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JANUARY 2008

## Seeing the wood

### MAKING MANAGEMENT INFORMATION MORE MANAGEABLE

*In too many companies, decision-makers find themselves swamped by confusing and even conflicting sets of management information. “Key” performance measures are often anything but, and large amounts of data, collected and circulated for reasons long forgotten, are routinely ignored. Simple tree structures, linking management actions directly to measurable outcomes, can help clear the deadwood and enhance commercial decision-making.*

The purpose of management information (MI) is clear enough: to help managers understand the performance of their business, and make well-informed decisions about what to do next. To the frustration of many senior executives, however, much of the MI routinely circulated fails to fit that purpose. A survey of key decision-makers within a selection of our client organisations (see the chart overleaf) suggests high levels of dissatisfaction. Typical comments included: “We’ve got KPIs coming out of our ears” and “a lot of numbers get circulated, but to be honest I find a lot of it isn’t much help”.



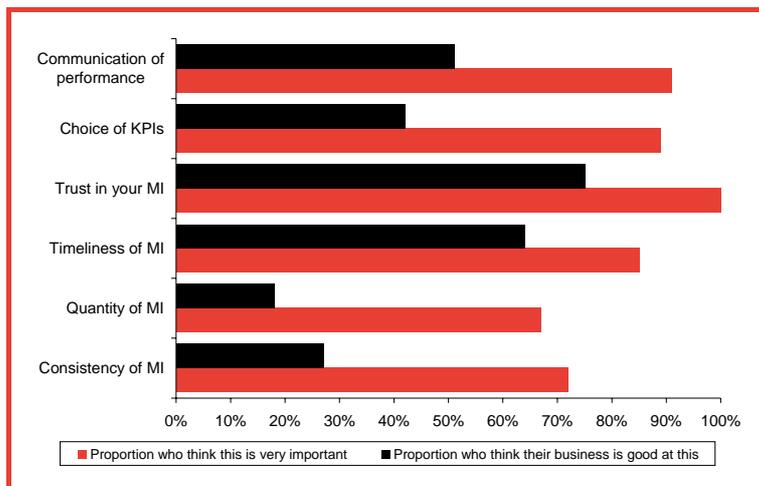


Figure 1: 2007 survey of views of executive managers on the quality and value of selected management information reports within a range of large companies

Source: Frontier

So what's going wrong? Our experience suggests there are four common problems.

- **Information is based on what can be produced, not what's needed...** Businesses' information systems tend to grow organically, with new systems being bolted on to "legacy" software databases and parallel systems being maintained in different parts of the company. Much effort is devoted to refining the numbers for what's easy to measure, rather than searching for data on what's useful to know. The result tends to be a series of partial performance measures that do not combine to provide an overview of the business.
- **... so too much information is produced...** Modern IT systems enable detailed data analysis to be produced and distributed rapidly. Weekly sales analyses may be circulated within days (or even hours) of the end of the week. Detailed decompositions by region or operating unit can often be generated as easily as aggregate figures. Real-time "news" data can be highly addictive, but not very indicative. While such a wealth of information can be valuable if analysed carefully, in many cases users become bogged down in data that is hard to interpret.
- **... and reports aren't properly pruned...** As companies grow and change over time, new performance measures are required and new reports are generated. But if old data flows aren't cut off, and reports cut back, companies may suffer from information overload. Frequently, too, different reports may provide conflicting measures of the same piece of "information", so that meetings degenerate into a wrangling over apparent inconsistencies.
- **... while much MI doesn't provide a clear line of sight from decisions to outcomes...** The majority of financial MI is typically based on standard management accounts and financial statements. While these enable comparisons to be made right across the business on a common basis, they often do little to explain the dynamics. A profit and loss analysis may tell you how much you've sold in three different regions, but do little to explain why.

Decision-makers tend to react to data overload in one of two ways. They either become paralysed – for fear of making the wrong choice – or fall back on gut feel, reinforced by reliance on the one or two metrics that they trust. Either response leads to trouble. The dangers of paralysis in any competitive industry are clear. And an over-dependence on one or two metrics may lead management to focus too much on a single dimension of competition, overlooking others.<sup>1</sup>

Simple logical tree structures can be used to impose discipline on unruly MI. The business's objectives are put at the top of the tree. Performance measures are arranged on successive levels below – each explicitly linked to the level above. It is this causality that is crucial, providing a clear line of sight from decisions to outcomes. Drawing the tree in this way prunes out factors linked only weakly to desired outcomes, letting light in on the measures key to performance.

The diagram below illustrates an MI tree for an integrated manufacturing and retail business. The overall objective – to maximise net profit – sits at the top. The determinants, shown at the next level down, are sales, gross margins and overheads. (Sales, multiplied by percentage gross margin, less overheads, equals net profit.) In this example the sales branch has been further extended to reveal its own determinants: transaction volume and average order value. And the transactions branch is in turn disentangled into footfall and the conversion rate.

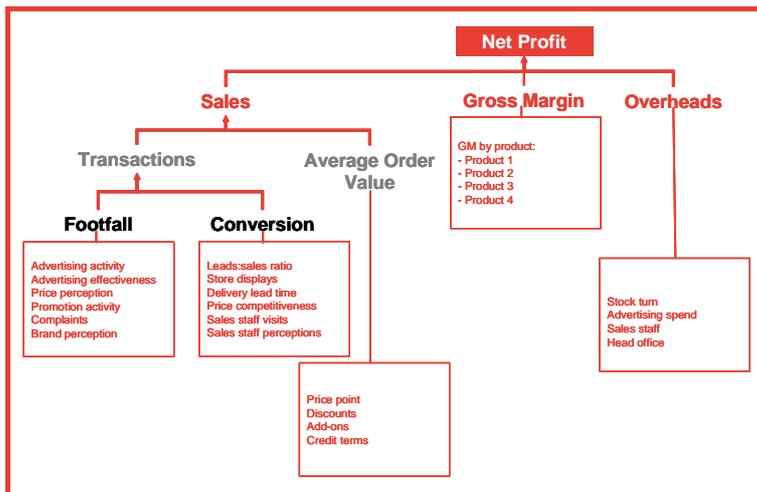


Figure 2: Illustrative example of an information tree for an integrated manufacturing and retail business

Source: Frontier

At lower levels of the tree the relationships become more complex and harder to express arithmetically. Footfall is likely to be driven by a range of qualitative factors such as price perceptions, advertising policy, competitor activity and so on. But while the relationships may be harder to pin down in simple equations, the basic chain of causality is clear. And by repeatedly tracking the same measures over time, and focusing on changes rather than absolute levels, the nature of the relationships between different levels may become clearer.<sup>2</sup>

<sup>1</sup> See the Frontier bulletin “*One-club golfers*” for more on this issue.

<sup>2</sup> The Frontier bulletin “*Pull the other one*” looks in more detail at the use of root-cause analysis to explain relationships between outcomes and the levers than management can pull.

To fill in these lower branches, you often need a richer set of data than conventional financial MI. In this example, you would need a range of information from operational teams (on, for example, store displays, stock turn, promotional and competitor activity) and marketing (price perceptions, advertising effectiveness) as well as financial data. Some of these factors may be hard to measure. But it is better to have imperfect evidence on important relationships than to ignore them. And once again, by tracking measures over time, it may become easier to assess their validity as indicators of performance.

### START AT THE TOP

This approach can be adapted to the pursuit of other top-of-the-tree objectives. So, for example, an MI tree to support the maximisation of the return on capital employed would need to include balance sheet data on the business's assets, and to explore the relationship between these assets and performance – in other words, to test whether they are needed and used efficiently. Likewise, separate saplings can be drawn to explore the determinants of sales for specific products, or to analyse the relationship between project overheads and outcomes. One might need a “deciduous” tree for short-term trading decisions, an “evergreen” for longer-term strategic planning. Trees can, in short, be drawn very differently, to suit the particular decisions they are designed to inform.

The following steps summarise the process of building a successful MI tree.

- Identify the key decisions that the MI needs to inform, and the people who make those decisions.
- Then ensure there is clarity and agreement about the outcomes they want to achieve. Set these at the tops of the trees.
- Work down through the determinants of those outcomes, and draw out the tree conceptually before considering what data is available to hang on the branches.
- Then, and only then, try to identify measures for each branch, drawing on all sources of relevant data.
- Where this is not available, think creatively about ways in which the information you need could be captured or proxied. For example, can a qualitative measure be built up from the insights gleaned from staff or customers? Remember: an imperfect measure of the relevant is much more useful than a perfect measure of the irrelevant.

And finally, a good MI tree should be treated like a live one. It needs regular pruning and attention; it shouldn't be allowed to crowd out other trees; and when past its prime, it should be cut down and replaced.

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