

BEATING THE BI BLUES

Enthusiasm for business intelligence projects has withstood even the recent IT cutbacks, according to our latest UK survey. PMP Research sifts the evidence.

Despite the IT downturn in recent years, many companies seem to have retained their enthusiasm for business intelligence and data warehousing projects and are keen to expand the range of information they provide. Companies are also actively seeking to make it easier for their staff to access and use key corporate data. These are the main conclusions of our annual PMP research survey into the business intelligence (BI) market – including data warehousing, corporate performance management (CPM) and business performance management (BPM).

The first stage in gaining access to information via business intelligence software is to establish the core data store – known as the data warehouse or data mart. In this respect, half of those polled (49%) say they have recently completed a data warehousing project, while a further 19% are evaluating its applicability right now. Just 15% rule out data warehousing completely as an option, with 7% undecided.

Of the remaining 10%, several describe their data warehousing project as ‘ongoing’ or ‘evolving’, suggesting strongly that this is a technology which grows and changes as the company’s own needs alter. On this theme, one respondent noted that their organisation’s data warehousing project started in 1998 and is still taking new data sources. Indeed, a third of our sample declare themselves to be data warehousing veterans, reporting that their programme of works has been in place for the past three to five years (see Figure 1). A few have been implementing data warehouses for longer than that, with 6% saying they started between six and 10 years ago and 6% putting the start date at more than a decade ago.

A quarter (24%) have begun developing their data warehouse over the past one to two years, but those who have only just seen the benefits of this technology are in the minority. Only 9% have started in the past six months and a further 9% within a 7-12 month timeframe. Given the length of time that most companies have been using data warehouses, it is not surprising to learn that a third (33%) maintain that the senior managers within their organisation are ‘very committed’ to this technology, with 42% describing their management as ‘moderately committed’.

Not only are senior management continuing to back data warehousing heavily, but the implementations themselves are becoming more ambitious.

In the early days, the bulk of initial implementations were single projects (28%), with a few departmental (17%) and inter-departmental (12%) programmes. Data warehouse implementations which spanned the entire organisation were

very much in the minority (23%). Currently, a third of the sample (33%) reckon to be implementing a data warehouse which covers the whole organisation, while the proportion favouring a single data warehouse project has dropped to 12%, with departmental implementations happening at about the same rate (15%) and inter-departmental implementations on the increase (28%).

The biggest differences are still to come, however. For the future, two-thirds of respondents (62%) expect to be building data warehouses which encompass the entire organisation, and only 8% remain wedded to the single-project approach.

The obvious question in this context is: what happens to all the independent implementations? Currently a third of our sample (33%) say they have several

FIGURE 1: Duration of current data warehousing programme

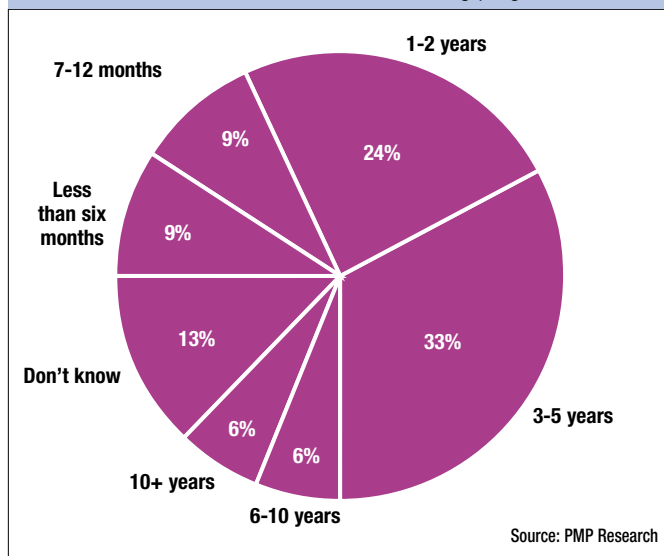
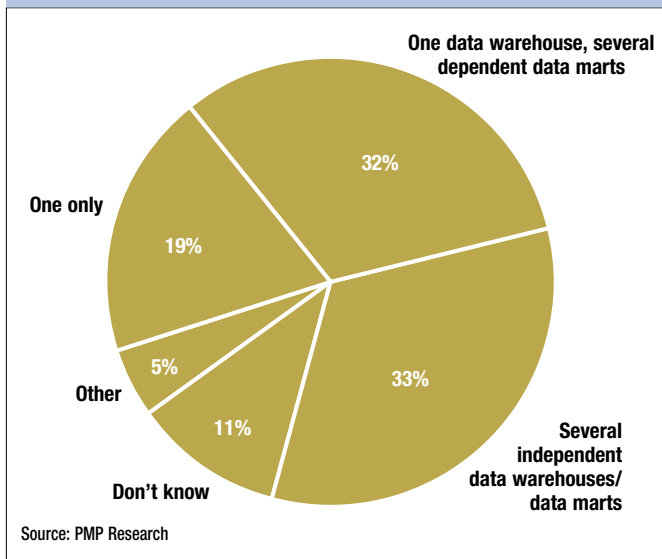


FIGURE 2: No. of separate data warehouses/marts implemented



independent data warehouses or data marts, and a similar proportion (32%) have one data warehouse with several dependent data marts (see Figure 2). Those who have just one data warehouse are in the minority (19%).

A quarter (23%) report that they view their existing mix of data warehouses and data marts as likely to stay independent, as their scopes are mutually exclusive. But 40% plan to integrate their current patchwork of options and are considering how best to do so – just 9% of the sample have already begun work in this area.

One major driver behind this trend is the desire most companies express to improve their flow of management information. For the majority (87%) this is the key benefit they are seeking when they

implement a data warehouse, along with improved data quality (65%).

Both of these factors score more highly than the ability to cut costs (42%), identify new trends (38%) or increase customer awareness (28%). As one respondent sums it up, companies are seeking “potential cost savings, but more importantly the chance to exploit new opportunities”. Another refers to the ambition to “build a single version of the truth in order to fully exploit all the available data”.

The reality, however, is somewhat more taxing. Improving management information flow is one area where companies report some success, as 11% say they have exceeded their expectations, 60% have achieved what they set out to do, and only 11% feel they have failed in this respect.

But getting on for a quarter (23%) admit they have not been able to improve data quality as they hoped, although 42% have had success in this area and 8% have exceeded their expectations. Looking at the question of data quality in more detail, this emerges as a major worry for many companies. Asked to describe the quality of their data before implementing a data warehouse, most respondents are lukewarm – with 34% labelling data ‘satisfactory’ and 33% calling it ‘bad’ (see Figure 3). A further 7% feel their data was ‘very bad’ at this point, and while 7% also reckon data

FIGURE 3: Data quality

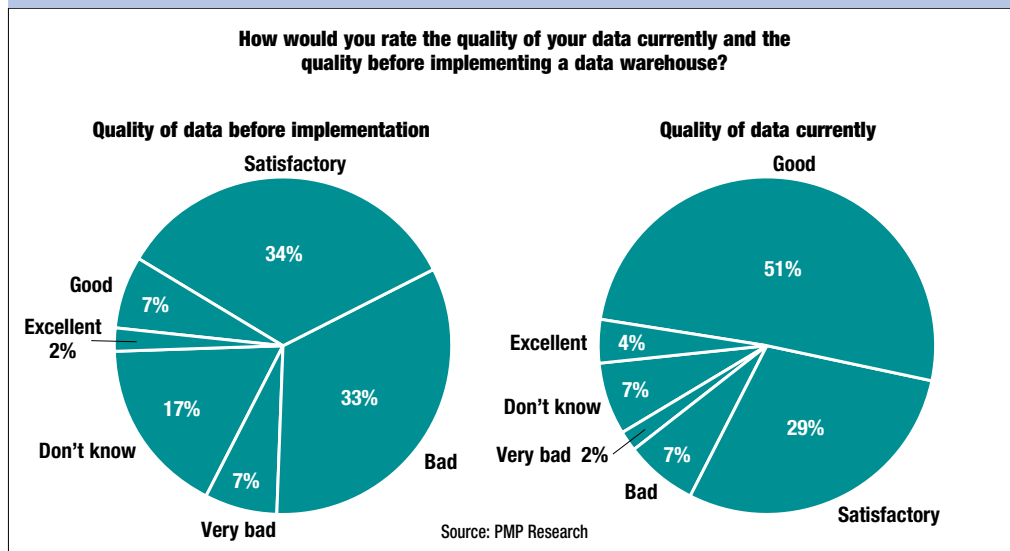
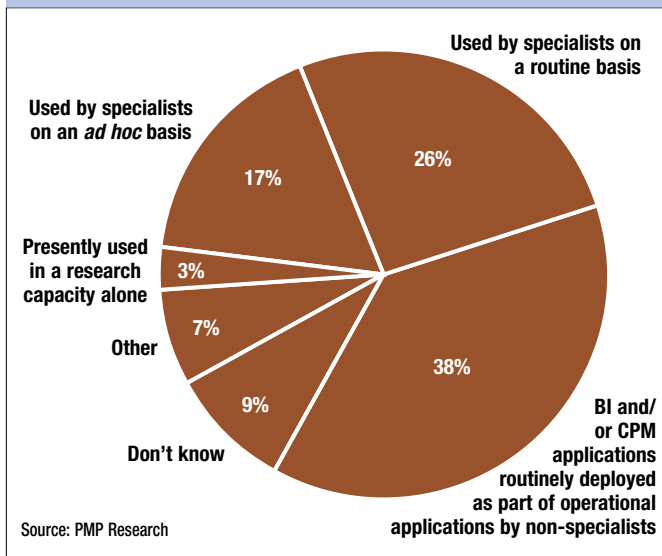


FIGURE 4: How BI/CPM tools are used



was 'good', just 2% say it was 'excellent'.

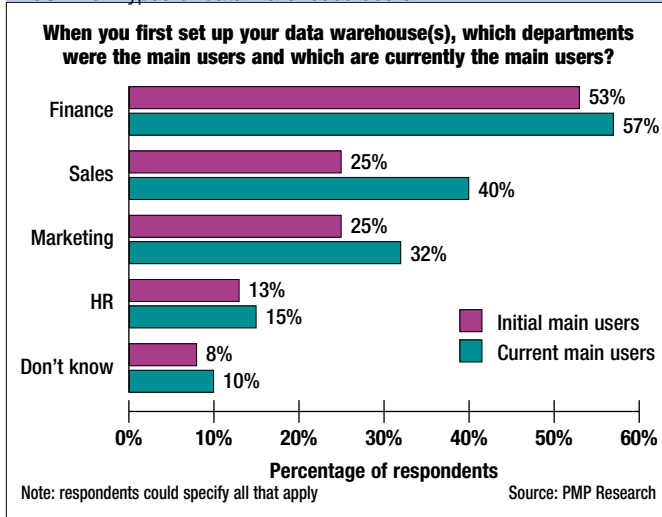
Post-implementation, half of all companies (51%) report that their data quality is now 'good', compared to the 7% who chose this option previously. The proportion of those who feel their data is either 'bad' (7%) or 'very bad' (2%) also drops significantly. Disappointingly, however, the proportion of those who plump for 'excellent' has only gone up from 2% to 4%, suggesting that while many companies have made substantial improvements, creating a true gold standard for data is more difficult than it might seem.

This may be one reason why only a quarter (24%) have managed to achieve the 'single view of the customer' which so many hope a BI/data warehouse implementation will deliver. True, for 17% of our sample this is not actually a prerequisite, but individual replies underline how important this goal is for many. One respondent says there will be a single view "when complete – and this is the main aim", while another reports their company can do this "within a limited boundary", similar to the respondent who states that "this is still in progress and is not yet a 360-degree view".

That said, two-thirds of those polled (66%) claim to have no difficulty analysing the data from their data warehouse, with the same proportion reporting that they use BI or CPM tools to find what they need.

One of the big changes is that most companies (38%) say that BI or CPM applications are routinely deployed as part of the operational applications by non-specialists. In contrast, a quarter (26%) reserve such

FIGURE 5: Types of data warehouse users



tools for specialist analysts to use routinely (see Figure 4).

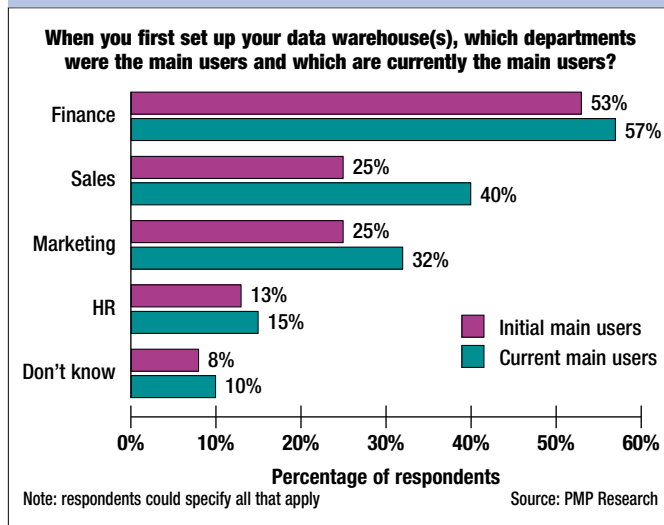
The days when only the specialists used such applications, and then only sparingly, are clearly over. Just 3% of companies report that BI and CPM tools are only used in a research capacity and only 17% say they are limited to specialist analysts working on an ad hoc basis.

This may be the result of a widening of access to data within the user community. As Figure 5 shows, when data warehouses were initially set up the main users were most likely to be the finance department (cited by 53%), followed by sales (25%) and marketing (also 25%).

Today, while finance remains the pre-eminent user (57%), sales (40%) and marketing (32%) are catching up. Unlike the financial experts, who are used to number crunching, these users are likely to need more hand-holding if they are to extrapolate the information they need.

The survey suggests that this process is well underway. For a start, more than two-thirds of respondents (68%) claim they are 'very likely' to be using BI or CPM tools in the future, while none rules this out and only 5% feel this step is 'not particularly likely'. Significantly, given the changing user profile, 22% of organisations are already using portal

FIGURE 5: Types of data warehouse users



technology to integrate their BI/CPM software with their operational systems, and 43% plan to do so shortly. The 26% who have ruled out this option are in the minority.

The main advantage of this approach is the way that a portal removes the need for multiple user interfaces, according to 72% of the sample. Portals also offer a means to combine several applications more cost-effectively (52%), are easier to use (48%) and allow non-specialist staff to carry out analysis (33%). These three factors pave the way for a considerable widening of access.

Companies are also working to make the information provided via BI/CPM applications more personalised to the end user. A third (33%) have already started this process, and 27% plan to do so in the immediate

future, with 24% considering this step. Just 9% maintain they have no need to increase personalisation (see Figure 6). Information may have to be more specifically targeted at the end user community because companies are becoming more ambitious about how they use corporate data. The majority (40%) say they use BI or CPM software in 'closed loop' processing, where the results of analyses are used to inform or apply changes in operational applications. A further quarter (26%) are looking into this possibility.

At the moment, any such change of direction is likely to be the result of manual intervention – only 2% of our sample trust their applications sufficiently for changes to be applied automatically by the system. But it is indicative of just how important BI/CPM technology has become in managing the modern enterprise. Indeed, half (49%) of those polled maintain that the implementation of such applications has resulted in significant changes to their business.

Individual responses indicate that this can happen in a variety of ways. One company says that "the implementation of daily BI for front-line people is having a marked effect in improving overall behaviours", while another reports "business has now become information-aware rather than only process-focused". More significantly, one respondent draws attention to a major change in company culture as a result: "We now see more evidence of a requirement for empirical evidence behind decisions, particularly when looking to change process."

Another argues that "a new management team was immediately able to get a handle on the business through the tools provided". These are ringing endorsements for technologies which have taken time to implement, but which are now starting to deliver real benefits. As our survey shows, companies have become more mature in the way they implement BI, data warehousing and CPM, and are being rewarded with some substantial gains in corporate performance.

SURVEY STATISTICS

We spoke to a broad cross-section of organisations for this year's survey into the market for business intelligence, data warehousing, corporate performance management and business performance management systems. The financial services sector (14% of the sample) and the public sector (also 14%), which both have to manage substantial information needs, were well-represented, along with manufacturing (13%). We also spoke to companies in areas as diverse as distribution & logistics (4%), leisure & tourism (4%) and publishing (4%).

The organisations who took part range from the smaller end of the spectrum, with 7% recording a turnover of between £1 million and £10 million, up to the very largest, since 9% report a turnover in excess of £5 billion. Around a third (31%) of those polled came into the £100 million to £500 million bracket, and a further 14% had turnovers of £500 million up to £1 billion.

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