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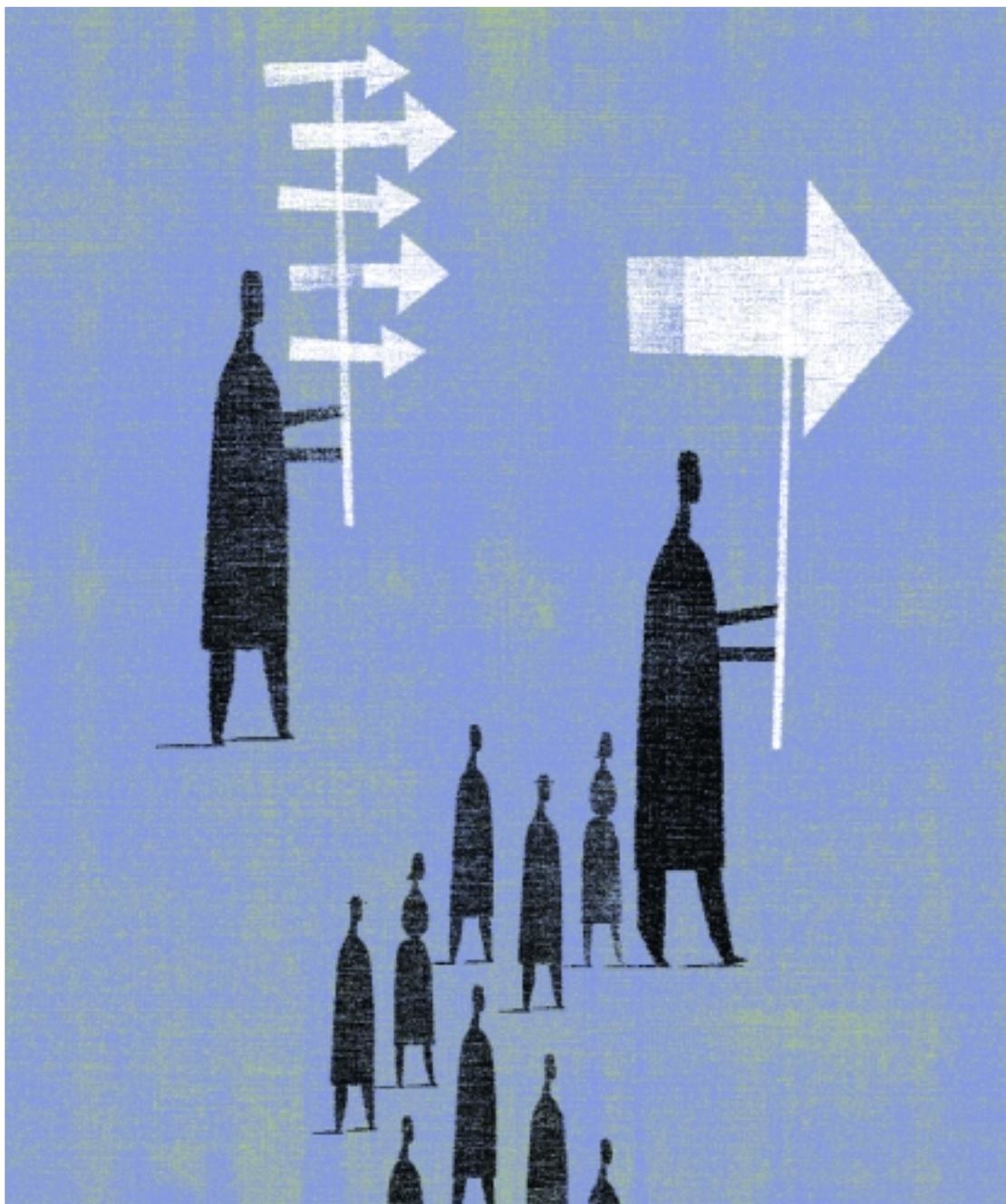
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BUSINESS PERFORMANCE MANAGEMENT:  
**CURRENT STATE OF THE ART**

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A SURVEY REPORT BY BERNARD MARR

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CRANFIELD SCHOOL OF MANAGEMENT  
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**B**usiness Performance Management (BPM) is a term frequently used among senior executives of leading corporations around the globe to describe the management processes and business systems they use to improve performance and accountability. However, very few reliable studies have documented the state of the art, common practices and tangible benefits of BPM. To close this gap we conducted one of the largest surveys into BPM, the results of which are summarised in this report. In late 2003, we collected data from 780 Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) from the 5,000 largest organisations in the United States.

KEY FINDING 1

ORGANISATIONS WITH A FORMAL BPM APPROACH BELIEVE THEY OUT-PERFORM  
ORGANISATIONS WITHOUT A FORMAL BPM APPROACH.

This perceived superiority applies both to overall performance and to performance of activities along the Performance Planning Value Chain - a framework we developed at the Centre for Business Performance to help organisations extract more value from their BPM initiatives.

In this survey, we asked senior executives to assess their overall performance compared to their main competitors. We then asked senior executives to assess their performance in certain activities along the Performance Planning Value Chain with the following outcomes:

1. **Build a Business Model** - Companies with a formal BPM approach report that they more often use causal models to build a hypothesis and link objectives and performance measures to the firm strategy.

2. **Collect Data** - Companies with a formal BPM approach report higher data quality and increased consistency in how they measure performance.
3. **Analyse and Interpret Data** - Companies with a formal BPM approach report improved interpretation of their performance information.
4. **Extracting Insights** - Companies with a formal BPM approach claim to extract higher quality insights from their performance information.
5. **Communicate Insights** - Companies with a formal BPM approach report that they better communicate their insights.
6. **Decisions and Actions** - Companies with a formal BPM approach report better execution of their decisions and actions.

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KEY FINDING 2

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**MOST ORGANISATIONS USING PACKAGED OR CUSTOM BPM APPLICATIONS TO AUTOMATE THEIR BPM INITIATIVES REPORT BETTER PERFORMANCE IN THE ACTIVITIES OF THE PERFORMANCE PLANNING VALUE MANAGEMENT CHAIN THAN THOSE USING ERP APPLICATIONS OR SPREADSHEETS.**

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Of the software applications used to automate BPM initiatives, organisations using packaged or custom BPM applications are most satisfied, while more than half of the organisations using

Enterprise Resource Planning (ERP) applications rate their performance as just acceptable. Most unhappy are those organisations still using spreadsheets.

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IN CONCLUSION

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In conclusion, as our key findings suggest, our survey found that organisations perceive their BPM initiative to have a positive impact on per-

formance and that the most positive impact occurs when initiatives are planned and executed properly, using appropriate tools.

**B**usiness Performance Management (BPM) is a term frequently used among senior executives of leading corporations around the globe to describe the management processes and business systems they use to improve performance and accountability. However, most of the current evidence about the success or failure of BPM is anecdotal. In addition, while many organisations use the term, there are great differences in how they define it, creating growing confusion about its meaning.

To shed more objective light on the current state of the art in Business Performance Management, we conducted an extensive study of Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) from 780 of the largest corporations in the United States<sup>1</sup>. This makes it one of the largest studies ever conducted in the field of BPM.

Before we present our findings, we would like to offer our definition of BPM, as it guided our development of the survey and our interpretation of its results.

***BPM is the organisational approach to assess and monitor performance in relation to set goals and objectives. It encompasses methodologies, frameworks and indicators that are used to help organisations in the formulation and assessment of the strategy, to motivate people and to communicate or report performance to external stakeholders. [19]***

All organisations use some indicators to measure aspects of their performance; however, we

use the term formal BPM approach when the methodologies, frameworks and indicators are made explicit and if they are codified into processes and policy. Formal approaches towards BPM include the Balanced Scorecard [9; 8; 13; 14] and the Performance Prism [21; 22], among others.

In this report we present more general descriptive findings about BPM, including:

- Usage level
- Reasons why organisations implement BPM
- What perspectives they are measuring
- What applications they are using to facilitate BPM

In the second part of this report we:

- Report on common practices
- Analyse how organisations use their performance measures to extract value for the firm
- Test these practices against the steps of the Performance Planning Value Chain<sup>2</sup>

<sup>1</sup> For a more detailed description of the methodology used to collect the data, please see Appendix 1.

<sup>2</sup> The Performance Value Chain is a framework we developed at the Centre for Business Performance to help organisations extract more value from their BPM initiatives.

## HOW MANY ORGANISATIONS USE FORMAL APPROACHES TO BPM?

The evidence about the use of formal BPM approaches is very confusing, partly because of the different interpretations of what BPM means.

For example, industry research suggests that in some organisations Balanced Scorecard (BSC) is used as a synonym of BPM. [19] Other methodologies frequently used include Malcolm Baldrige National Quality criteria, quality based measurement tools such as Total Quality Management (TQM) and economic value assessment models like Economic Value Added (EVA).

Our survey found that 46 percent, or 359 of the 780 organisations that participated say that they follow a formal performance measurement methodology in their Business

Performance Management. Of these 359 organisations, three quarters use the BSC as their main methodology. Just over one quarter use quality based methodologies, such as Total Quality Management, Malcolm Baldrige criteria or Six Sigma, and a small minority rely on Economic Value Added (EVA) as their main methodology.

This means that overall about 35 percent of the organisations in our sample use the BSC. Interestingly, only about 14 percent rely solely on the BSC as their performance measurement tool. Many firms combine it with other methodologies - the most common combinations are BSC with TQM or Malcolm Baldrige, and BSC with EVA.

## WHAT ARE THEIR REASONS FOR USING BPM?

The three general reasons why organisations use BPM are to:

- (1) **Implement and validate their strategy**
- (2) **Influence employees' behaviour**
- (3) **Report externally on performance and corporate governance [16]**

As shown in Figure 1, firms in our sample said

that the primary reason for having a performance measurement system is control (30 percent) followed by strategic planning (19 percent), decision making (18 percent) and strategy validation (12 percent). The least stated primary usages are for communication, motivation and reward, and relationship management or regulatory reporting.

FACTOR	% OF TOTAL RESPONSES	<i>Figure 1: Reasons for Adopting BPM</i>
Controlling	30%	
Strategy Planning	19%	
Everyday Decision Making	18%	
Strategy Validation	12%	
Communication	8%	
Motivation and Reward	7%	
Managing Relationships with Stakeholders	3.5%	
Regulatory Reporting/Compliance	2.5%	

WHAT LINKAGES ARE FACILITATED BY BPM?

The majority of companies in our sample use BPM to link strategy to financial and operational plans (74 percent), while just over half use it to link strategy to budgets (55 percent) and compensation to performance (53 percent).

Thirty-three percent of all respondents use BPM to establish all three links - strategy to financial and operational plans; strategy to budgets; and compensation to performance.

Ten percent combine linking strategy to financial and operational plans and compensation to performance. About 9 percent combine linking

strategy to financial and operational plans and strategy to budget. Just 2 percent combine linking strategy to budget and compensation to performance.

These results are summarised in Figure 2, which shows the percentages of companies using their measurement system to link one or multiple aspects of their business.

Significantly, our study shows that 53 percent of firms link their compensation system to performance even though some have not yet linked their budget or operational plans to strategy.

LINKAGES FACILITATED BY BPM			
Strategy with Financial and Operational Plans	Strategy with Budgets	Performance and Compensation	% of Total Responses
Yes			74
	Yes		55
		Yes	53
Yes	Yes	Yes	33
Yes		Yes	10
Yes	Yes		9
	Yes	Yes	2

Note: Multiple counting possible

Figure 2: Linkages Facilitated by BPM

WHAT PERSPECTIVES ARE MEASURED IN BPM?

To provide a comprehensive picture of performance, organisations must measure all relevant perspectives on performance. Relevant perspectives will differ slightly depending on the industry context or focus of the organisations.

While most measurement frameworks prescribe a specific set of perspectives, some leave it up to the organisations to identify the most relevant ones. For example, even though the BSC prescribes four perspectives (finance, customer, internal processes, learning and innovation), a recent study of BSC usage finds that a third of BSC users have no perspective comparable to 'learning and growth'. [28]

In our study we found that most organisations measure their performance in 3 or 4 different perspectives. Figure 3 shows the different perspectives used in performance measurement and the percentage of respondents claiming to use the perspective in their BPM approach.

These findings reflect the reality observed by us in our everyday work with many leading organisations. That is, organisations find it easy to measure the financial perspective because many of the accounting measures are readily available and measured on a regular basis for other pur-

poses such as planning and budgeting or reporting. In fact, 91 percent of the firms we surveyed measure the financial perspective - raising an interesting question about the remaining 9 percent that do not!

The second most frequently included perspective is the customer perspective (69 percent), closely followed by the process perspective (64 percent). These are also areas in which organisations have quantitative data readily available, making them easy to measure.

Our analysis also shows that companies with a formal BPM approach measure performance against more and more varied perspectives than those without one. In fact, 64 percent of companies without a formal BPM approach claim that more than 50 percent of their measures are financial and a staggering 36 percent say that between three quarters and all of their measures are financial in nature. These numbers change significantly for companies with a formal BPM approach. Only 5 percent report that between three quarters and all of their measures are financial in nature, and 16 percent say that more than 50 percent of their measures are financial.

PERSPECTIVES	% OF TOTAL RESPONDENTS	<i>Figure 3: Perspectives of Performance Measured in BPM</i>
Financial	91%	
Customer	69%	
Processes	64%	
People	52%	
Industry Benchmarks	33%	
Health & Safety	24%	
Innovation	22%	
Other Stakeholders	10%	

Note: Multiple counting possible

**HOW MANY COMPANIES APPLY CAUSAL MAPS?**

To understand how performance drivers - especially intangible assets - translate into value, it is valuable to visually map causal relationships into visual maps showing their causal relationships. [12; 14; 20] Advocates of the BSC [10; 11] suggest using a strategy map containing outcome measures and performance drivers, linked together in a cause-and-effect diagram. [8] There is some convincing evidence of causal relationships between non-financial assets and performance. [25; 5]

In our sample, 54 percent of respondents with a formal BPM approach say that they visualise causal links between their measures using cause-and-effect diagrams such as strategy maps. This corresponds with findings in other smaller studies, which have found that about half of companies using a BSC also use causal maps. [28] Of the companies without a formal BPM approach, just one quarter claim they visualise causalities between measures.

**WHAT KIND OF BENCHMARKING DO COMPANIES DO?**

Benchmarking is a popular tool for strategic management and in fact all of the winners of the Malcolm Baldrige award score highly on the use of benchmarking. [4] Benchmarking enables a company to understand its current performance levels and set future targets. [2] Benchmarking can have an internal as well as

an external focus. Of the organisations with a formal BPM approach, 80 percent do some kind of benchmarking. Of these, 60 percent benchmark internally, 35 percent benchmark both internally and externally, and only 5 percent benchmark only externally (Figure 4).

BENCHMARKING	% OF RESPONSES WITH BPM	<i>Figure 4: Types of Benchmarking</i>
Internal (only)	60%	
Internal and External	35%	
External (only)	5%	

**IMPLEMENTATION TIME**

Our study shows that the average time to implement a BPM system is 12 months. Other

typical project cycles are 3, 6, 12, 18 and 24 months (see Figure 5).

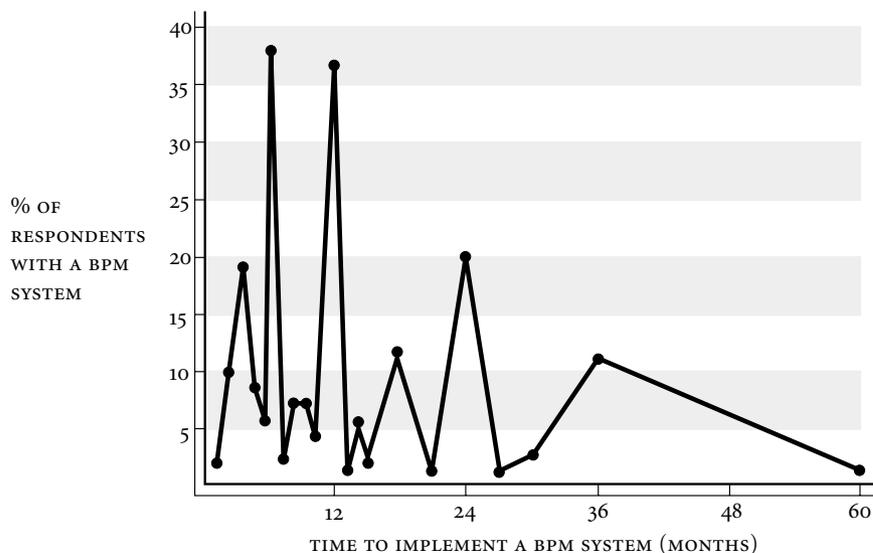


Figure 5:  
Time to  
Implement a  
BPM system

**WHAT SOFTWARE APPLICATIONS ARE USED TO SUPPORT BPM?**

The software market for BPM applications is growing rapidly; in 2003 there were more than 65 software vendors participating in the multi-billion dollar analytic application market [17; 18; 15]. While pencil and paper or simple spreadsheet tools may be sufficient to start applying a BPM tool such as the Balanced Scorecard, automation is necessary to make the method an integral part of the business. Manual and spreadsheet measurement systems are too slow, cumbersome, labour intensive and

unreliable. [26; 26; 3]

In our survey, 45 percent of organisations still use spreadsheets as the prime tool for their BPM initiatives; 28 percent use Enterprise Resource Planning (ERP) systems as the main tool; 15 percent use packaged performance measurement applications; and 12 percent use custom built applications. Many companies combine applications such as ERP systems and spreadsheet applications with custom-built applications.

SOFTWARE APPLICATIONS	% OF RESPONDENTS WITH BPM
Spreadsheet applications	45%
ERP	28%
Packaged PM applications	15%
Custom built applications	12%

Figure 6:  
Software  
Applications  
used for BPM

Overall, 34 percent of respondents report that the applications they use for BPM work well or very well and 46 percent report that they work just acceptably. Overall, only 20 percent of respondents report that the applications they use for BPM work poorly.

If we split those into the different categories of applications, we can see that users are most satisfied with packaged applications (see Figure 7). Not a single respondent reported that the applications performed poorly and about three quarter of respondents using packaged applications reported that they worked well or even very well.

Custom built applications follow in second place as half of the respondents using custom built

applications for their BPM report that they work either well or very well, and 44 percent report acceptable performance.

When it comes to ERP applications more than half of the respondents feel that they perform just acceptably. Thirty three percent feel they work well, while just 2 percent believe they work very well. Eleven percent feel they work poorly.

Users felt most unhappy about their spreadsheet applications. Eighteen percent felt that they worked only poorly as tools to measure and manage performance. Only one quarter of the respondents using spreadsheets felt that they worked well or very well as tools to measure and manage performance.

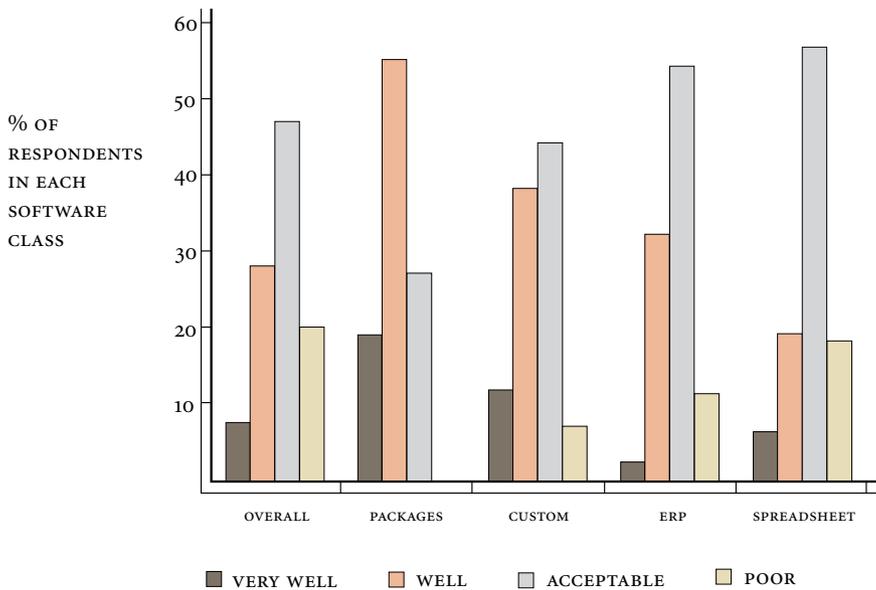


Figure 7:  
Levels of Satisfaction with Different Types of Software Application

Based on our extensive research and experience, the Centre for Business Performance at Cranfield School of Management has concluded that most organisations tend to measure what is easy to measure and not necessarily what really matters. As a result, when organisations implement a formal BPM approach, they will frequently just recycle existing measures and map them into the newly designed performance perspectives.

To help organisations extract more value from their BPM initiatives, the Centre for Business Performance has developed a process called the Performance Planning Value Chain, shown in Figure 8. Our belief is that to extract value from BPM, organisations need to start by

developing a business model that reflects the basic hypothesis about their business. Only when such a model is in place, should they start collecting data, analysing and interpreting that data to extract insights that can be used to make decisions.

In fact, if organisations do not extract new insights that allow them to make better decisions, then the entire process of BPM is a non-value added activity - or put bluntly: a waste of time and money.

In Part II of our report, we discuss the different stages of the Performance Planning Value Chain in further detail and compare them to the findings in our study of 780 leading corporations.

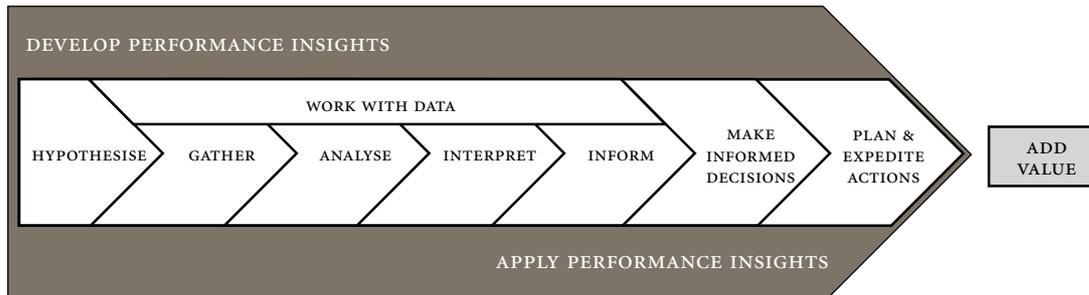


Figure 8: Performance Planning Value Chain

DESIGNING A BUSINESS MODEL

One of the fundamental mistakes organisations make is failing to link their measurement systems to the strategy of the firm. Often they fail to establish such links out of laziness or thoughtlessness and, as a result, self-serving managers are able to choose and manipulate measures solely for the purpose of making themselves look good and earning nice bonuses. [6, p 89]

Another common mistake is creating measurement systems that do not measure intangible assets, which are core value drivers in most firms today. [29] This occurs because many organisations lack the critical understanding of how intangible assets contribute to the overall objectives of the firm.

To avoid these mistakes, The Performance Planning Value Chain suggests that organisations should build business models of causal relationships between the different aspects of performance. Such maps can then be used not only as a

powerful communication tool of strategic intent, but also as a tool to guide the data collection and analysis. Figure 9 shows an example of such a cause-and-effect map based on the four BSC perspectives. The bubbles show the different strategic objectives, which can then help to design the appropriate measures for each of the objectives.

Moreover, this business model is basically the organisation’s hypothesis of how the business creates value. With sufficient data, it is then possible to test and challenge this hypothesis. Even if companies create causal models, they rarely go on to prove that actual improvements in non-financial performance measures affect future financial returns. [6] As reported in Part I of this report, in our sample about half (54 percent) of firms with a formal BPM approach use causal maps to visualise links between the different aspects of their performance.

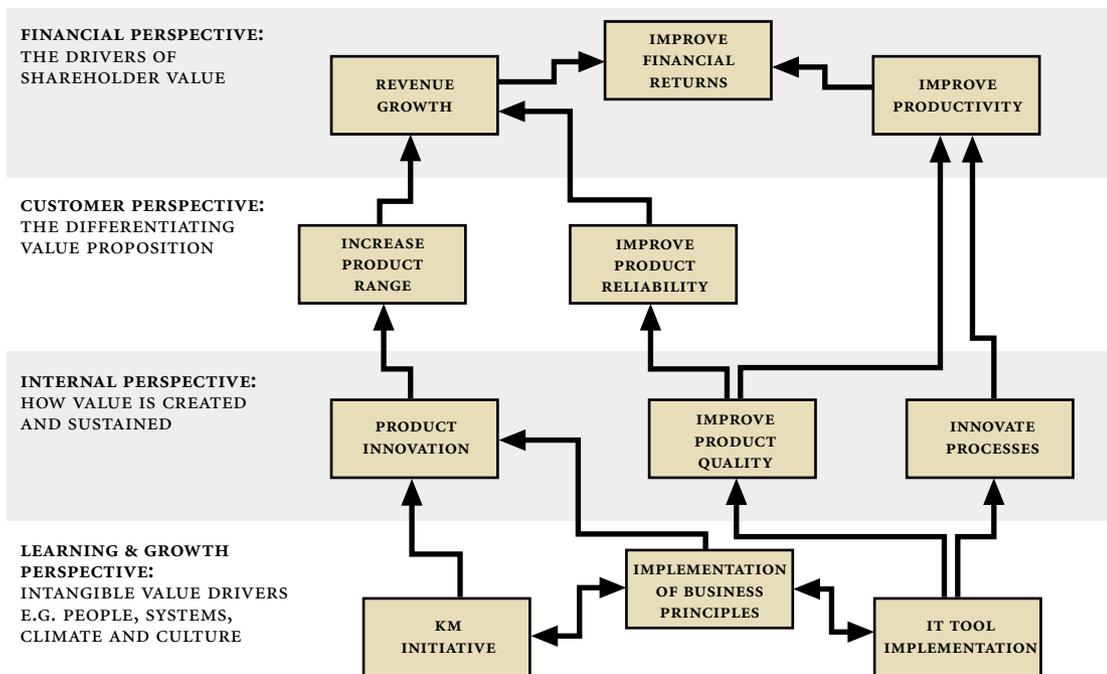


Figure 9: Cause-and-Effect Map Based on BSC Perspectives

In our sample we find that organisations with a formal BPM approach have a better understanding of their intangible value drivers. However, organisations using cause-and-effect

maps have the greatest faith that their understanding of how intangibles drive value has improved (see Figure 10).

WITH A FORMAL BPM APPROACH, WE BETTER UNDERSTAND THE VALUE OF OUR INTANGIBLE VALUE DRIVERS		<i>Figure 10: Better Understanding of Intangible Value Drivers</i>
Strongly Agree	11%	
Agree	52%	
Neither Agree nor Disagree	22%	
Disagree	13%	
Strongly Disagree	2%	
WITH CAUSE-AND-EFFECT MAPS, WE BETTER UNDERSTAND THE VALUE OF OUR INTANGIBLE VALUE DRIVERS		
Strongly Agree	28%	
Agree	61%	
Neither Agree nor Disagree	9%	
Disagree	2%	
Strongly Disagree	0%	

**DATA COLLECTION**

This part of the Performance Planning Value Chain suggests identifying the right measures and measuring them in the right way. From our experience, many organisations lack a clear understanding of what the key measures are, have no transparent definitions of measures, and furthermore measure them inconsistently across the organisation. One company we recently worked with had 18 different definitions of the term ‘on time delivery’, which made it impossible to internally benchmark performance.

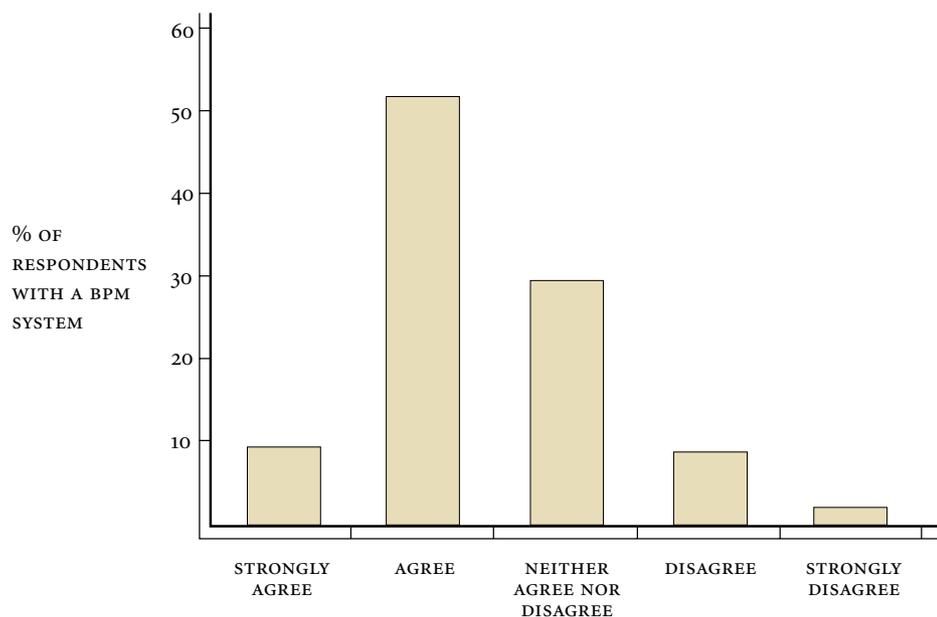
Our study shows that organisations with a formal BPM approach report higher measures of quality and consistency. In fact, 68 percent of firms with a formal BPM approach report that the quality of their measures is good, while only 33 percent of companies without a formal approach to BPM believe their measures quality is good. Even more striking is the fact that 73 percent of organisations using BPM report that their measures are collected consistently across the organisation, which contrasts with only 24 percent of companies without a formal BPM approach.

**ANALYSIS AND INTERPRETATION**

In our survey, 44 percent of companies with a formal BPM approach claim to test causal relationships between measures while 24 percent of the organisations without a formal BPM approach do so. However, this number is an indication of any causal relationships between measures and not an indication of testing the entire system of causal relationships. Only 19 percent of companies with a formal BPM

approach claim that they test all their causal relationships in their cause-and-effect models.

Most organisations in this study agree or strongly agree with the statement that their BPM system has improved the quality of our data interpretation (61 percent), as shown in Figure 11. This is a strong indicator that BPM approaches do improve interpretation of performance data.



*Figure 11: Organisations with a Formal Approach to BPM Show Improved Quality of Data Interpretation*

EXTRACTING INSIGHTS

From our experience, we find that most organisations spend the majority of their time and effort collecting and reporting performance data and not enough time on extracting valuable and actionable insights from their data.

The number of measures and the amount of performance data seem to grow constantly while the insights seem to decrease. This phenomenon could be described as “drowning in data” or “paralysis without analysis”. [22]

Organisations with formal BPM approaches in place report better satisfaction with the insights they gain from their performance data. In fact, 57 percent of the respondents with a formal BPM approach agree or strongly agree that they gain high quality insights from their performance data. While only 26 percent of the respondents without a formal BPM approach feel that way about their management insights gained from performance information (Figure 12).

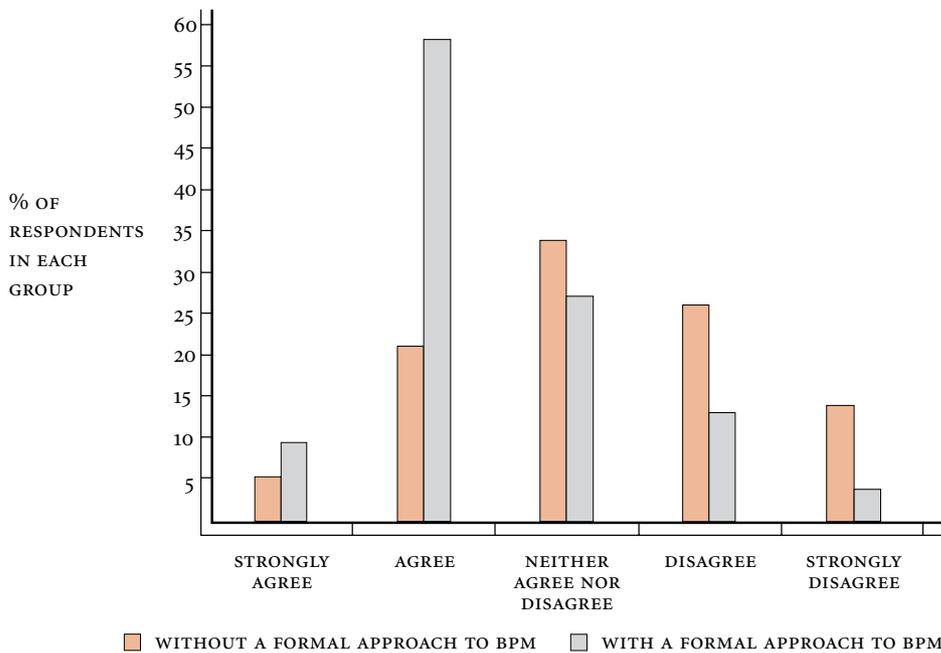


Figure 12: Organisations with a Formal Approach to BPM Gain More Insight

COMMUNICATE INSIGHTS

From our experience with many organisations, we know that communication is often poor - especially when it comes to communicating business insights. Large and complicated spreadsheets with little indication of the key messages they contain are common communication tools.

In our study, organisations with a BPM approach in place report higher effectiveness of their overall communication of performance measurement insights. Fifty one percent of the respondents with a formal BPM approach agree or strongly agree that their communication of performance data is effective. Only 23

percent of the respondents without a formal BPM approach feel that way about the overall effectiveness of their communication of performance results (Figure 13).

Our analysis also revealed communication effectiveness differences between the users of different software applications. Organisations are most satisfied with the communication support of packaged applications and custom built applications. For ERP systems we get mixed messages - some organisations are satisfied while others are not. According to our respondents spreadsheet applications support communication the least.

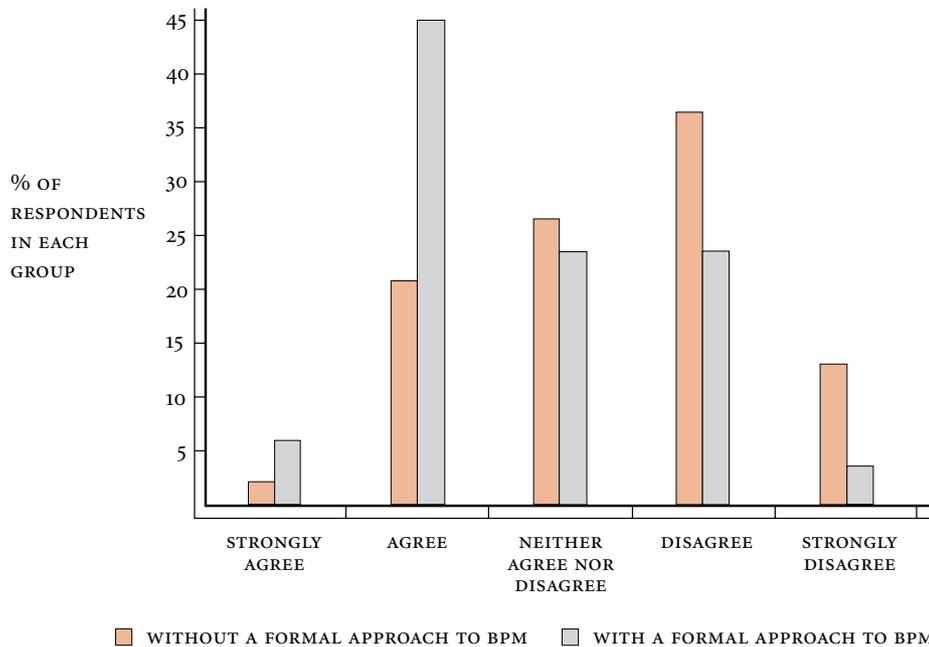


Figure 13: Organisations with a Formal Approach to BPM Show Improved Quality of Communication Effectiveness

**DECISIONS AND ACTIONS**

The most crucial aspect of any BPM initiative is making decisions and taking actions. An organisation can have a great business model, measure all relevant aspects of its performance, analyse data well and still fail to extract insights that help them make better decisions and take actions that add value.

In our survey we asked respondents whether the management decisions made in their organisations are good. Respondents with a formal BPM approach in place report better satisfaction with the management decisions made in their organisation. Seventy one percent of respondents with a formal BPM approach agree or strongly agree that their decisions are good. Only 57 percent of the respondents without a formal BPM system feel that way about their decision quality (see Figure 14).

Furthermore, our study shows that organisations that have implemented a formal BPM approach report specifically that BPM has improved their ability to make better decision. In fact, 72 percent of the respondents with a BPM system agreed or strongly agreed that it is the BPM system that enabled their managers to make better decisions (see Figure 15).

We further found that organisations with a formal BPM approach in place report better satisfaction with the decision execution in their organisations. Sixty percent of the respondents with a formal BPM approach agree or strongly agree that their decisions are executed well. Only 43 percent of the respondents without a BPM system feel that way about their decision execution (see Figure 16).

DECISION QUALITY			<i>Figure 14: Organisations with a Formal Approach to BPM Show Better Decision Quality</i>
COMPANIES WITHOUT A FORMAL APPROACH TO BPM (%)		COMPANIES WITH A FORMAL APPROACH TO BPM (%)	
4	Strongly Disagree	1	
13	Disagree	6	
26	Neither Agree nor Disagree	22	
48	Agree	56	
9	Strongly Agree	15	

OVERALL		<i>Figure 15: The BPM System has Improved our Decisions</i>
Strongly Disagree	0%	
Disagree	6%	
Neither Agree nor Disagree	22%	
Agree	54%	
Strongly Agree	18%	

EXECUTION QUALITY		
WITHOUT BPM (%)		WITH BPM (%)
4	Strongly Disagree	2
26	Disagree	11
27	Neither Agree nor Disagree	27
38	Agree	49
5	Strongly Agree	11

Figure 16:  
Organisations  
with a Formal  
Approach to  
BPM Show  
Better Decision  
Execution

**BPM IMPACT ON BUSINESS PERFORMANCE**

Our survey produced evidence to support that companies with a formal BPM approach perform better in all the steps of the Performance Planning Value Chain compared to those companies that do not have a formal BPM approach. Companies with a formal BPM approach claim to make more use of causal business models to link objectives and measures to strategy, claim superior quality of measures, analysis and interpretation, extract more valuable insights from their data, communicate the insights better and make better business decisions based on the insights.

process performance also translates into superior business performance. We asked respondents to rank the performance of their entire company, taking into account all relevant dimensions of performance, compared to their main competitors. Such self assessment of performance is generally accepted as a reliable tool to measure firm performance. It also ensures that we take into account all aspects of performance and not just the financial performance publicly available. The findings provide evidence that organisations with a formal BPM approach out-perform the organisations without a formal approach (see Figure 17).

The question now is whether this superior

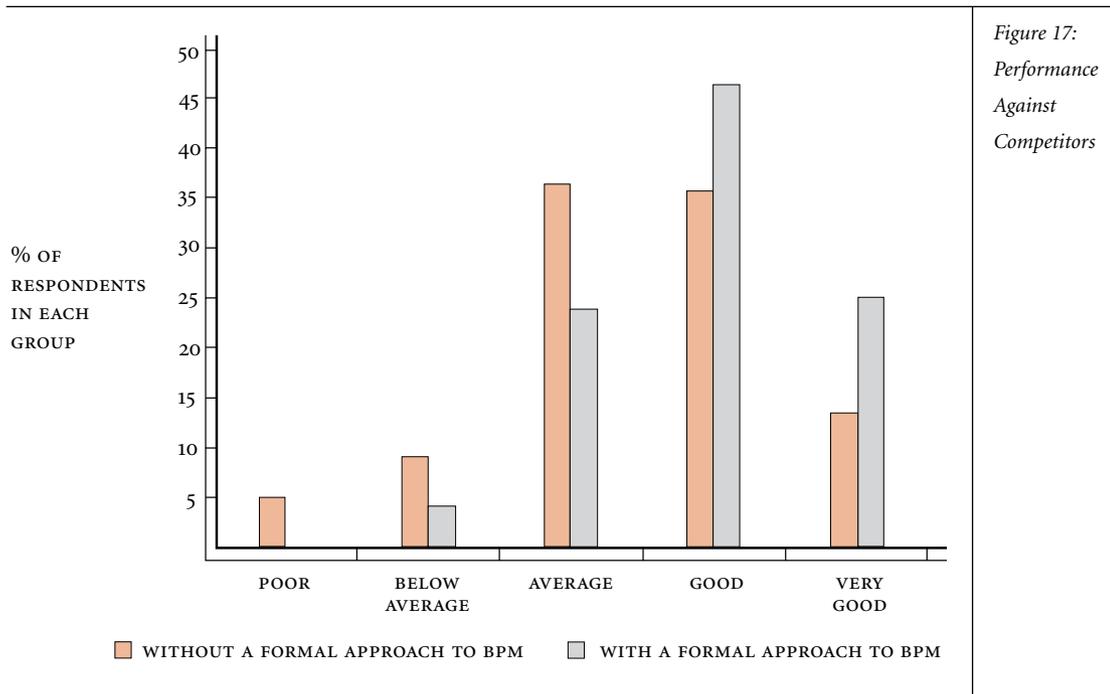


Figure 17:  
Performance  
Against  
Competitors

**B**PM is an increasingly popular and valuable discipline among leading American firms, although many companies claiming to have a formal BPM approach do not always follow a prescribed methodology or template of perspectives. We found this to be especially true for organisations using BSC, confirming the findings of other rigorous studies claiming that many organisations have a limited or incomplete version of a BSC. [28] We believe that most organisations could improve their understanding of what drives their performance by following a more rigorous methodology and by including a more comprehensive perspective on their value drivers.

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This conclusion is supported in our finding that organisations that follow the Performance Planning Value Chain extract more valuable insights from their data, apply those insights to make and execute better decisions and, as a result, out-perform their competitors. The better performing firms in our sample were better able to link their measures to strategic objectives by building a business model before starting to measure. These business models represent the assumptions and value proposition of the firm and can be visualised in causal maps, tested and validated.

Companies with a formal BPM approach also believe to out-perform other companies in collecting high quality measures and analysing and interpreting them to extract business insights. A formal BPM approach helps ensure quality and consistency in these activities.

We also found that packaged BPM applications or custom applications best facilitate BPM. Across the different steps of the Performance Planning Value Chain, organisations report

most satisfaction with these applications. Surprisingly, we found that almost half of the firms we surveyed use spreadsheet applications as their main software applications to facilitate BPM, even though they express significantly less satisfaction when compared with either packaged or custom applications.

The firms using ERP applications for their BPM activities also express less satisfaction than firms using either packaged or custom BPM applications. This indicates that there is much room for improved BPM by using improved software applications.

Overall, this study shows that BPM seems to have a positive impact on performance; however, it also shows that this positive impact occurs only if organisations do it right. The Performance Planning Value Chain is a clear step in the right direction and we encourage all organisations to think more carefully about how to extract more value from their BPM initiatives.

We sent a copy of the survey with a cover letter to the Chief Executive Officers (CEO) and Chief Financial Officers (CFO) of the Fortune 1000 companies. When we received multiple replies from the same organisation, we selected the response from the most senior respondent based on job title. If the CEO or CFO was unable to complete the survey, we asked him or her to select the most suitable candidate to fill in the survey.

We provided respondents with a Web link and encouraged them to complete the survey online, which gave respondents immediate access to benchmarking information based on other respondents as well as to a pre-study literature review. As a further incentive to complete the survey, we offered the first 100 respondents a copy of a management book on performance management.

Using these techniques, we achieved 248 responses, which corresponds to a 25% response rate, from the Fortune 1000.

Next, using the Perfect Analysis database product, we identified the 5,000 largest United States' companies based on their total revenue, excluding the Fortune 1000 companies contacted before. We then approached another 4,477 executives from these United States' companies, of which 430 responded - a response rate of just under 10%. In addition, we placed announcements in CFO magazine as well as in Perform Magazine, inviting CEOs and CFOs to go to our Web site and participate in the study. The result was that 193 companies responded to the announcement and completed the survey from which 102 were usable. We excluded 51 because respondents were from outside the United States, 32 because they were too small

and 8 respondents because they did not provide sufficient company information.

This gave us a total of 780 responses from large United States' firms across different industries. Figure 18 shows the breakdown of industries of the firms represented in our final sample.

SECTOR	FREQUENCY	PERCENT
Service	249	32
Manufacturing	156	20
Financial Management	49	6
Retail	37	5
Telecom	34	4
Other	255	33
<b>Total</b>	<b>780</b>	<b>100</b>

Figure 18: Respondents Industry Breakdown

All respondents were asked to reply for the company as a whole and not for any particular subsidiary or division. All participants were assured that all responses would be kept confidential. The cover letter and survey stated that only aggregates would be used for the research and that no individual company would be linked to specific responses.

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**FURTHER READING**

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Bernard works with leading organisations and thought leaders in the field to develop approaches and frameworks to measure and manage their intellectual capital and intangible assets and identifies how those intangibles contribute to the overall value creation of the organisation. Bernard is chairman of the international PMA Intellectual Capital Group, Intangible Assets Editor of the journal Measuring Business Excellence, and member of the editorial board of the Journal of Intellectual Capital and the International Journal of Learning and Intellectual Capital.

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Named one of the Fortune 100 Best Companies to Work For 2004, Hyperion employs approximately 2,500 people in 20 countries. Distributors represent Hyperion in an additional 25 countries. Headquartered in Sunnyvale, California, Hyperion - together with recently acquired Brio Software Inc. - generated combined annual revenues of \$612 million for the 12 months ending June 30, 2003. Hyperion is traded under the Nasdaq symbol HYSL. For more information, please visit [www.hyperion.com](http://www.hyperion.com).

  
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