



Providing Effective Dashboards

10 things you need to know

Paul Martin



Dashboard Trend Charts - Actual v Target

Cost Centre : All
Measures : Reporting Amount
Department : All

Sales



EiB

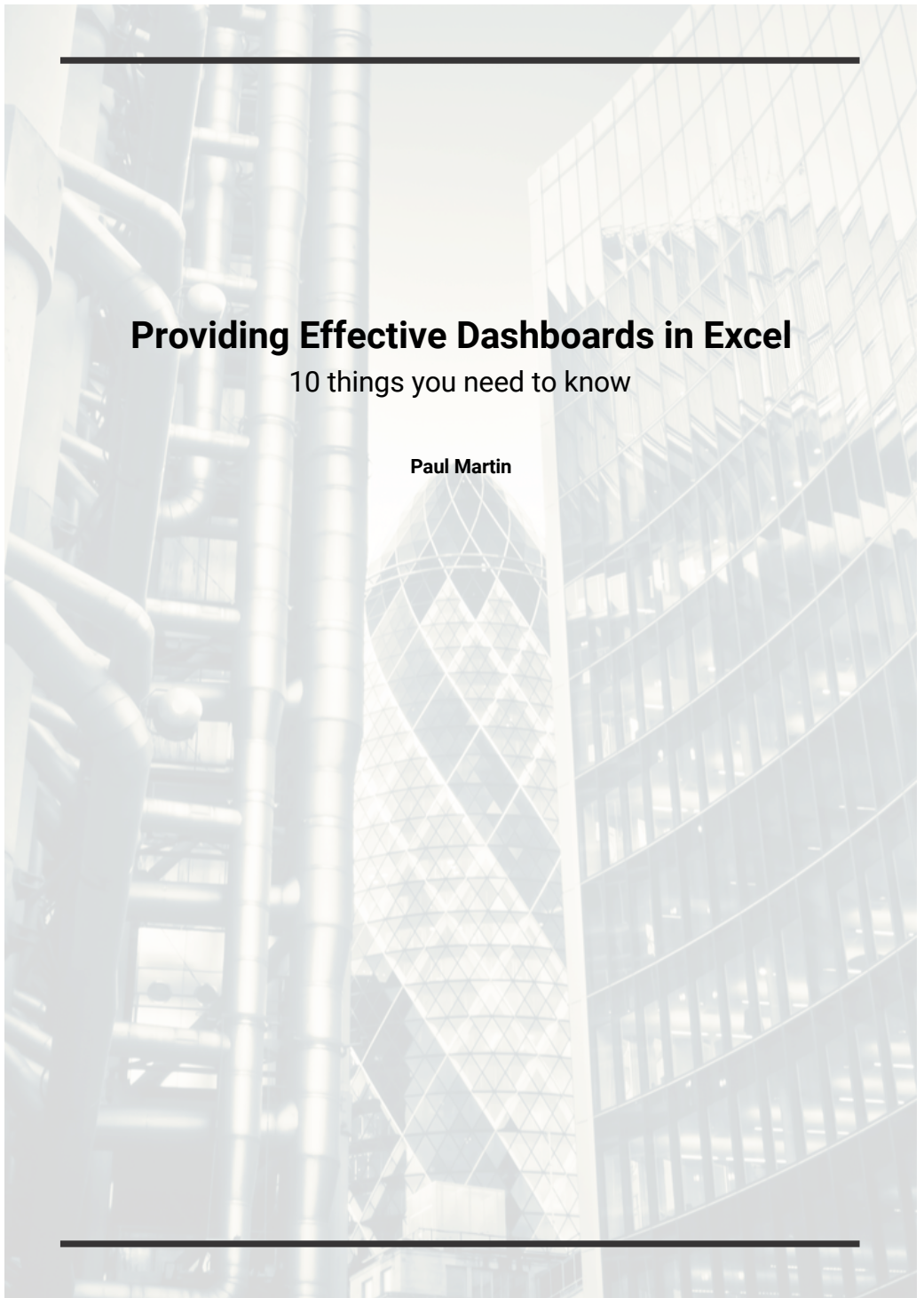
EXCEL IN BUSINESS

Automated Analytics. Powerful Insights.

Providing Effective Dashboards in Excel

10 things you need to know

Paul Martin



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INTRODUCTION

Today, even with innovations in dashboarding, management reporting and self-service business intelligence software, visualising every aspect of your business is still too complicated. It's essential for you to use the right tools to track your business performance effectively, yet there are dozens of different software applications and approaches on the market, making choices confusing, complicated and all too often costly (especially as your user population grows).

With the majority of businesses trying to manage and present data from operational systems and spreadsheets across different departments and business operations, being able to bring that data into one manageable place is critical.

I have written this guide to show you how a new breed of dashboarding software harnessing the tools you use today i.e. Microsoft Excel, can change the way you do things and hopefully assist you in any software selection or implementation process you may be conducting.

My 25+ years within the industry have given me the experience needed to write this guide and share my practical expertise from having personally assisted over 200 organisations in improving their business performance management. I have both high-level business and detailed technical experience, working for major corporations, business intelligence software vendors and through working as a consultant.

This guide is heavily influenced by customer implementation best practices and experts I have had the pleasure of working with in areas such as data visualisation, balanced scorecard, business intelligence, OLAP, data management and big data. It is intended to guide you through what is available in both the public domain and from our independent research and expertise.

If you are considering implementing a system that meets the standards advocated in this document, we can provide this service through Excel in Business' EIB Analytics software modules and associated services.

By leveraging data from your data warehouse and/or operational applications and through simple user development of value added analytical apps on demand, we believe EIB Analytics can provide a one-stop solution for the emerging and challenging area of true self-service analytics and interactive data visualisation.

When it comes to delivering effective management information systems, we are positive that EIB Analytics allows you to deliver much more with fewer resources and at a minimum and known cost upfront.

Paul Martin

Managing Director at Excel in Business

1 - SELECTING THE RIGHT DATA MANAGEMENT SOFTWARE

Why do you need effective dashboard and reporting software?

If you're a manager you might want to view your business financially, from a sales perspective and from a CRM perspective. Typically, you're going to have to distil information from one, two or three different systems in order to gain an overview. The problem is, that's not easy to do.

There are many software tools that have names like business intelligence tools, or dashboard tools. They lift information out of the underlying operational systems and provide a way for senior managers to analyse the business via a front-end tool or dashboard.

There are two major elements that any good business performance monitoring dashboard needs to include. In order to view summarised information about your business, you must be able to:

- ❑ Go to one centralised place to find all information, reports and dashboards;
- ❑ Find information that is presented consistently and clearly, showing positive or adverse performances against known and accepted business measurement criteria .

An effective reporting tool for your organisation should have a dashboard that is a central point, linking all the different kinds of information from within your business and all the different datasets which need to relate to each other in a useful and integrated manner – 'the one version of the truth'.

You should avoid dashboard systems that:

- ❑ Don't provide useful and consistent summaries and presentation of data in a way that can be easily compared
- ❑ Do present information that might look very glossy but is very hard to assimilate or consume effectively

Disruptive technology – is your dashboard and reporting software working with you, or against you?

In my experience, many dashboard and reporting products can work very well if you are able to load or input your information into the software.

However, many organisations have large numbers of Excel workbooks in addition to their corporate data sources. This usually means that data has to be re-entered or re-formatted from Excel to load into the dashboard program itself. This is highly inefficient, and has a high associated cost of ownership. This technology is disruptive and can be a huge drain on resources, both in the setting up and the ongoing maintenance.

Furthermore, the implementation of new dashboard and reporting software will invariably result in the need for significant training. As many people in business are only familiar with common programs and software packages, there is a great need to find something that is familiar, can be easily learned and is user friendly.

The ease with which data can be presented using industry best practice visualisation techniques also needs to be considered. Some datasets are more complicated than others to represent graphically.

Sharing data and access to common dashboards also needs to be easy,

for occasions such as board meetings through to personal and group directed emails (incorporating specific dashboard content) and everything in between.

These points should be considered carefully when choosing which dashboard management software will work best for your organisation.

2 - BUSINESS PERFORMANCE MEASUREMENT FRAMEWORK

Establishing, communicating and agreeing appropriate targets – not just ‘red’, ‘yellow’ and ‘green’

A business performance measurement framework determines how information is presented (colour coded) against performance and the prioritisation of various business metrics and how appropriate they are to include or exclude in your dashboards. It is essential to establish such a framework to leverage and aid any dashboard software adoption. This approach is needed to prevent dashboards from becoming overwhelmed with either too much (sometimes trivial) information or relying on automated colour coding provided by the software vendor. Automated colour coding often makes no sense at all (or worst still can be factually incorrect) when interpreted by business management users, resulting in loss of confidence in the information presented.

Make any of the above common mistakes and your dashboard project is dead on arrival!

Using a practical example: when considering performance against budget, many dashboards will indicate meeting a target as ‘green’ and failure to meet a target as ‘red.’

If we choose metrics such as stationery budget and profit from sales (to take an extreme example) to be encapsulated in the same dashboard, without a proper measurement framework a ‘red’ reading for each will be shown in exactly the same way.

A ‘red’ reading on a small expense may be inconsequential, and your dashboard needs to be able to filter out the important information to end-users, highlighting real business issues clearly without being confusing. Common colour means common weighting in the eyes of an end-user, so you need to respect that and ensure that such colour coding reflects users’ assumptions.

The needs of different organisations in terms of a business performance measurement framework can often differ greatly. There are no definitive rights and wrongs, however, doing it right will invariably mean:

- ❑ You have a clearly understood and agreed set of performance guidelines that are understood and communicated to the management team (who will be using the dashboards) before you even start building;

- ❑ Anything, i.e. what does represent good, ok and poor performance in your business and which key performance indicators (KPIs) should be included/excluded at certain management levels.
- ❑ You have targets for every KPI you measure. Omitting targets is a somewhat surprising common failing and makes any measurement totally subjective. Remember the old adage, 'what gets measured, gets done.'
- ❑ The dashboards delivered truly reflect the upfront framework agreed above, so everyone gets and understands what they originally agreed to

Your dashboard and reporting software needs to be customised with your organisation in mind to ensure you're getting the optimum results from your data. Adopt the *KISS (Keep It Simple, Stupid)* principle to get rapid adoption and best understanding.

3 - DELIVERING THE RIGHT INFORMATION TO THE RIGHT USER

Often data needs to be presented to a range of audiences who may have different priorities. Presenting to a board may require very high level metrics to be presented consistently against target, allowing discussion of each KPI as part of one combined management process, i.e. is the company performing well across the entire business? After reading research and this guide, you may wish to represent this data as a series of bullet charts, as advocated by visualisation industry expert, Stephen Few.

On the other hand, presenting KPIs to a sales manager may only focus on information relating to sales without other data needing to be considered. The sales manager's preference may be for a more glitzy performance gauge style of representation and, providing the information is truly conveyed clearly and correctly, why not?

Remember a common misconception is that dashboards are all chart based, which is not the intention at all. Read Stephen Few's excellent book 'Show me the numbers', to discover when charts are the right medium and when tables offer a better option.

Tables and charts can of course be combined to provide any dashboard. Obvious distinctions between tables and charts are:

- ❑ Tables are better when precision is required in the visualisation or when different forms of measurement are to be combined in one analysis, for example, gross revenue, percentage contribution, customer survey result average, etc.
- ❑ Charts are better when precision is not required, but visual trends are required to assimilate lots of associated numbers as a pattern. Seeing 24 columns of data for a two year by month trend is nowhere near as effective in a table as seeing this data displayed as a graphical trend.

Your dashboard software needs to facilitate multiple ways of presenting information with minimal effort, and provide relevant visualisation that's quick and easy to understand by its intended audience.

However, avoid using a dashboard as a canvas for every graph type that looks 'cool'.

If presented with lots of different graph types, the user has no idea of what's important or where to look first.

This so often repeated mistake is fueled by dashboard software vendors who think showing everything must show you their software is powerful. For example, a photo of a manager, followed by five different tables and four different graph types depicting performance of that manager's cost centre all on one screen. Great for vendor sales demos, disastrous for getting your dashboards accepted and used.

A dashboard product with limited levels of visualisation or formatting for presenting data is unlikely to meet all your diverse needs.

By selecting a dashboard system that can be adapted to create different visualisations and reports depending on who the audience may be, you could save yourself a great deal of time and effort. This way, regardless of whether you are speaking with a team member or the executive board, you can make sure that you give them the information that they need, in the way they need it. This in turn creates buy-in from your user community and better dashboard acceptance and adoption.

Remember, dashboards are still a new concept to many users and unless you address their needs sensitively and clearly show the resulting benefits, you may see them return to "just give me the numbers in an Excel report" syndrome.

4 - ENCAPSULATING BUSINESS LOGIC IN DISPLAYS

Business logic needs to be built into the way your information is presented. It also needs to be displayed in a way that users and their audience know exactly what they're looking at.

Imagine a simple dashboard with two charts. The first is gross income, the second is operating costs. Income that exceeds the target, or is above the line, might be depicted as a green bar to reflect a positive variance. If you didn't meet your target, that same bar might be red. The next chart shows operating cost. However, if operating costs are higher than predicted (so above the line), this is a negative performance variance and should be depicted in red.

Some dashboard tools avoid this 'real world' complexity by depicting values using a neutral colour like blue for both above and below the line, and rely on those reading the dashboard to understand the context.

The end result of your dashboard taking this approach, means that two charts displaying very simple information, manage to depict business performance in a confusing manner.

This is clearly a very trivial example to aid understanding, but there are many other examples which can create issues for you if your software cannot apply business logic to the charts you use. When presenting any information as part of a dashboard, it is often necessary to pre-process it to aid clarity of final visualisation and to make sense when applied to a relevant audience.

A dashboard should tell you immediately what's going on in your business. You shouldn't have to be educated to go through each chart in turn and make sure you understand what you're looking at every time you see it.

5 - COMPLICATED, CONFUSING CHART TYPES DON'T WORK

Though charts, especially pie charts and area charts, are often used in business, the fact is most of the time they don't help shape information in a useful or meaningful manner at all. They can seem very attractive in the sales demo from the dashboard vendor, but this kind of eye-candy doesn't help end-users process the data in a meaningful way. Other gimmicks that aren't useful include using too much irrelevant colour and 3D imagery. Edward Tufte, a visualisation expert, talks about the data : ink ratio with dashboards. In simple terms, this means show as much information as is meaningful, but don't make understanding that data unnecessarily complicated by adding any content that is not part of the data itself.

A dashboard should show a range of important things clearly, without unnecessary distractions. Pictures and excessive use of colours, borders, company logos and other gimmicks that take up valuable space on a dashboard, actually reduce its functionality and make it more difficult to see at a glance what information is pertinent to you and your management team.

Avoid dashboard software which tries to impress with highly distracting graphics and seek out simple, up-front data visualisation tools.

Auto-scaling data

In basic Excel, as well as many other dashboard tools, the amount of real estate available to chart your data is dependent on the magnitude of that data. What this means is either you end up with a chart that doesn't scale correctly between your different variables

or, if you're using Excel, your charts will start to use available real estate to show, for example, 1,000,000 in the y axis instead of 1,000 as you analyse different parts of your business. The result is often unreadable charts, and useless dashboards.

A further example is comparing business revenue in two different sized markets, like USA compared to South Africa. Comparing this data can require meticulous re-writing or re-formatting of charts manually because automatic tools often don't have enough business logic built into them to accurately display the differences.

It is possible to get an on-site Excel expert to engineer such charts for you, but without someone on hand it's likely that businesses will run into problems when trying to compare datasets which vary across different scales.

It's also worth considering the cost and overall business value of keeping a staff member trained in a skill that then causes a high risk, reliance and dependency.

Colour considerations

We've already commented on colour considerations, stating that dashboard tools should avoid using confusing colour in visualisations. There are also many more issues to be aware of.

Colour used for performance and colour used for dashboard aesthetics should not be mixed and therefore confused. If red and green are used to indicate positive and negative variances, use of those colours in any aesthetics or navigation aids relating to the dashboard will confuse users and should be strictly prohibited.

If the same colour is used twice, an end-user will assume there is a link between them. Colour use needs to be consistent throughout a dashboard and, whenever possible, consistent across dashboards.

Another consideration is colour blindness, where many users (particularly males) may not be able to see the difference between a positive variance (green) and a negative variance (red). Stephen Few often prefers to use greyscales for visual display of colour coded performance instead of red, yellow, green to circumvent this issue.

Real estate considerations

The space of a screen is a valuable resource and needs to be used effectively. A good on-screen dashboard should never require your users to scroll through it.

6 - DASHBOARD REPEATABILITY – TO CODE OR NOT TO CODE

If you are already using Excel for dashboards, you might have IT staff who are able to program customisation into it for you. This is usually done using a programming language called Visual Basic or Visual Basic for Applications (VBA). If you are using this, there are a few key things to consider.

Firstly, the cost of having an Excel programming expert available who is required to do new things with the software. This may be required to create visually identical dashboards or even new datasets.

Channels of communication between business staff and IT staff may not always be optimum, and communicating business needs in a way that technical staff members can respond to is not always easy.

Remember that end-users may be using computer equipment that is not always top of the range or based on the latest screen resolutions available, so may have a much smaller screen than perhaps the dashboard developers. How a dashboard will display on different sized screens needs to be considered carefully upfront.

A dashboard product should work for you and the means in which you present it should also work for you. If you want to be able to print your dashboard on say an A4 or US Letter sheet of paper it should be just as easy to read as if it were on a computer screen. However, designing an effective dashboard for this usage would be different from developing an onscreen version, as the paper version would be longer, but narrower. This may result in fewer charts across the page, but more going down.

There are often miscommunications and there can be several rounds of correspondence (resulting in many VBA amendments) before the right dashboard visualisation is created for the business user. This in turn slows down overall dashboard delivery, resulting in delays in ROI or possibly missing the opportunity altogether.

Another concern is sharing and distributing dashboards with VBA developed reports and charts through a common medium such as email. A standard Excel file can be easily sent to other people, however something custom-made in Visual Basic will often be interpreted as a dangerous file to most email systems.

It is a file with custom code which is unknown to that computer, which means many email systems and even end-users may choose to delete the file without even opening it. There is always a risk to opening these kind of unknown files within a business, even if you know the person who is sending it. People will not risk opening these files, so the dashboard becomes useless and ineffective to share. Sure, adding 'approved safe users' and trusted certificates can alleviate this issue to some degree, but it's more cost and more things to do, for little to zero benefit.

Dependency on IT staff, and the fact many people will delete Excel file attachments in an email with VBA, is a huge concern for coding in-house within Excel.

An effective dashboard tool, even one residing in Excel, should never have these sort of issues and should provide all functionality natively within Excel.

7 - ACCESSING EVERY RELEVANT DATA SOURCE

There is always some data across any organisation that is needed for management reporting which is stored exclusively in Excel. That's the first given, and your dashboard tool must be able to incorporate this information easily.

Additionally, for more corporate dashboard and reporting applications, data will be stored in a multiplicity of database technologies ranging from SQL Server or Oracle databases/data warehouses, to OnLine Analytical Processing (OLAP) Data Mart Cubes or even the newer 'In Memory' database technologies. Any users depending on these data sources to get the metrics for the dashboards they require obviously don't care about this or, in most cases, don't even know about it.

With the right dashboard technology or dashboard add-in to Excel, you should be able to achieve the dual objectives of:

- ❑ Accessing any data you require from any data source
- ❑ Presenting data in the most pertinent manner using best practice visualisation techniques

A good dashboard system can sit on top of Excel data and enterprise data, or both, and ultimately provide a centralised analysis tool that is optimised to retrieve and present data very quickly.

The more complicated the data sources, the more likely it is that additional software will be required to fully cope with the additional workload, functionality, scalability and security requirements.

Charts and data working together in harmony

Many dashboard products work by treating each chart of data as a discrete entity within a dashboard. This is not the way users think or expect dashboards to operate.

Changing a 12 month trend of data to a three year trend for several variance charts in one dashboard, may take a manual adjustment of each chart in turn, when clearly (in this example), you would want one set of changes just to ripple through all charts.

Not only is this time consuming without such linking, but you dramatically increase the opportunity for user error; for example, comparing Year 1 of income with Year 3 of expenditure, thinking that you are investigating the same time interval for both.

You want a dashboard solution that allows a change in parameters to be quickly reflected in some or all of the datasets being analysed without the need for any programmatically driven functionality.

8 - DEVICES AND DEPLOYMENT

An effective dashboard should give you a succinct visualisation of everything you need on each and every device it can be viewed from.

Today there are a range of dashboard programs that can be viewed on tablets, slates and smartphones as well as PCs and laptops. There are several concerns with this functionality that should be kept in mind while choosing which dashboard software to use.

Firstly, how do you want to interact with your data? If you want to share and discuss data in a dashboard, it's important you can interact with it in the way you need to. This might mean the ability to share the data in the cloud or via email, comment on it or manipulate it using different selection criteria.

The dashboard also needs to be legible on your device, too. It's no good being able to access a dashboard that doesn't tell you any useful information, or you having to endlessly scroll across your iOS, Android or Windows Phone to see one metric (or worse still, half a metric!) at a time.

It's a waste of your time and resources, and you'd be paying for features that aren't giving you any benefit or actually working for you. It is perfectly possible to have a functional interactive or static dashboard on a portable device.

However, this is achieved by taking cognisance of real estate considerations and having a dashboard tool that is flexible enough to design for each device's usable space. In many cases, interactive access to dashboards can be provided very easily from any device by just adding standard technologies such as Windows Terminal Services or Citrix.

It is worth asking your dashboard and reporting software developer how they will offer this if it is a feature that is important for you.

9 - DATA STORAGE AND DATA HANDLING

Data storage

When viewing sensitive data on a portable device, PC or laptop, it's imperative to consider data security. It's not always possible to directly link a portable device to a dashboard on your internal servers for either security or, in some cases, logistical reasons.

There are cloud-based storage solutions such as Microsoft's OneDrive, DropBox, Google Docs and Hightail etc., where you may be tempted to publish perhaps static dashboards for wider audience consumption. However, these server locations are not often openly disclosed, which may prove untenable for companies who must adhere to a national law on data security.

Cloud-based storage services often offer an excellent dashboard deployment solution for many companies, but check you are legally allowed to store in the cloud at your organisation and that any storage solution for your dashboards and reports adheres to your company's security policies.

Data handling, including errors

Many dashboard solutions are narrow-minded in their approach to what constitutes sensible data.

Consider the situation where a customer's order of £100,000 needs to be refunded. In January you may only get £80,000 of other income which will show January's net income position as a negative figure, specifically minus £20,000 in this case.

In many dashboard solutions rendering visualisations such as bullet charts or gauge charts, the resulting data is unable to be charted and the program will either produce an error, or it will produce a graph that doesn't make any business sense.

This is often very much the case with free dashboard examples provided as Excel workbooks from different websites, forums or consultants.

We understand that you are often pushed for time and may not be able to play around with these examples in order to get them to show something logical. In many cases this may not even be possible.

However, good dashboard software needs to handle these issues sensibly, even displaying error messages where appropriate, perhaps instead of the chart itself; for example, if you had a scenario where a metric had a zero target, but for some reason had actuals associated with it, then there is no correct mathematical way of displaying percentage of target or percentage variance from target.

10 - TRAINING AND HELP FROM EXPERTS

There is a vast amount of information in the public domain about data management and data visualisation and reporting. We encourage anyone who has the resources to make their own investigation into the theories and technologies available. However, we understand that not everyone has the time or inclination to know first-hand how this works.

Two experts in the field whose theories have highly influenced this booklet are Stephen Few and Edward Tufte, and we would like to personally thank both for their considerable work in the area of data visualisation and recommending best practices. Their respective websites are available at www.perceptualedge.com and www.edwardtufte.com.

Their explanations of visually depicting performance measurement and appropriate use of chart types, tables and other considerations would prove incredibly useful to anyone considering building their own dashboard software.

Be wary, however; it has taken our company Excel in Business several years of development to create our own EIB Analytics dashboard software and that is with 25 years of practical implementation and previous business intelligence product expertise!

If you want to execute these ideas quickly and efficiently we recommend you consider Excel in Business' EIB Analytics products - www.excelinbusiness.com - as we have built systems under the consultation of experts in this field.

We adhere to what the experts say is best in data management and visualisation. If you don't have the time to investigate and build the solutions yourself, we have a range of products and services that can be quickly implemented, taking the guess-work out of dashboard development and deployment.

How Excel in Business' EIB Analytics dashboard software works

The simple answer to this is our EIB Analytics ReportStudio software's dashboard module has an integral set of 'ribbons' (extra options) within Microsoft's Excel program.

Our EIB Analytics range of products were developed after receiving endless questions about how our dashboard and reporting products could and should integrate with Excel. It is not surprising so many business end-users feel comfortable with the program.

Excel in Business' EIB Analytics products provide the usability and customisation of Excel whilst ensuring up-to-date contact and integration with your corporate databases. This gives users the comfort of viewing data in a familiar and easy to use program while being assured of data integrity, scalability and security. A win-win for end-users and IT alike.

WHY USE EXCEL IN BUSINESS?

Built on solid theory, research and experience

Our products are the result of combining the expertise of top data warehousing, data mart and data visualisation experts in the world with our 25 years' practical expertise of providing BI reporting software.

Excel in Business' EiB Analytics software suite, provides all the tools you could possibly need to develop and deliver full self-service BI applications, but in an Excel environment that you're already familiar with. Also we provide our software at a fraction of the cost of other commercial BI software alternatives.

Our products are built in Excel which means they are non-disruptive, provide significant time savings through familiarity and require less training. Furthermore, they are accessible to both power-users and end-users alike allowing full authoring and consumption of self-service applications.

There is no reason to export your data from Excel into another system when Excel and EiB Analytics has all the tools and data access technologies built into it. The reason to use our EiB Analytics products is because our customisations to Excel vastly reduce the time Excel gurus would take to build the same thing from scratch for your business.

We have been instrumental in providing highly successful implementations of dashboards, management reporting and financial reporting applications ranging from very large corporations through to smaller customers.

With a practical approach to design and products we are passionate about, we are well positioned to resolve the struggles organisations have with regards to effective data management and visualisation.

Exceedingly fast processing power

If required, our EiB Analytics products can deliver millions of rows of data in Excel in seconds. This is achieved by using our EiB Analytics add-ins to optimise and scale queries between Excel and your data warehouse or data marts.

Simple, scaled pricing

There is a vast difference in cost for Excel in Business' EiB Analytics products to other self-service analytics, dashboard, reporting and business intelligence solutions on the market.

One of the reasons is many other business intelligence vendors require you to estimate the number of users or concurrent users, authors versus users, servers and other factors, which are complex to determine, before giving you a price.

Their estimates may be much higher than you are able to afford or, alternatively, not provide enough licenses for what you discover is actually then required.

Excel in Business doesn't mind how many end-users you have, or how many devices our EIB Analytics software is deployed across, or even if any of these factors change dramatically in the future. There is a simple fixed annual cost for either personal licenses, a country license or even worldwide licenses per product.

A smaller, more nimble product will continue to adapt to new technologies without costing an excessive amount or becoming a cumbersome weight within your organisation.

Our interest is in ensuring customers are satisfied and wish to continue using the product after the first year – our lower cost means we share the investment during the first year and only profit from long-term, happy customers.



OUR COMPANY

Headquartered in London, England, Excel in Business, is a leading supplier of self-service analytical applications designed and deployed from within Excel.

Our core business includes financial management, management reporting and performance dashboard applications delivered to enterprise and mid market organisations.

Excel in Business' mission is to provide fast, simple and scalable reporting applications which can be designed and developed by power-users in record timescales.

Our products use the robust, industry standard Microsoft data warehousing platform so that such applications are developed with IT's endorsement.

OUR PRODUCTS



**The integrated combination of our
EiB AppStudio and EiB ReportStudio products.**



Visual development environment for the creation of self-service analytical applications which can be run from client and server computers. Environment is directly available from Excel for users who are permitted as application authors.

Visual EiB AppStudio tools for:

- Loading data from relational databases, ODBC, Excel and CSV files
- Visual objects to transform, combine and manipulate source data, with calculation and rules engine to augment your data
- Ability to combine multiple data sources into a single model
- Output to SQL Databases or SQL Data Marts (Analysis Services models) to complement your data warehouse or BI environment
- Ability to augment applications through enabling data entry for additional data e.g. forecasts and plans
- Full documentation of AppStudio designs and documentation of any and all data warehouse databases and data marts

OUR PRODUCTS



Excel based reporting suite for your data warehouse, data mart systems and/or AppStudio models.

- ❑ Dashboard module allows data from anywhere to be graphically rendered as native Excel based dashboards. Contains many advanced charts such as bullet charts, spark lines and spark-bandlines, gauge charts, waterfalls, etc.
- ❑ Cube reporting module in Excel provides flexible interactive reporting on top of any Microsoft based data mart using SQL Server Analysis Services or SQL Server Analysis Services Tabular models. Train of thought analyses functionality provides powerful ad-hoc interrogation of data
- ❑ SQL reporting module in Excel provides flexible interactive reporting on top of any Microsoft SQL Server or Oracle database/data warehouse
- ❑ Report distribution module (RDM) in Excel provides mass distribution of either dashboards, Cube reports or SQL reports to cloud service storage devices e.g. OneDrive, Google Docs, Box, Dropbox etc. or to end-users via email in a variety of formats, such as Excel, PDF, web page, etc.



Excel based application which automates single or multi company financial reporting.

- ❑ Application software which produces and distributes your month end management accounts, including financial reports (P&Ls, balance sheets) and dashboards
- ❑ Available for leading accounting systems
- ❑ New accounting system adaptors available on demand
- ❑ Embedded Structure Designer facilitates the rolling up of accounts into different financial statements e.g. P&L, Investor P&L, Group P&L, Bank Reports, Statutory P&L etc.
- ❑ Application which generates Microsoft SQL Server Analysis Services data marts (Cubes) for fast access and flexible presentation of financial data
- ❑ Contains standard 'out of the box' reports plus report and dashboard designer all from within Excel
- ❑ Includes budgeting and forecasting module, with direct import and/or direct data entry modes
- ❑ Has optional multi currency modules for flexible P&L and balance sheet consolidations using any combination of exchange rates e.g. period end, average, opening etc.

OUR PRODUCTS



EiB Insurance Analytics for MGAs, Underwriters, Insurers and Brokers automates the delivery of meaningful management information to your underwriters, board, shareholders and carriers.

- Comprehensive monthly analysis of all pertinent Premium and Claims data
- Automated triangulations of complex KPIs such as Earned Premium saving days per month
- Automated validation, rejection and auditing of all invalid risk and claims information > better quality and self-healing MI
- Standard monthly application can be extended to handle daily information across any number of underwriting years
- Data can be combined seamlessly from different risk software vendors and claims houses or EDI outputs
- Complete reporting environment for all your internal and carrier reporting requirements without leaving Excel, including Dashboards, Management Reports, Operational Reports and Report Distribution
- Based on industrial strength IT infrastructure: Microsoft BI SQL Server – Analysis Services - Excel - Architecture
- Lowest cost of ownership and reporting platform for the insurance industry.



EiB Shipping Analytics is about delivering an open, integrated and highly scalable self-service analytics platform, across all your ShipNet data, internal applications and external data sources

- Comprehensive monthly analysis of your accounting data by Company, Vessel, Cost Centre, Port, Commodity etc.
- Automation / Semi Automation and Manual capture of industry standard Shipping KPIs as defined by shipping.org
- Incorporation of Company specific KPIs and targets
- Full Commercial analysis of prebuilt Time Charter Equivalent (TCE) and Cargo data-marts
- Complete reporting environment for all your internal and ship management reporting requirements without leaving Excel, including Dashboards, Management Reports, Operational Reports and Report Distribution
- Based on industrial strength IT infrastructure: Microsoft BI SQL Server – Analysis Services - Excel – Architecture
- Open reporting and MI platform for the Shipping industry.

PAUL MARTIN

Paul has over 25 years' experience working in the areas of business intelligence, data visualisation, management and financial reporting. Paul has expertise in advising and implementing systems for both large corporates and medium sized businesses.

He began his career at International Computers Limited (ICL) which was known in the industry as the UK equivalent of IBM. There he competed in very big ticket reporting software sales and looked after major public sector accounts such as the Department of Trade and Industry, the Inland Revenue, HM Customs and similar. He then founded HMG Consulting, implementing executive information, budgeting and forecasting systems for five years, advising companies about their strategic reporting requirements and the processes/software needed to fully address these areas.

Paul was headhunted to run the UK sales operation of Gentia Software, who competed against established business intelligence competitors such as Cognos, Hyperion (now Oracle), Business Objects (now SAP), and Micro strategy. He was on the management team that concluded a successful Initial Public Offering (IPO) on the NASDAQ. Here his team also introduced the first computerised balanced scorecard, transforming management theory into a deliverable software application.

Following this Paul cofounded both ProClarity UK (now Microsoft) and Intelligent Apps (now Sage), where he recognised trends like the influence and market share of Microsoft in the data warehousing space and Excel as a credible and desirable front end tool for companies to adopt for their reporting.



Software from these two companies, at both of which Paul was CEO, resulted in sales to major corporations such as Reuters, Morgan Stanley, Reckitt Benckiser, Shell and hundreds of other reputable and sizable organisations.

Attracting the attention of Sage in the UK, a system was built over their existing accounting solutions which proved very successful. This resulted in the acquisition of IntelligentApps in 2004 by Sage and Paul running Sage's Business Intelligence division.

After leaving Sage in 2006 to establish Excel in Business with co-founder and CTO Nico Kichenbrand, Paul and Nico have concentrated on developing their own product on their own terms, and being able to provide cost effective customer services utilising an innovative virtual model. This allows their consultants to be 'onsite' anywhere worldwide in minutes.

EXCEL IN BUSINESS ETHOS

Excel in Business (EiB) and the EiB Analytics software solutions we offer, come as a result of looking at what businesses really need for self-service analytics, management and financial reporting.

Having worked on over 600 customer implementations, as well as consulting with industry visualisation specialists, business intelligence experts and software developers, we realised that Excel is undoubtedly the most effective and widely deployed reporting platform used by businesses.

Research into usage backs this up, with an estimate of 300–500 million users of Excel worldwide. Not all of these organisations use Excel for business reporting of course, but according to independent research, an estimated 11% do. This means there are somewhere between 33-55 million Excel reporting users worldwide, far bigger than the sum of all other dashboard, reporting and business intelligence products user bases combined.

So with our development team, we sought to build additional functionality for this widely-adopted program, allowing businesses the opportunity to make the most of their existing data, wherever it may be. We consulted with IT departments to ensure any perceived shortfalls of Excel, such as scalability and security, were not only fully addressed but became an actual strength of our Excel based EiB Analytics software.

Our organisation was started in 2006, with an aim to create brand new self-service dashboarding and reporting software which could be installed from within Excel.

Creating a smaller company away from the larger business intelligence and system vendors meant that we could concentrate on creating innovative reporting solutions to address known business problems yet without the usual upfront and ongoing costs associated with wide scale adoption. This means for the first time, reporting systems using EiB Analytics can be deployed to hundreds of users for the same cost as a small departmental solution from other comparable vendors.

With our EiB Analytics software applications and associated services solutions, we offer organisations of all sizes the chance to target and use their existing data to drive their businesses efficiently and effectively. We would welcome the opportunity to show you why we have become so successful using our approach.

FURTHER READING

Stephen Few

www.perceptualedge.com

Stephen Few founded Perceptual Edge in 2003. With 30 years of experience as an innovator, consultant, and educator in the fields of business intelligence and information design, Stephen is a leading expert in data visualisation for sense making and communication.

Edward Tufte

www.edwardtufte.com

Edward Tufte is an American statistician and professor emeritus of political science, statistics, and computer science at Yale University. He is noted for his writings on information design and as a pioneer in the field of data visualisation

Delivering Self-Service Analytics

– 10 things you need to know

Making Financial Reporting Simple

– 10 things you need to know

www.excelinbusiness.com/guides



Providing Effective Dashboards in Excel

10 things you need to know

Every business wants to have access to the data they need as quickly and easily as possible.

With the emergence and popularity of dashboard systems, many businesses believe that they have found the solution to all of their data reporting and analysis problems. However, without ensuring that you have a dashboard that presents, sorts and assimilates the data from your company in a way that is useful, you could end up complicating matters further.

In this unique guide, Paul Martin, co-founder of Excel in Business, explains how you can choose the best dashboard system for your business needs.

- How to approach choosing a dashboard system
- Ensuring you have a business performance measurement framework in place
- What you should and should not do on a dashboard system
- How to manage your data sources
- Creating integrated charts with business logic to form an effective dashboard

And much more!



EiB

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Automated Analytics. Powerful Insights.

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