data held across many sources including finance, CRM system, rental management systems, e-commerce applications and a myriad of spreadsheets. Developing business reports was time consuming and unreliable.

Rutland wanted to power their growth. They wanted to use their data assets as a key information source for managing the business on a day-to-day basis as well as medium-long term planning.

The BI solution that Village Software delivered resulted in:

- Easy migration from our legacy Finance system to full ERP
- Saving of 1.5 workdays per week in report preparation
- Concise analytics across all our business services
- Empowering our departmental managers with self-service reporting and analysis
- Curtailed "Anecdotal decision making" – decisions now made on facts

"We've been so pleased with the solution from Village Software and the results have really changed the way we work"

- Mark Gilbert, Finance Director, Rutland Cycling



Prinovis

Prinovis increase visibility of manufacturing process

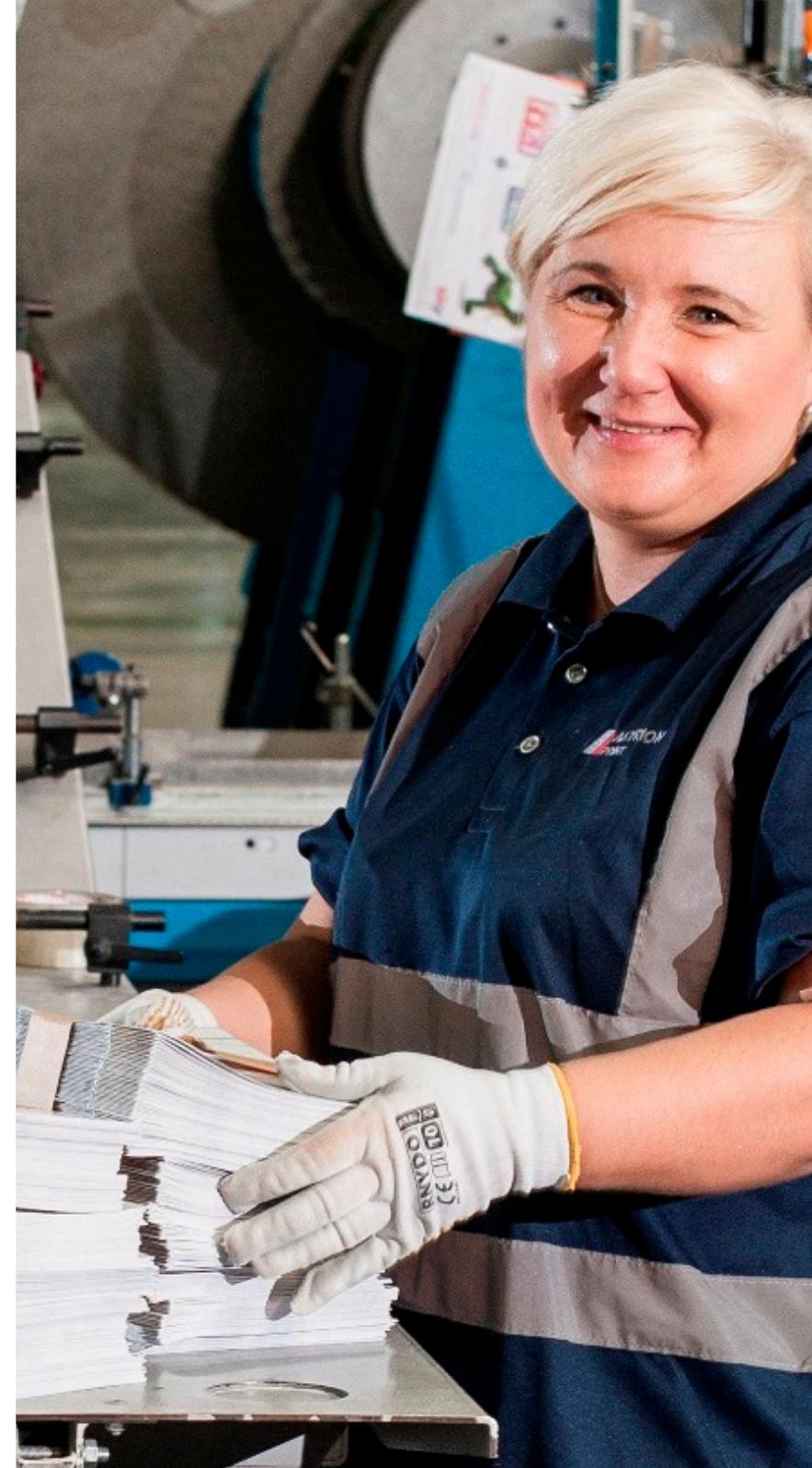
Prinovis UK, the UK's largest gravure printer, were already using sophisticated manufacturing systems with real-time shop floor data collection but they had no way of evaluating the balance of speed, waste and uptime on the production line; dynamic visibility was required.

Whilst their systems provided sources for current-state and end-of-shift reporting they require a range of key performance indicators to monitor the efficiency across the large site and to focus on waste, team utilisation and other key issues.

The solution? Village Software pulls data from a range of on-site and cloud systems to deliver an overall picture of the operations and activity-based costing of the operation. This is provided in a range of paginated reports, custom dashboards and explorable data on key production and performance data, integrated with Prinovis's existing systems and fed through to international group systems. These insights allowed them to make operational changes which in turn improved efficiency and productivity and reduced waste.

"Through collecting data from various sources, the reporting provides us with a valuable insight into our daily environment, enabling performance to be assessed 'up to the minute'. This has extended our capability whilst enabling us to save resources."

- Dean Hayward, IT & Programme Director, Prinovis



**Why is Business
Intelligence Important?**

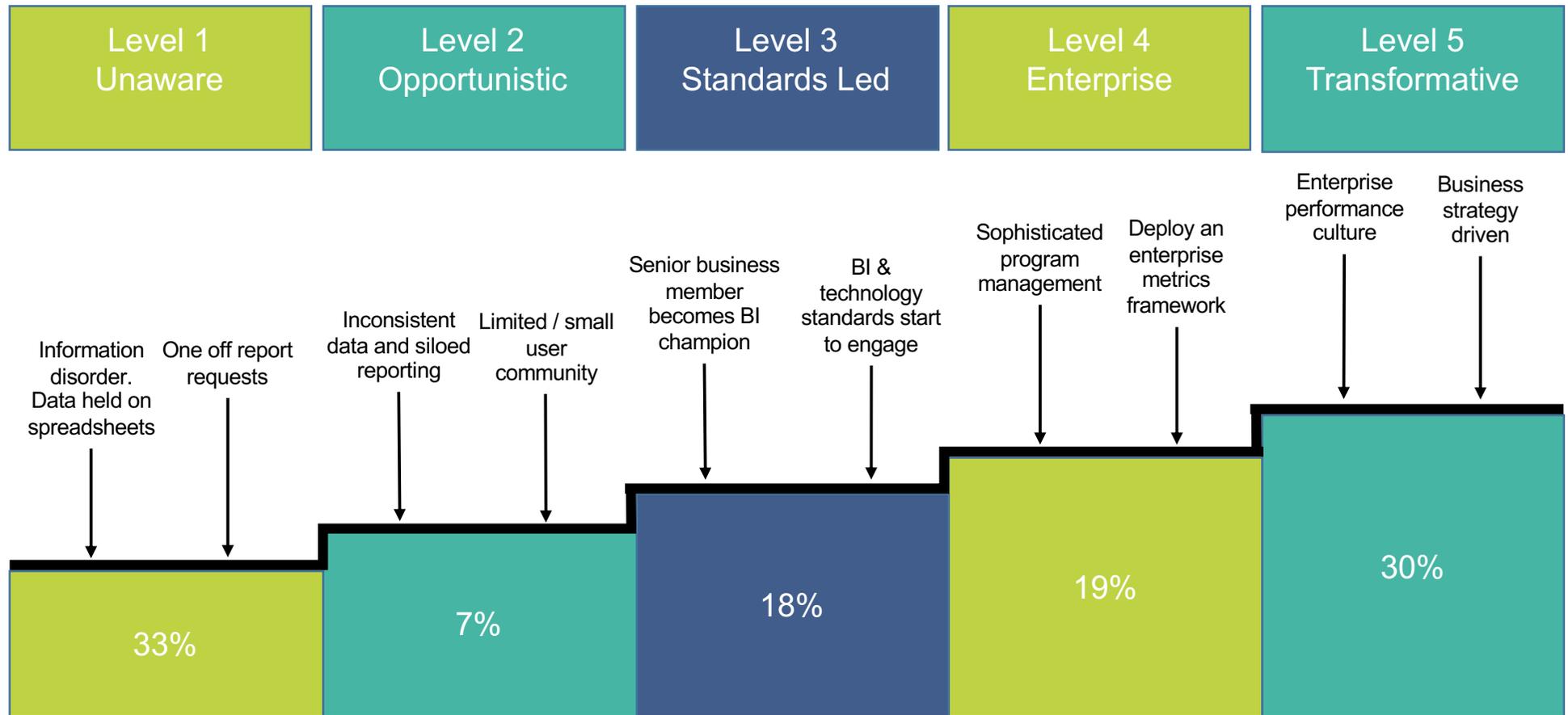
Business intelligence can help companies make better decisions by showing present and historical data within their business context whilst enabling accurate forecasting of potential organisational performance.

Being able to deduce action from data is a competitive advantage leading you to grow your customer base, improve employee productivity, and create a better product or higher quality service. Business intelligence enables you to know what's happening in real time, why it's happening, how to stop it or capitalise on it, and how to predict what will happen next.



**What level are you at in
your data journey?**

BI transforms businesses. It provides the insights that deliver informed decision making which can drive greater efficiency, productivity and innovation. BI is a process which will change as your business evolves. Where are you in this process? The diagram below shows the five stages of the data journey.



Statistics reflect the number of organisations at each level in the data journey

**Village Software –
your Business
Intelligence experts**

Village Software Engineering design and build incredible software solutions with the single aim of improving your business.

Our team of innovative and skilled developers work across many sectors including **manufacturing, education, transportation and logistics, healthcare, utilities and retail.**

We provide application development, enterprise integration and business intelligence software solutions that embrace leading edge technologies and methods.

Our curiosity and intelligent thinking help us to deliver quality solutions that don't just work but work for you.



**We'd be delighted to talk to you
about how we can help transform
your business through BI.**

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