The Bumper Book of Business Intelligence

A 90 page guide to everything BI
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Business Intelligence is a hot topic right now – and deservedly so!

As companies are beginning to recognise the benefits that a successfully implemented BI solution can have for their company, there has been a surge in demand for these tools.

As a result, there are now thousands of vendors out there offering a multitude of different products and services. With such a wide range of vendors vying for your business, it is often a difficult task to sort the facts from the fiction and find out what you really need to know about Business Intelligence.
Here at Matillion we regularly post fantastic new content covering every aspect of Business Intelligence. Here are just a few of the many channels we use to get our content out there to the public:

✓ The wide-ranging blog section on our website where we post new articles and insights every week.

✓ Free eBooks like this one, jam-packed with great tips and useful information on a range of topics.

✓ Social media: you’ll find us on all of the most popular social media platforms:

Click on the links below

✓ Online content such as our on-demand webinars and infographics.
With so much content on offer, we appreciate that you might not have time to read through it all.

With that in mind we’ve made it easier for you by creating this Bumper Book of Business Intelligence, a collated collection of some of our best content from the last year.

We’ve even broken it down into easy to digest sections, exploring some of the key topics you should be aware of when it comes to choosing and implementing Business Intelligence, making it easier for you to find exactly the information you need.
CHAPTER 1:
Why you need a Business Intelligence solution

So why does your company need Business Intelligence?

After working with dozens of companies who have gone on to implement BI solutions, we have found a number of common pain points.

We’ve taken these pain points and condensed them down into a list of the eight signs that you need Business Intelligence.

Work your way through the list and then take our quick quiz to find out if a BI solution is right for you.
The 8 signs that you need a BI solution

If one or more of the following apply to you, your company could benefit from a Business Intelligence and self-serve reporting solution such as Matillion.

1. Your data is difficult to access

In competitive industries, it is imperative that businesses are able to access their data quickly. In order to facilitate this process, it is important that key decision-makers are able to access the information specific to their role with relative ease. Without an effective BI solution, this process can often be complicated and time-consuming as data is tied up in complex systems and spread across multiple sources.

“We had the information, or rather the data. The challenge was accessing and using it. In some areas, we just weren’t asking for the information we needed, as we knew it was going to be painful to get”

David Sturges, Managing Director at Countax Limited
2. Your data is spread across a number of different sources

When a business draws its data from a range of different sources, it can be difficult to consolidate this information into actionable insights. Different departments will undoubtedly have varying interpretations on what performance metrics are most important and may use different reporting tools to communicate this data.

This internal conflict can severely diminish data quality and make it impossible to form a coherent overview of company performance. As Julia King states, a BI solution can help to overcome this problem by “pulling data from all internal systems plus external sources to present a single version of the truth”.

3. You rely on spreadsheets to store your information

Spreadsheets may have underpinned the business intelligence operations of SMBs for many years but, as data requirements have grown, they have become an increasingly inefficient way of storing information.

Spreadsheets require a large amount of manual data entry to maintain and this time-consuming approach can cause significant delays, leading to data being both inaccurate and outdated.
“Our spreadsheets weren’t delivering what we wanted, and we realised that we had to find a better way of doing things.”

Stephen McCandless, Division Finance Director at Tullis Russell

The manual nature of this approach also makes it more susceptible to human error which can skew important data, diminishing its value. Laurie McCabe states that “20 to 40 per cent of all spreadsheets contain errors, and as they become more complex, error rates multiply”.

A BI solution can help to streamline the data collection, analysis and reporting process, removing this dependency on spreadsheets.
4. You have bottlenecks in your reporting

In many companies, Business Intelligence and reporting fall entirely under the responsibilities of the IT department. Business Intelligence software often requires a great amount of technical expertise and non-technical users are therefore heavily reliant on IT staff to manage data and create reports.

This can create bottlenecks in the reporting process and these delays can lead to the information being outdated. This dependency also takes time away from the other responsibilities of the IT department and can lead to it neglecting these duties.

A BI solution can help to reduce these bottlenecks by giving more power to the people through the ability to self-serve and create their own reports without the need for technical knowledge or experience.

“We needed to enhance our reporting capabilities, as well as reduce/remove bottlenecks”.

Anne Beaney, IT Manager at Henry Collbeck Limited
5. Your data does not provide actionable insights

Businesses can often get so caught up in the process of collecting data that they fail to take into consideration the importance of producing actionable insights.

Companies should take a quality over quantity approach to data instead of simply collecting large volumes of meaningless information.

An effective BI solution can help you to discover the information that really matters and can help you keep track of it in relation to your company’s strategic goals.

6. Your data is outdated

One of the major issues facing businesses is that their data is not up-to-date, meaning that key decision-makers do not have relevant information on which to base their decisions. This could be down to delays in the collection, analysis or reporting of information and can be detrimental for company performance.

A recent study found that only 13 per cent of business leaders say their reports are reliably up-to-date, highlighting just how significant this problem is for companies of all sizes.

A BI solution can automate the processing and delivery of data, with many tools offering the ability to schedule reports in advance, ensuring business leaders always have the information they require.
7. You struggle with data visualisation

Data visualisation is a key part of Business Intelligence but, without the existence of a BI solution, it often gets neglected. There is little point in collecting large volumes of data for it then to be poorly presented to the people who matter.

Data visualisation tools can help bring your data to life and make it much easier to interpret through the use of charts, visualisations and dashboards.

8. You are unable to access your data on multiple devices

In the modern age, it is becoming increasingly important that information can be accessed anywhere, at any time. Traditional on-site Business Intelligence operations may be seen as a more secure option but they severely restrict the way that data can be accessed and this can limit its utility.

Developments in technology such as Cloud Business Intelligence have meant that this data can now be accessed anywhere in the world with users simply needing access to the internet. Advances in Mobile BI also mean that users can access their data on the go through smartphones and tablet devices.

The benefits of this were highlighted in a recent study which found that Mobile BI users saw an increase of 45 per cent in their ability to make business-critical decisions in the allocated time frame.
Quiz

5 question test to prove a Business Intelligence system is right for you

Take this quick and easy five question test to establish whether you need Business Intelligence.

*Tick all of the boxes that apply to your business.*

1. Is it difficult to get at the information you need?
   
   It might be spread across different systems making it difficult to access. Or it might be raw data which needs processing in order to be useful, making it difficult for you to get at the information you want quickly. And sometimes, you just can’t get the information you need.

2. Is vital reporting information provided infrequently, or is it arriving late?
   
   You get January’s sales figures in mid-February. You find out a key product line is selling fast, several weeks after it started to happen. You get management information monthly or quarterly, not weekly or daily. It doesn’t have to be like that—a Business Intelligence system can deliver what you want, when you want it, entirely automatically.
- Do bottlenecks form around key individuals with the technical skills to extract data and turn it into meaningful information?

It’s often the case that only a few individuals have the skills and detailed knowledge to produce reports and analyses. Such people quickly get overloaded, and delays occur. Plus, of course, risk is increased—because what you need to know today, you won’t find out until next week.

- Do you have data in held in multiple places?

It might be spread across several ERP systems, for instance, or held in different best-of-breed functional systems, or even held in spreadsheets. The result: you’re getting fragmented, obsolete information, instead of one single, always up-to-date, version of the truth.

- Do lots of people in your organisation spend time manually producing reports?

You know the sort of thing: downloading data into Excel, manipulating it, and then emailing it out. This is costly and error prone, and those people could be better employed spending time managing, or selling, or servicing customers.
How Many of the above problems apply to your business?

0.

Sounds like you’re pretty much covered

That’s great! However you still might benefit from some of the fantastic benefits of a BI solution.

1-2.

There’s definitely room for improvement

Effective BI could help to solve these problems and improve the performance of your business.

3-5.

You need Business Intelligence

The problems you’ve listed could be costing your business time and money! A Business Intelligence solution is definitely something you should be thinking about right now.
So you’ve come to the conclusion that you need Business Intelligence? That’s great!

However, choosing the right Business Intelligence solution for you can often be an arduous task.

One thing that quickly becomes apparent is that there’s no shortage of purported Business Intelligence offerings on the market. The trouble is, attempts to compare and contrast them often leave you more confused than when you started.
Why? Because they define “Business Intelligence” differently, have different target markets, and approach Business Intelligence in very different ways.

What ought to be a straightforward comparison of like-with-like Business Intelligence systems quickly turns into a debate about the nature of Business Intelligence itself.

At Matillion, we approach the problem differently. Instead, we’ve came up with a three-step initial approach to choosing a BI solution:

Step 1: Think about the questions you should be asking when it comes to your BI solution

Step 2: Determine which core elements of Business Intelligence functionality matter most to you

Step 3: Decide which broad “family” of Business Intelligence solutions comes closest to meeting your needs

Clarify these three issues, and the rest of the selection process becomes much easier.

In order to assist you in this process we’ve taken extracts from three of our most popular blogs which will allow you to cover the three steps above in greater detail.
Your next BI solution: the key Business Intelligence questions to ask

There are many questions your company should be asking when looking for a new BI solution. When investing in new software, it is natural and important for this to be the case. We have compiled a list of some of the most important Business Intelligence questions your company should consider.

Who is driving the BI project?

When developing a BI strategy, it is important to know who is driving the project, the person who is ultimately responsible for decision making.

It is of vital importance that any project is sponsored by somebody high up in the company who has the authority to drive ideas into action.

Is the strategy business- or IT-lead?

When it comes to implementing new tools, business users are typically concerned with factors such as speed, clarity of information, ease of use and its sustainability over time.
IT users on the other hand are more concerned with factors such as security, control and the ease of integration with existing systems.

Jeff John Roberts argues that “The better approach is to treat data in a more agile manner, and create teams that consist of both an IT person and a business executive”. In theory, this would allow much greater collaboration on projects and allow the business to derive the greatest value possible from their BI strategy.

However, in reality it is unlikely that this collaboration will be a smooth process and, with such differing views, it is possible that this may divert attention away from the best interests of the business as a whole.

Who are the users?

Perhaps even more important than the architects of a BI strategy are the end users of the tools.

It is important that your BI strategy is formulated with these users in mind and in order to do this you must gain an insight into who exactly they are.

Daniel Dann describes the three broad classifications of Business Intelligence users as being; strategic, tactical and operational.
These different types of users have very different requirements in terms of the volume, complexity and timeliness of intelligence information.

It is also important to accommodate the different levels of experience that different users may have as well as their level of IT competence.

What are your Key Performance Indicators?

As part of your BI strategy, it is crucial that you determine what information is most important for your business. In order to do this you should define the Key Performance Indicators (KPIs).

These KPIs should be high-level, well-defined, quantifiable measurements based on pre-established criteria and provide a framework for comparing performance against business objectives.

It is crucial that these KPIs are clearly defined and that their use is consistent throughout the whole business in order to avoid any confusion or misinterpretation that may occur with the use of overly technical jargon.

How good is your data?

One of the major obstacles facing businesses when developing a BI strategy is the quality of data.
Businesses often put great amounts of time and money into developing their business intelligence operations but this can all be undermined by the data itself being of a poor quality.

One of the major difficulties that businesses face is being able to collect and process such vast amounts of information and this is where BI tools can help.

BI tools can automate the collection of data and process it into clear and actionable insights. This means that you can spend less time collecting the data and more time using it.

How secure is your data?

One of the biggest concerns that business have about their BI strategy is the security of their company data. This is one of the primary reasons why businesses have traditionally preferred on-premise Business Intelligence as opposed to outsourcing these operations.

A study by Howard Dresner into Cloud BI concerns found that more than half (56%) of the survey respondents stated security and privacy issues are the top barrier to adoption of Cloud BI. However, technologies such as Cloud BI are becoming increasingly secure and therefore offer a viable alternative to on-premise.
What technology to use?

Another major factor in a BI strategy is determining how it will be used and on what platform users will view the information.

Two of the major trends in Business Intelligence in recent years have been the emergence of Cloud BI and Mobile BI.

Cloud BI allows users to access information at anytime, anywhere in the world, overcoming many of the restrictions of traditional BI tools.

Mobile BI can allow users to access this information on the go on a range of smartphones and tablet devices.

How much does it cost?

Cost can be one of the major factors to consider when developing a BI strategy, particularly for SMBs who do not have the vast financial resources of larger businesses.

With all of the new tools and technologies that are available right now, it could be easy to get carried away and make large financial outlays that the company simply cannot afford in the long run.

Cloud BI tools can offer a great solution at a fraction of the price of traditional on-premise operations.
How long does it take to implement?

Business Intelligence solutions can often take a long time to implement, leaving businesses without this vital information for long periods of time. It is important to factor this implementation period into your BI strategy and be realistic about time constraints and any potential delays that may occur.

Again, Cloud BI offers a much more efficient solution to tradition BI because the implementation time is drastically reduced. A traditional Business Intelligence tool typically takes between 12-24 months to implement whereas, here at Matillion, our customers can be up and running in as little as four weeks.
8 common Business Intelligence requirements

The precise Business Intelligence requirements of individual organisations will vary. Some features will matter more to some businesses than others; some businesses may have little need for a particular feature, while others might rely on it heavily.

At the core, though, lie a number of key requirements which are commonly found on most businesses’ shopping lists.

On the next page we will go on to explore eight of these features in greater detail.
✓ **Self-service reporting:** The ability for users to access a report, and filter searches and reports employing easy-to-use drop down menus and so on — and to do it themselves, without needing an IT department’s involvement.

✓ **Drill down analysis:** The ability to explore your data even further, drilling down into specific selling products or customer sectors in order to understand what lies behind the “big picture” results that you are seeing.

✓ **Data visualisation:** The ability to look at data in a way that lets you spot trends, identify gaps, or exploit visual aids as a tool to communicate better. By making information easily digestible to everyone, data visualisation can foster better decision making processes.

✓ **Dashboards:** In short, dashboards are at a glance, situational awareness tools for a given user or role. They combine information from a variety of sources, and then present it graphically, providing at-a-glance information on progress against goals and objectives.

✓ **Report scheduling:** The ability to define a report, and then have it automatically sent by email to a user or group, on a schedule. This isn’t the most glamorous part of a Business Intelligence solution, but our usage statistics show that it is, interestingly, one of the most heavily used.
✓ **Microsoft Office integration:** The ability to readily integrate Business Intelligence information into the world’s most widely-used office productivity suite, thereby leveraging your existing investment training and skills. In short, if your finance staff love Excel, why fight against the tide?

✓ **Support for mobile devices:** The ability to have reports and dashboards automatically delivered to users through mobile devices such as iPads, Android tablets, and smartphones. Formerly a “nice-to-have” feature, it is now a “must-have” item on most shopping lists.

✓ **Security:** The ability to control “who sees what” with a Business Intelligence solution can be vitally important. In the wrong hands, information about which customers, or which products, are — for instance — the most profitable or fastest-growing can be highly damaging. You need to have the information, certainly — but that doesn’t mean that every junior salesperson needs to know it as well.

Now that you’ve determined the sort of questions you should be asking yourself and thought about the features that matter most to your business, it’s time to look at the types of Business Intelligence on offer.

This should help you to determine the broad “family” of Business Intelligence Solutions that best fits your requirements.
6 of the most popular Business Intelligence solutions out there

Study the market, and you’ll find a large number of options when it comes to Business Intelligence products. To make things easier, we have broken them down into the six most popular categories available.

Each has arguments for and against. Weigh them up, and you’ll be much closer to making the decision that’s right for you.

1) Enterprise-grade Business Intelligence solutions

These are the highly-capable and scalable Business Intelligence suites sold by the likes of Cognos (IBM), Business Objects (SAP), and Hyperion (Oracle).

**For:** Very scalable, even to the very largest businesses. Every feature you could ever want and more.

**Against:** They’re expensive and complex to implement and run. Often, you’re paying for tools that you don’t want or need, and which don’t get adopted.
2) Data visualisation tools

Simply put, these are the cool tools that let you visualise data via graphs and dashboards. Tableau and Qlikview are examples of successful products in this area.

For: They’re really powerful graphically, and make great-looking, complex dashboards and data visualisations.

Against: You need to install them on individual PCs as they’re client server tools. They don’t always have all the basic reporting capabilities such as scheduling, printing and self-serve report creation. Creating new reports is not an end user activity.

3) Report-writing tools

These are products designed for basic reporting tasks such as formatting data into printable reports. Crystal Reports — now sold by SAP — is an example of a report-writing tool.

For: They’re cheap and effective for printing reports.

Against: They’re not Business Intelligence tools. They can’t analyse and drill down into data, and creating reports is time-consuming and highly technical — often an IT task, and not for an end user.
4) “Home-grown” Business Intelligence solutions

Take your time, and it’s perfectly possible to use Microsoft Excel and Microsoft SQL Server to hand crank a Business Intelligence capability yourself. Or at least, to kid yourself that you’ve got a Business Intelligence solution.

**For:** There’s little capital outlay involved. And you’ve probably already got what you need already.

**Against:** It can take a long, long time to implement — and even longer get to real ROI. And, once staffing time is taken into account, the true cost is usually higher than a Business Intelligence solution. Oh yes, and there’s little by way of essential features such as security, self serve reporting, scheduling, and mobile support.

5) ERP “packaged” Business Intelligence or reporting functionality

These days, most ERP solutions have some sort of business intelligence tool bundled-in. So if you’ve got a recent ERP system, then there’s likely to be a Business Intelligence module that you can licence.

**For:** They’re designed to work with your existing ERP or core system. There is no need to worry about integration costs or compatibility.
Against: They can only work with the data that’s in your ERP or core systems, and ignore data held in other systems. They’re often inflexible, as well, and can be difficult or expensive to modify.

6) Cloud-based Business Intelligence tools

Business intelligence doesn’t have to be on-premise. Increasingly, there are web-based solutions which companies can buy into on a software as a service (SaaS) basis, and access securely over the internet. Matillion belongs to this category.

For: Reduced risk of implementation because the solution is you “pay as you go”. Typically, it is designed to be easy to use and no hardware or software is required. Web-based, so accessible from anywhere. Usually faster to implement than traditional alternatives.

Against: Some Cloud-based Business Intelligence systems are just that, namely tools that happen to be in the Cloud, and which may still require hard work such as data integration. And some customers have security/reliability concerns about the Cloud, although this typically isn’t the case nowadays.
CHAPTER 3:  
Why you should consider Cloud BI

Each one of the different types of Business Intelligence tools that we looked at in the previous chapter has their own unique benefits. However, at Matillion we believe that Cloud BI is in a league of its own when it comes to the potential return on your investment.

These days, it is generally accepted that Business Intelligence can dramatically enhance a company’s performance. What’s less well known is how Cloud BI raises the bar on that enhanced performance.
In short, traditional Business Intelligence delivers — but Cloud BI delivers more.

How? By providing the same mix of analytics, reports and dashboards that traditional Business Intelligence provides, but providing them faster, providing them with greater flexibility, and providing them at a lower cost.

In other words, Cloud BI delivers more – and delivers it more cheaply. Which means that in any like-for-like comparison, Cloud BI delivers a greater ROI than traditional Business Intelligence.

Despite the benefits that Cloud BI can offer, many businesses still remain sceptical about its implementation.

In this section, we aim to tackle this scepticism by assessing some of the most common concerns we have come across.

This done, we will go on to further explore the fantastic benefits that Cloud BI can offer for businesses of all sizes.
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7 myths about Cloud BI busted

Businesses have often taken a cautious stance when it comes to implementing Cloud BI solutions, but, with recent advances, this decision involves less risk than ever before.

The relationship between the Cloud and Business Intelligence has continuously grown in strength over recent years, and yet its use has mainly been restricted to only partial areas of intelligence operations.

A number of underlying concerns have deterred many businesses from rolling out a full-scale Cloud BI project. Yet these concerns are often unwarranted as the Cloud begins to offer an increasingly viable alternative in the move away from on-premise operations.

We tackle these concerns head on by busting seven common myths about Cloud BI.

Myth 1: Cloud BI is not secure

Security concerns have been one of the main barriers to Cloud adoption in the last few years but we have found that these concerns are decreasing as people become more aware of the truth. The main question to ask around security
of your data is around relative risk. Are your local computers, servers and networks better protected than most Cloud data centres? Usually, the answer is no. One survey suggests that 90 per cent of businesses have been hacked, a figure that would have been reduced with the better security provided by Cloud BI.

**Myth 2: Cloud BI is not reliable**

There have been many reports of how the Cloud can affect how and when you can access what you want or need. After all, you are relying on external factors and also the internet. On the other hand, what companies do not always consider are situations such as laptop dying, your computer freezing or servers going into meltdown. With economies of scale, Cloud BI is better equipped to deal with these so-called typical issues. To back this up further, Microsoft released a study stating the Cloud increases reliability.

**Myth 3: Cloud BI is a fad**

We think it is safe to say Cloud BI is no passing fashion. With companies adopting and embracing the technology, the concept is proven and it will only become more prevalent as firms like SAP and Oracle use the technology.
Myth 4: Cloud BI is one-size-fits-all

Some might tell you a Cloud BI solution is bolted on regardless of your system or data requirements. This is simply not true. At Matillion, every Cloud BI implementation is bespoke and tailored to each client’s requirements and needs.

Myth 5: Cloud BI is pay-per-use

Whereas some Cloud BI providers may offer pay-per-use, we do not. We want you to use the software as much as possible since we have seen that businesses that use our tool more thrive and grow. Our pricing is based upon the number of modules and users you require, not how much you use the tool.

Myth 6: Cloud BI will not integrate with my systems

This is another common misconception – and for a number of reasons. Here are a few of the phrases we have heard over time which did not affect us. “Our system is too old. It was built in the 70s”. “Our ERP is bespoke and has been rebuilt and bolted on several times. You won’t be able to get the data out”. “We have over 10 ERPs globally and the data is far too complex. You cannot make false promises”.

These are issues we tackle and solve every day and since Matillion was created there has not been a system with which we could not integrate.
Myth 7: Cloud BI costs more over time

If you look at a 20-year time scale, you might assume Cloud BI would be more expensive than an on-premise solution. But are you considering upgrade costs? The extra IT staff you will need to maintain an ageing system? The server that will need to be replaced due to the extra load carried? Not forgetting whether you want to replace your old on-premise BI system after 10 years – at a large cost.

Cloud BI will often outlive a traditional Business Intelligence solution and is usually justified this way. In a truer reflection, Cloud BI is more cost-effective and comes with fewer or no capital costs.
The 5 Business Intelligence rewards you can reap with Cloud BI

Confidence in Cloud BI is at a high right now as seen by the satisfaction rates found in a recent Dimensional Research study. The study found that over 80% of respondents were highly satisfied or satisfied with their Cloud BI adoption.

No longer can the decision to implement Cloud BI be considered a leap of faith. Instead, it has become an extremely sensible option that has been substantiated by the high rates of success seen by current users and the fact that many large names are beginning a transition to the Cloud.
But it’s not just larger businesses that are exploiting the benefits. Cloud BI presents a great opportunity for SMEs who traditionally would not have possessed the resources to invest in technology this powerful.

We take a look at five of the biggest rewards you can gain from investing in Cloud BI, not matter what size your business.

1 Faster implementation

One of the major flaws of traditional Business Intelligence solutions is that they can take a painstaking amount of time to implement. Not only that, but even when this complex process has been completed, there is still up to a 70 per cent chance that the project will fail. A long implementation period can put great strain on both the physical and financial resources of a business, deterring investment away from other areas of the company. And, as more time passes, enthusiasm for the project will surely diminish.

A much faster implementation period is one of the Business Intelligence benefits widely offered by Cloud BI vendors. At Matillion, for instance, we deliver Business Intelligence projects with cost-effective, fixed-price implementations, and one all-inclusive monthly subscription that includes support and on-going changes.
What’s more, the implementation process has been designed to be low-pain and fast, so we can deliver an effective, enterprise quality, Business Intelligence and self-serve reporting project in just a few weeks.

2 Improved data visualisation

Being able to easily interpret the vital information you need to run your business is essential. There is little point in collecting large volumes of data for it then to be poorly communicated to the people for whom it really matters.

With the rapid rise of information technologies, businesses have increased their demands for high quality performance data. The difficulty comes in finding a way to present this information to employees in a way that is quick and easy to interpret and this is where data visualisation tools can help.

Want to spot trends, identify gaps or communicate visually? Data visualisation lets you do all this through graphs and charts. By making information easily digestible to everyone, data visualisation can foster a quicker, more efficient decision-making process.
3 Report scheduling

With traditional Business Intelligence tools, reporting can often be a difficult and time-consuming task that typically requires the help of IT departments. This can put great strain on IT staff and can lead to bottlenecks occurring in the reporting process.

Cloud BI tools take the hassle out of building reports, requiring significantly less manual effort on the part of the user. This accelerates the whole process and ensures that you receive the actionable insights you need in a timely manner.

Many Cloud BI tools such as Matillion also allow you to schedule reports for a specific time or date, thereby guaranteeing that your reports will always be on ready on time.

4 Advanced security

A common misconception about Cloud BI systems is that because the data is on the Cloud, it is less secure, but this is completely untrue. In fact, studies have even proven that attacks are twice as likely to be targeted at on-premise solutions.

Here at Matillion we offer an advanced security system that allows you to control exactly what each user can see.
This permits you to share your reports freely with managers, employees and even suppliers or customers.

We also understand the need for high security in the Cloud. It is for this reason that we use encryption that exceeds banking standards. Our data centres are SAS Type II, ISO 27001 and PCI accredited.

5 Improved access

Innovations in technology over recent years have completely changed the way in which Business Intelligence information can be viewed, with technology such as smartphones and tablets making it easier to access data anywhere in the world.

Unlike on-premise solutions, Cloud BI tools have been designed from the ground up to be accessed remotely through these devices. This means that users can have up-to-date Business Intelligence tools with them, wherever they are.

Walking the factory floor, at a customer’s premises, at a supplier’s premises, while travelling, users can have access to these tools — instantly, with no fuss, and from whatever mobile device is to hand.
CHAPTER 4: Functional analysis

For many considering a Business Intelligence or self-serve reporting project, the prospect of defining their analysis requirements is daunting. There are a number of important questions that you should be asking yourself:

- What do we want to analyse?
- How should our data warehouse be designed?
- Where is our data? And in what format or technology?
- What are my data quality issues?
As with all significant IT projects, the requirements analysis stage can be time-consuming and painful. It’s also where the project can be set up to fail before it’s started.

At Matillion we like to deliver value fast. We also focus on specific market verticals and company types which means we have a really good understanding of our customer’s reporting requirements.

As such, we’ve been able to develop industry-ready “modules” of Business Intelligence functionality designed to deliver all the reporting and analysis functionality you require for a given area of your business.

Each module is integrated, tailored and customised on implementation to deliver a high-fidelity fit to your requirements. So they’re not “cookie-cutter” templates that you have to like or lump. But they do contain all the facts and dimensions that we expect a company in a specific vertical to need to analyse their business.

We have modules available for:

- Sales analysis
- Inventory and supply chain analysis
- Production analysis
- Financial analysis
Sales analysis
The sales analysis module delivers all the functionality we expect a mid-size, product-centric business to need to analyse its sales activities. Customers, products, margins, revenues, volumes, budgets, targets, sales people, geographies, orders, deliveries, invoices and forward order book are all part of the sale analysis module.

Inventory and supply chain analysis
The inventory and supply chain analysis module again delivers all the functionality we expect a product-centric business to need to analyse its purchasing activities and inventory. Suppliers, products, prices, volumes, managers, regions, orders, deliveries, purchase invoices, daily stock positions and stock history are all part of the Inventory and supply chain analysis module.

Production analysis
The production analysis module with Matillion BI delivers functionality for manufacturers to analyse their production activities. It includes concepts such as work orders, operational steps/processes/procedures, work cells/production lines/machines, labour, capacity, utilisation and wastage.
Financial analysis

Matillion’s financial analysis delivers self-serve reporting and analysis functionality over ledgers and financial transactions. Ledger balances, ledger entries, open items, payments, accounts, liquidity, balance sheets, P&L, cost centres/units and financial ratios are all delivered as part of the financial analysis module.

The financial analysis module is particularly useful where the business wishes to perform analysis beyond that which is typically performed by an accounting package or ERP finance module (e.g. drill-downs, trends, graphical analysis or ratios). Or where the business wishes to share self-serve reports, analysis functionality or data visualisation based on financial data with the business beyond the finance department. Or where the ERP or packaged finance reporting functionality is inflexible, insufficient or difficult to access.

Now that you know what each module involves, let’s take a look in more detail at the benefits they can bring to your business.

In the next few pages we’ll discover why you should be investing in sales analysis and inventory analysis.
Sales analytics: 3 quick questions that will boost your bottom line

As insightful tools go, it’s difficult to beat sales analytics. At a stroke, you’ve got ready access to all those clever Amazon-style insights into such things as “customers who bought this are likely to want to buy that”. But sales analytics can do more than that — much more.

Better still, while all that affinity analysis and basket analysis data mining delivers powerful insights into customer behaviour, it is possible for basic out-of-the-box sales analytics to have an even greater impact on businesses’ bottom lines, without getting into the complexities of full-blown data mining.

How? By using sales analytics to run simple and straightforward analyses of customer profitability, pulling in sales revenue data, margin data, and — if appropriate — “cost to serve” data, such as logistics costs, or special packaging, or delivery stipulations.

Such analyses are quick, straightforward, and provide ready insights into which levers to pull in order to increase overall profitability.
1) Sales analytics: who are our most profitable customers?

Here’s a hint: it’s not necessarily the customers who you think are the most profitable. Run the analyses, in short, and you can quickly find that the margins your sales people are accepting in order to retain your very largest customers are in fact tending to push those customers down the profitability table.

How far down? That depends on the business. But we wouldn’t be surprised to learn that your top five customers are less profitable than your next five largest customers. Or that those ranked 11th to 20th are more profitable than those ranked 1st to 10th.

Not in terms of aggregate absolute profit earned necessarily (although that can happen). But certainly in terms of percentage margin, especially if cost-to-serve factors are taken into account.

2) Sales analytics: who are our least profitable customers?

Again, these aren’t necessarily who you might think. And admittedly, cost-to-serve often plays a part here.

So, rather than necessarily focusing on negotiated margins, look for concessions made on packaging or shipping
charges, or special deals in terms of delivery frequency.

And again from a cost-to-serve perspective, also take a close look at what you’re selling, as opposed to who you’re selling it to. If you’re maintaining entire product lines just for one or two customers, then alarm bells should be ringing.

3) Sales analytics: how can we take corrective action?

Clearly, in terms of boosting the bottom line, it is impossible to wave a magic wand and simply swap less profitable customers for more profitable ones.

But in practice, a magic wand isn’t necessary.

It’s simply necessary to know why some customers are less profitable than others — and then corrective action can be taken.

Are incentives to the sales staff encouraging too much discounting? Are larger customers imposing overly-onerous conditions? Is a process of product rationalisation called for?

Better still, by looking at those characteristics that are shared by your more profitable customers, it’s possible to shape offers so as to be more attractive to that type of customer.
Capturing more-profitable customers, in short, at the expense of less-profitable customers.

It’s not an overnight process, to be sure. But it’s certainly a journey where sure-and-steady progress is very possible.

Sales analytics: the bottom line

Despite which, all too few businesses engage with sales analytics in order to find the starting point necessary to embark on the journey.

Don’t be one of them. Because as low-hanging fruit go, making improvements to customer profitability ranks among the most straightforward means possible of boosting the bottom line.

So start the journey today.
Inventory analysis: 5 quick ways to unlock your hidden cash pile

While it’s fashionable to point to sales analysis as an example of how Business Intelligence adds value and delivers ROI, at Matillion we think that inventory analysis is just as useful — and maybe more so.

Because while the impact of sales analysis takes time to work its way through to the bottom line, inventory analysis has more immediate benefits. For cash-constrained businesses, in short, inventory analysis delivers one of the fastest time-to-benefits possible.

It’s not without a certain irony. Ask anyone who’s managed a warehouse, and you’ll hear the same sorry tale.

The parts, materials, and products that customers are demanding are precisely those that it’s difficult to keep in stock. Meanwhile, the shelves are groaning with the parts, materials, and products that customers don’t require.
And ask anyone who’s managed a warehouse in a business that is cash-constrained, and you’ll hear an even sorrier tale. Because where cash is tight, the supplies of incoming inventory to replenish those items that are selling can become erratic, or dry up completely as borrowing limits are reached.

Meanwhile — you guessed it — the shelves are groaning with parts, materials, and products that customers aren’t demanding, and which aren’t selling.

1) Use inventory analysis to cut down reorder quantities

Once you start using inventory analysis to express individual stockholdings in terms of days of sales, it’s easy to get a nasty shock. Why on earth do we have 10 months’ worth of sales of this item sitting on the shelves? And why did we buy so much of it just last week?

The answer is likely to lie in reorder quantities that are too large — either due to a setting in an inventory control or MRP system, or the purchasing department taking “advantage” of discounted rates for bulk purchase. But in such situations, buying fewer items, albeit at a slightly higher price, is likely to be a more profitable strategy.
2) Use inventory analysis to re-set safety stock levels

Consult an inventory management textbook, and you’ll discover that fast-selling items have a much lower demand variability than slow-moving items. But often, safety-stock levels fail to reflect this, holding just as much safety stock for fast-moving items as for more erratic, slow-moving items.

With inventory analysis, safety-stock levels can be better aligned with demand variability, freeing up surplus stock without impacting customer service levels. The result: lower inventories — and happy customers.

3) Use inventory analysis to generate cash from surplus stock

Without inventory analysis, it can be difficult to identify surplus stock. But with inventory analysis, it’s all too easy to see that the stock levels of some items are way out of kilter with requirements. You could wait for the situation to resolve itself naturally, of course — but that might take several years.

It’s often better to explore ways of selling off surplus stock, once identified. Offering discounted prices is one stratagem. Selling to a specialist broker is another. Selling back to the original supplier is yet another. Either way, it’s cash in the bank — and not sitting on the shelves.
4) Use inventory analysis to raise service levels, and boost sales

Sometimes, safety-stock levels are too low, especially on fast-moving items. Customers want to buy a part, product, or material, and they can’t — because it’s out of stock. Now, in some businesses, customers will wait until what they want is back in stock. But often, that moment of being out of stock turns out to be a lost sale.

Raising service levels by re-setting safety-stock levels in this way has a negligible impact on inventory holdings, because the items involved typically turn over very quickly — which is why you’re out of stock in the first place. But the impact on reputation, customer satisfaction levels, and revenues, can be significant.

5) Use inventory analysis to capture trends

Are the sales of an item rising rapidly? Are the sales of an item falling rapidly? Is demand predictably higher at some times of the year than others? Are certain items routinely bought together?

In each case, this is vitally useful information, allowing businesses to better manage their inventories, boost sales, and increase customer satisfaction.
But without inventory analysis, such things can be difficult to spot. And an opportunity not spotted is an opportunity from which a business can’t profit.

**Inventory analysis: the bottom line**

For businesses with inventory to manage, a Business Intelligence-based inventory analysis toolkit can be a valuable way of not just generating operational insights and improvements, but actually freeing up cash and boosting sales and profits.

And with today’s Cloud-based Business Intelligence, the power and ease of use of inventory analysis tools has never been greater.

So, what are you waiting for?
Data visualisation has been a major component in the overall effort to make Business Intelligence more mainstream and widely accessible.

In a modern workplace, where time is of the essence, it has become crucial that information is efficiently communicated across different levels of the business. The effective use of data visualisation can allow you to present large volumes of data in a much more simplified and user-friendly manner.

With these benefits in mind, we explore why it deserves to be an integral part of your Business Intelligence strategy.
Why data visualisation is crucial to your BI success

What is data visualisation?

In simple terms, data visualisation involves the graphical representation of data and can take a large number of different forms such as charts, info graphics and dashboards. Data visualisations can help to transform often complex data into something that is not only easier to understand but also more aesthetically pleasing.

A switch from input to output

As Business Intelligence becomes more mainstream, vendors are beginning to focus on both ends of the pipeline. As well as improving the quality of data input, there is also a strong focus on ensuring that the output is well-structured and clearly presented.

This increased focus on output has largely been driven by the demands of consumers who have been enticed by what visualisation can offer. Rick Robinson states that one of the major demands from business users is the ability to produce business dashboards that are “faster and more flexible”.
A BI dashboard can be a great way to compile a number of different data visualisations to provide an at-a-glance overview of business performance.

The advantages of data visualisation

Businesses are quickly beginning to realise the advantages that visualisations can have over standard representations of data.

Nathan Roberson discusses how visuals are much more effective, not only in capturing people’s attention, but also in maintaining this attention for a greater length of time. This can be particularly important when communicating data to key decision-makers higher up in the business who require quick and actionable insights.

How data visualisations can be used

However data visualisations are not just an important tool for communicating data to other people. As Michael Rappa says, “We see visualization as an important, integral part of not just communicating insights to decision-makers, but very important to your understanding and analyzing your data”.

Data visualisations can help you spot trends in data that may not have been noticeable from the text alone.
They can also enable you to make more effective comparisons between data sets by plotting them on the same visualisation, helping you to gain more value from your data.

The future of data visualisation

Ellis Booker discusses how data visualisation tools are slowly getting into the hands of “regular business users”. This highlights the changes that have occurred in recent years to make Business Intelligence increasingly accessible.

Users no longer require high levels of experience or technical knowledge to be able to create and manipulate data visualisations, meaning these tools are no longer restricted to particular areas of the business.

Users are beginning to expect higher quality data visualisations, and in order to keep up with these expectations, vendors are continuously being forced to innovate the capabilities of their software.
How to construct the executive dashboard your user actually needs

When it comes to designing a business dashboard, it is crucial that you take into the account the end user. Understanding and fulfilling their requirements can be the difference between success and failure.

After all, these are the people who will ultimately be using these tools on a day-to-day basis and any discontent on their part is sure to cause problems for the business as a whole.

The aim of a dashboard is to present users with a simplified snapshot of the data that really matters to them. However, failing to take into consideration user requirements could completely diminish the value that these tools offer.

This article looks at some of the most important factors that you should take into consideration in order to ensure the success of your business dashboard.
The number of users

There may be a wide spectrum of different users, but it still makes sense to try to create a “persona” of the typical characteristics that they may have, and how many of them there will be.

A business dashboard is more effective when it can be customised to the user’s needs, but this becomes progressively more difficult as the number of users increases. Even if the data requirements are the same for all users, the way in which they use the dashboard may be completely different.

With a single user, it would be simple to tailor every aspect of the dashboard to their specific needs, allowing for optimum efficiency. However as the number of users grows, it becomes increasingly difficult to ensure certain sections are user-specific.

User skills/ experience

The level of experience of the people using your dashboard will ultimately define how complex and detailed the information on it can and must be. This experience may refer to their position within the company, or their previous experience of using similar systems for handling data.
It is important to compensate for the differing capabilities of users by making your dashboard versatile. The more experienced a user is, the more likely it is that they will wish to drill down further through the information, as they can handle a greater complexity of data.

On the other hand, a user who is a relative novice would only be able to handle limited complexity, and so the focus for them would be around how easy the dashboard is to use, rather than how extensive is the data that it displays.

Not only is the appropriate volume of data related to experience, the type of data that a user will typically require is also affected. Users in different levels or sectors of the business will interact with different types of data on a day-to-day basis, and it is therefore important that there is a degree of flexibility that allows users to prioritise particular metrics.

Rather than including a large number of filters, which can increase complexity and waste valuable space, it is more efficient to have some kind of intelligence built in to the dashboard that allows more frequently-used performance indicators to be prioritised.

User platform

The platform on which a business dashboard will be viewed
can be influential in determining how it should be designed.

Innovations in technology over recent years have completely changed the way in which information can be viewed, with technology such as smartphones and tablet devices making it easier than ever to access data anywhere in the world.

This can improve accessibility and be a great selling point for your dashboard, but it can also be costly and time-consuming to make available across a large number of supported devices. You must also take into consideration the screen size and resolution of individual devices in order to optimise the executive dashboard display.

Regardless of this, the ability to support mobile devices remains a key requirement for users. The demand for this feature is highlighted by a recent Jaspersoft survey which found that 85 per cent of respondents recognised the advantages that could be gained from accessing Business Intelligence tools on their mobiles device.

Additional user requirements

As well as the more obvious user needs, it is also important to account for some of the more specific requirements that individual users may have.
A lot of these requirements may involve the visual qualities of the executive dashboard as some users may find it harder to interpret the information than others.

A good example of this is the case of colour-blind users who may struggle to view information that is presented in particular colours and colour schemes.

It may not seem that important in the grand scheme of things but over 250 million people worldwide have some degree of colour-blindness, including around 8 per cent of all males. With such a high prevalence worldwide, is this really something that you can afford to ignore when designing an executive dashboard?
7 simple secrets to nailing your business dashboard

Dashboards can help to condense large volumes of data into a much easier to interpret format, reducing both time and skills requirements in the process.

Furthermore, dashboards place a greater emphasis on the visual representation of information through the use of various graphs and charts. This makes the data more meaningful as well as being more aesthetically pleasing for users.

In theory this all sounds great, right?

However, in practice, this is not always the case. Poor design or delivery can completely diminish the value of these dashboards and can leave users feeling confused and frustrated.

By following a few simple tips, you can optimise the performance of your CEO dashboard and exploit the benefits of these fantastic tools.
1. Limit the dashboard to a single screen

The whole crux of a CEO dashboard is that it allows data to be viewed at a glance. For this reason, a best practice dashboard should be generally be limited in size to a single page and be able to fit the screen of the devices on which it is going to be viewed, be that computer, mobile or tablet.

If the dashboard does not fit onto a single screen and the user is required to scroll down or across it, some of the important data may be neglected.
2. Less is more when it comes to presenting data!

With the limited amount of space available on a business dashboard, there is often the temptation to cram in as much data as possible. However, this can lead to dashboards that look confusing, messy, and which are difficult to interpret.

It is important to determine which metrics should be included on the dashboard and then limit the data to the most important or most recent figures.
3. Think about the placement of data

It is usually the case that some KPIs are more important than others. Think carefully about which information you wish to emphasise, and how this can be achieved. The attention that information receives can be influenced by where it is located on the dashboard. The figure below shows the areas that are more emphasised by the human eye than others.

4. Choose the right data visualisation

Choosing the right data visualisations is a pivotal stage in the design process for a CEO dashboard.
It is easy to think that flashy effects and graphics will gain the greatest attention. But, in reality, visualisations that are simple, yet powerful, are the most effective when it comes to presenting data on a dashboard.

Data visualisations such as bar charts, line graphs, scatter graphs and locational maps can all commonly be found across good examples of dashboards.

However, it is more simple visualisations such as spark lines that can often be the most effective.

5. Use colour sparingly

There is often a temptation to use excessive amounts of colour, in order to highlight as much information as possible in the small amount of space that you have. This can lead to dashboards looking confusing, congested and unprofessional.
It is important to understand the role that colour plays, and to analyse where it is needed and where it is not. In the process, you can cut down on any unnecessary use of colour, and leave your dashboard looking clean and clear.

6. Avoid using 3D effects

3D charts may seem like a good idea, but, in reality, they can make it more complicated to determine exact values on a chart or visualisation.

This problem is highlighted by the example of a 3D bar chart below. The difficulty arises in determining which part of the bar is actually the “top” value, and this may create confusion between users.
7. Give users more freedom to manipulate the data

Once you have mastered the content and aesthetic design of your dashboard, it is important to think about how it will actually be used. There are a number of factors that you should consider in relation to how users will interact with your dashboard, and the features that they may expect to be present.

Many dashboards are relatively static and simply present users with data without allowing them to explore further or take action. It is important to provide a flexible dashboard that gives users more freedom in what they can do with the data. One example of this may be the ability to drill down further into the information to gain a more in-depth insight.
CHAPTER 6:
Business Intelligence resources

So you’re still interested in Business Intelligence and want to find out more?

Here’s our guide to some of the best resources available, both online and offline.

We’ve also compiled a handy glossary of the key terms you may come across when reading about Business Intelligence and reporting.
7 of the best BI Twitter accounts

On the lookout for the latest news on Business Intelligence? Look no further, here at Matillion, we have compiled a list of seven of the best Twitter accounts to help you learn about Business Intelligence and self-service reporting.

#1 BI Updates – @biupdates

BI Updates’ 4,000+ followers enjoy plenty of tweets regarding the latest on emerging Business Intelligence including commentary, research and updates, with links to free white papers, reports and articles.

#2 BusinessIntelligence – @BIdotcom
With just 588 followers, BusinessIntelligence are a somewhat hidden gem of tweeters. BusinessIntelligence, as you might expect given the name, tweet all about Business Intelligence. Many tweets link to articles on their website businessintelligence.com which is full of helpful BI information such as news, resources and job vacancies.

#3 Gregory Lancaster – @beyeguy

Another hidden gem is Gregory Lancaster who has just 244 followers but a whopping 13.4k tweets which offer first-hand knowledge coming from an individual with 14 years of experience as an implementer of enterprise Business Intelligence.

#4 Boris Evelson – @bevelson
With over 8,000 followers, Boris Evelson is a popular individual tweeter who provides an insightful look into the world of BI. Boris is a Business Intelligence industry analyst at Forrester Research who tweets many extremely useful reports, articles and blogs written by himself and others.

#5 BI Leadership – @BILeadership

BI Leadership are a research company run by TechTarget who have just 440 followers, but don’t let that fool you. Blogs, reports and all manner of articles are tweeted by this vendor-neutral research company in order to provide an honest and reliable source of information for Business Intelligence professionals.

#6 Upsearch BI – @UpSearchBI
UpSearch BI have the most followers on this list with a massive 19,700. Upsearch BI tweet about the latest Business Intelligence news to help leaders unlock the value of data. UpSearch is run by a team of diverse thought leaders with years of industry experience between them.

#7 Howard Dresner – @howarddresner

Howard Dresner is a former Gartner researcher who currently works as an independent analyst. With 9,416 followers, Howard has the highest followers of any individual tweeter on this list – and with good reason. Howard’s tweets offer an insightful and intuitive look at the latest issues and trends in Business Intelligence.

Here at Matillion, we love using Twitter to spread the word about our company. Follow us on @Matillion and find a fantastic range of blogs, content, industry news and discussion.
6 must-read Business Intelligence books

Do you want to know more about BI, data warehousing and self-service reporting? Read these Business Intelligence books and you too can become an expert.

Here at Matillion, we have compiled a list of six of the best Business Intelligence books on the market, looking at subjects such as performance management, big data, predictive analytics and data visualisation. We also include some of our very own e-books to help you see how Matillion can help you and your business.
“The Performance Management Revolution” by Howard Dresner

Howard Dresner is a Business Intelligence and performance management thought leader with years of experience. His book, *The Performance Management Revolution*, explores the ways your business can prepare itself for the future by transforming strategies into plans, plans into actions, and actions into results.

“Practical Tools for Data Warehousing and Business Intelligence” by Ralph Kimball

Recognised worldwide as one of the leading authors in the data warehousing industry, Ralph Kimball discusses the collection of effective tools businesses can use to their advantage. This book covers the complete lifecycle including project planning, requirements gathering, dimensional modelling, ETL, Business Intelligence and analytics.
“Predictive Analytics: The Power To Predict Who Will Click, Buy, Lie, Or Die” by Eric Siegel

This great book by Eric Siegel provides in-depth insights into the interesting world of predictive analytics. This book covers the major issues surrounding predictive analytics and provides detailed case studies of analytics in action.

“Too Big to Ignore: The Case for Big Data” by Phil Simon

Too Big to Ignore is geared towards CIOs, CEOs, presidents, and IT professionals wanting to know more about big data and why it is such a hot topic right now. Simon provides common sense advice for organisations looking to make sense out of the information streaming at us with unprecedented volume, velocity, and variety.
Getting at the vital information you need can be painful. Business Intelligence and self-serve reporting solutions can help.

This free complete guide will teach you all you need to know to select and deploy a Business Intelligence and self-serve reporting solution, helping you deliver the smarter, clearer picture you need for your company.
“Very helpful coverage on what not to do when constructing an effective dashboard. A must for the busy CFO/controller.”

Rene Baca

“How it was very helpful in getting ideas for how to effectively use dashboards in an easy-to-understand manner.”

Bruce Robinson

Software has made it easy to produce graphs, charts and dashboards. Trouble is, the software won’t stop you making bad ones. There is little point in collecting data for it then to be poorly communicated.

This free complete guide will teach you all you need to know when it comes to designing compelling business dashboards, helping you to design, create and deliver something that not only looks great but performs well too.
Here’s a handy explanation of some of the key terms you might come across when reading about Business Intelligence.

Ad hoc query

A database search that is designed to extract specific information from a database. It is ad hoc if it is designed at the point of execution as opposed to being a “canned” report. Most ad hoc query software uses the structured query language (SQL).
Big data

Big data is a massive collection of digital data (typically hosting millions or even billions of rows of data) that is unorganized or marginally organized, making it difficult to mine, structure, analyze or display in any meaningful way. Currently, much of the data that large companies produce and store would accurately be classified as Big Data. In the business intelligence industry, the term “Big Data” is also used to describe sophisticated technologies designed to process massive data sets.

Business Intelligence

Business intelligence (BI) is a term that refers to ideas, practices and technologies for turning raw data into information that businesses can use to make better organizational decisions. Businesses that employ BI effectively can transform information into growth by gaining a clear understanding of their strengths and weaknesses, cutting costs and losses, streamlining internal processes and increasing revenue.

Corporate performance management (CPM)

This is a method of illustrating and improving performance and profit in a business. CPM is considered an additional benefit of Business Intelligence. While in BI, the analysis of history and the present take centre stage, CPM also encompasses the future with planning, projection and sales promotions in mind. Synonymous terms are business performance management (BPM) and enterprise performance management (EPM).
Cloud BI

Cloud business intelligence (cloud BI) refers to network-based tools that turn raw data into information that businesses can use to cut costs, streamline inefficiencies, increase revenue and generally make better organizational decisions. Because it doesn’t have to be downloaded from a disc or hard drive, cloud based BI offers many advantages as a business intelligence solution. It is easy to access, relieves the user of many of the administrative tasks associated with data management, comes relatively cheap and is highly scalable.

Dashboards

A dashboard is a screen that consolidates critical performance metrics all in one place, making it easy for users to stay constantly updated on the information most important to their business. Dashboards can be designed to suit a variety of needs, and will therefore take on a variety of forms, from business intelligence dashboards (BI dashboards) to executive dashboards/enterprise dashboards and key performance indicator dashboards (KPI dashboards).

Data warehouse
A data warehouse is a digital storage centre in which information is compiled, searched, and managed. In most data warehouses, information can be inserted by different parties culling data from many sources. Data in a data warehouse is often modified with compression and hashing systems to expedite searches and transactional processes.

**ETL**

Extract, transform, and load (ETL) is an activity performed by software, in which data sets are moved from their original sources into new databases. ETL is crucial to building and maintaining a current database that can therefore produce relevant business intelligence. Essentially, ETL tools read data sets, convert those data sets into forms that are compatible with the new database, and then write the data to the new database.

**Online Analytical Processing (OLAP)**

Online Analytical Processing (OLAP) is business intelligence software that provides the user with answers to complex queries extracted from multidimensional databases, thus delivering various perspectives on data. OLAP software achieves this type of complex analysis by searching multidimensional databases that can receive input from a number of relational databases and organize them into groupings that can be understood and compared in many ways.
Software as a Service (SaaS)

Software as a service business intelligence (SaaS BI) is business intelligence delivery from third-party providers over the Internet. Rather than paying for software licensing and hosting an entire business intelligence system onsite—replete with hardware, software, and administrative personnel—SaaS BI provides a bevvy of business intelligence tools online, letting users either pay a subscription fee or purchase individual services as they need them.

Because SaaS BI spares organizations the expense associated with traditional business intelligence hosting, it opens up the benefits of business intelligence to many organizations that otherwise could not afford the expense of building a BI infrastructure. And because SaaS BI is hosted in the cloud, it can be scaled to the needs of any company, large or small.

Use this checklist to help you successfully evaluate, plan and implement Business Intelligence in your company.

1. Why do you need a Business Intelligence solution?
   - Review the list of reasons why your company may require a business intelligence solution.
   - Take the short quiz to find out if this is actually the case.

2. Choosing a BI Solution
   - Think about the questions that you should be asking when it comes to your BI Solution.
   - Determine which core elements of Business Intelligence functionality matter most to your company.
   - Decide which broad family of Business Intelligence solutions come closest to meeting your needs.

3. Why you should consider Cloud BI
   - Sort the fact from the fiction by looking at common moths about Cloud Bi being busted.
   - Explore the large number of benefits that could be gained from a switch to Cloud BI.
4. Functional Analysis

- Explore the functionality of a Business Intelligence by looking at the different modules on offer.
- Find out how Sales Analytics can boost your bottom line.
- Think about how Inventory Analysis could be used to unlock your hidden cash pile.

5. Data Visualisation and Dashboards

- Find out why Data Visualisation is crucial for the success of your Business Intelligence project.
- Explore why it is necessary to keep end users in mind when designing a Dashboard.
- Discover the 7 secrets to nailing your Business Dashboard.

6. Business Intelligence Resources

- Discover the best Business Intelligence twitter accounts that you should be following.
- Find out which Business Intelligence Books you should be reading if you want to find out more about the subject.
7. Business Intelligence Glossary

- Understand more about the topic by looking at the definitions of some of the key Business Intelligence concepts.
GET A FREE DEMO: Matillion BI and Self-Serve Reporting

If you’re interested in improving your access to management information, request a custom demo of Matillion’s cloud business intelligence software.