TECHNICAL MATTERS

Budgeting and innovation

Do budgets stifle creativity? **David Marginson** and **Stuart Ogden** report on a case study that has addressed this question in a leading global technology firm.

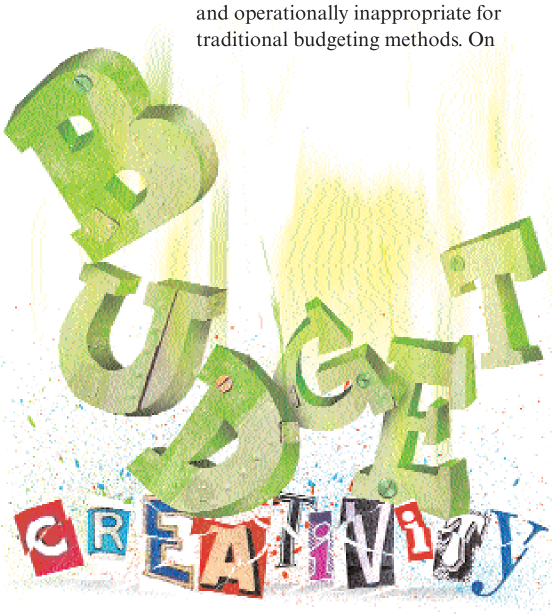
Budgets have long had a bad press, but they have attracted even more flak recently for being at best inappropriate to modern business practice and at worst potentially harmful[1]. The Beyond Budgeting Round Table (BBRT) has been one of their most vociferous critics. It argues, for example, that the necessary conditions of trust and empowerment in today's organisations "are not possible with budgets still in place, because the entire system perpetuates central command and control"[2]. But research suggests that most businesses are still using some form of budgeting.

One important issue that relates directly to the BBRT's criticisms concerns how firms are balancing the need to control costs on the one hand with the pursuit of innovation on the other. Innovation is crucial in a globalised economy. It requires, among other things, trust and empowerment. Budgeting stifles trust and empowerment, according to its critics, which in turn stifles innovation. But is this really the case? Do managers actually feel constrained by their budgets or can they successfully reconcile the tensions between budgetary control and innovation? If they can, how are they doing it?

We were recently engaged in a research project that sought to answer these questions. The study had four main aims:

- To ascertain how well and in what ways budgets keep pace with innovation – ie, how managers are able to innovate in a context of budgetary control (and vice versa).
- To understand how well and in what ways innovation is accommodated through changes to the design and operation of budgetary systems.
- To examine how well and in what ways the process of learning – which implies a degree of inefficiency and occasional failure – is accommodated within budgetary processes.
- To explore the extent to which budgets may inhibit the development of new ideas and initiatives.

We pursued our aims using an intensive investigation of the control processes and innovative practices of a major multinational enterprise: a provider of "document solutions", which we called Astoria. The company is a leading player in the global technology industry and seeks to maintain its position through continual product development. It also exhibits many of the hallmarks of an innovative enterprise, including a highly organic structure and an emphasis on learning as well as innovation. Such arrangements have long been considered contextually and operationally inappropriate for traditional budgeting methods. On the other hand, the markets in which Astoria operates are fiercely competitive, so cost control is a prerequisite for survival.



This combination of factors made the company a potentially valuable research site. Our intensive case-study approach allowed us to explore the interplay between budgeting and innovation in some detail.

Management control systems as a resource, not a constraint

The critics of budgeting start from the premise that the budgetary system is a central mechanism of control in an organisation, if not *the* central mechanism. As the report on last year's CIMA/ICAEW-sponsored Better Budgeting Forum argues, budgeting "provides an overall framework of control without which it would be impossible to manage".

Such a view contrasts with the growing body of academic work that points to an expanding management control framework[3]. It appears from our analysis that one of the reasons why firms may be expanding their control framework is not to install further means of command and control, but to give managers the tools for reconciling tensions and possible trade-offs involving budgeting and other organisational activities – for example, innovation and learning.

Structurally, our study of Astoria demonstrates how attempts may be made to embed the pursuit of budgetary control within a wider management control framework. The company's own framework comprised mechanisms and procedures that were called "performance excellence planning", "benchmarking" and

Illustration: Pablo Bernasconi

"customer-centred productive interactions". Each mechanism is meant, in its own way, to help managers align their day-to-day decisions with Astoria's corporate objectives. The emphasis is on ensuring that particular decisions are taken with the company's overall strategy in mind, rather than local targets.

Managers at the company readily acknowledged that they would use the control processes at their disposal to resolve potential conflicts involving people's targets. The controls allowed managers to "keep the emotion out of it", to quote one interviewee, when trade-off decisions that could affect a particular section's performance had to be taken.

Securing agreement on the potential localised sacrifices to be made, financial or otherwise, in the name of the bigger picture seems to be key to resolving any tensions involving budgets and innovation. These tensions are created by organisational activity and must, therefore, be resolved by the organisational participants. To this end, Astoria's various control mechanisms were seen as a resource, rather than a constraint. They provided a means by which managers could assure themselves that a particular decision concerning a particular issue was the best decision for the organisation as a whole.

By using the organisation's control framework, managers helped to ensure that, at the day-to-day operational level at least, their budgets and budgetary expenditure kept pace with new developments.

"Aggregated" variance analysis

Variance analysis is the mainstay of traditional budgetary control. According to the cybernetic model of control on which budgeting is based, decisions about variances should follow automatically from the information received – ie, variances should be corrected. If not, budgetary targets are likely to be missed, leading to ineffective cost control. In practice, however, decisions on budget variance correction must be taken in a wider context in the light of the pursuit of innovation, which implies a degree of inefficiency, and also of unexpected financial requirements.

Astoria's budgetary system broadly reflected the textbook description in that resources were allocated through the major "decision points" of the company. This meant that, as is the tradition with budgeting, individual managers had designated areas of budgetary responsibility – ie, the budget framework was compartmentalised, comprising individual centres of accountability. This also meant there was the potential for localised variance analysis and correction as individual managers sought to achieve their compartmentalised budgetary targets.

Localised budget variance analysis is seen as problematic, because it's likely to result in short-sighted behaviour. Critics have argued for changes to the design and operation of the budgetary system on this basis, but Astoria's response to this issue tended to emphasise a managerial solution.

The closest we came to finding any suggestion that budgets might inhibit innovation was a comment from one manager: "Everybody has a sandpit to play in. My sandpit financially is my control plan. If I stay within it, I'm free to play"

Decisions on whether or not to correct deviations from budget weren't taken by individuals in a vacuum. Instead, managers emphasised a team-based approach, with people meeting regularly to monitor the unit cost of products.

Managers at Astoria were free to decide the best course of action with regard to budget variances. If, for example, the estimated benefits of correcting a particular variance could be outweighed by a potential loss of revenue owing to a slippage in the launch deadline for a new product, then notions of variance correction could be overruled by the pursuit of the predetermined deadline. Of course, the manager whose budget targets might be threatened by this approach might need to be persuaded that it should happen, but this is where a wider control framework again seems to help.

Formal resolution, leading to general agreement and a potential paper trail, appears to ensure that organisational needs come before individual targets. This procedure represents a key method by which Astoria seeks to ensure that the needs and implications of innovation are accommodated within the budgetary process.

Managerial innovation and budgetary targets

Cost control is pursued by people, but so is innovation. An enduring criticism of budgets is that they stifle such human endeavour. The old command-and-control ethos of budgeting is seen as a restriction on innovation and learning, with the most entrepreneurial managers feeling the most constrained.

This view is another issue that underpins the BBRT's deliberations, but we found little evidence to suggest that managers at Astoria were deterred from engaging in innovative activities simply because they had budget responsibilities. Of course, the amount of resources available to them may have presented a sort of boundary, but they didn't see the presence of budgetary targets as a constraint. The closest we came to finding any suggestion that budgets might inhibit innovation was a comment from one manager who remarked that "everybody has a sandpit to play in. My sandpit financially is my control plan. If I stay within it, I'm free to play."

More generally, managers considered that, if they felt restricted in pursuing innovation, it was the degree of general empowerment they had that mattered. One manager went so far as to say that he felt "constrained in some ways by not having enough hours in the day". Our findings suggest that, although much of the accounting literature argues that budgets may deter innovation, this seems far from the truth.

Managing shared accountabilities and partial controllability

Traditional budgeting presumes a binary division of controllability – ie, managers are deemed to have full control over the cost items for which they are held accountable and no control over cost items that are the responsibility of others. In practice, however, factors such as task interdependence, informal control, jurisdictional ambiguity and teamworking combine to create areas of partial controllability. At Astoria this situation was exacerbated by the existence of shared accountabilities through delegated tasks, combined objectives etc. In such cases, no single manager could exert anything other than partial control over the financial results for which formal accountability had been established.

Conventional wisdom sees this as a problem. It states that partial controllability may result in dysfunctional behaviour and deter innovation, not least because managers may seek to regain as much control for themselves as possible by resorting to strategies involving individualism, instrumentalism (the view that the end justifies the means) and risk-aversion. Paradoxically, it seems that the opposite was true at Astoria. Rather than behaving in an insular way, managers at the company were observed to manage their lack of controllability through social interaction in the form of discussion and negotiation. The most popular forum for this tended to be face-to-face dialogue, either directly or via videoconferencing. These communications allowed managers to influence, where necessary, the decisions and actions of their counterparts, thereby allowing them to achieve their own targets.

It's plausible, therefore, to argue that traditional budgeting and responsibility centres, when combined with other control processes, actually encourage managers to communicate with their colleagues and seek the help of others, with the resulting dialogue fostering new ideas and initiatives. To this end, restructuring the budgetary system, or even abandoning traditional budgeting altogether, may create as many problems as it solves.

We observed that the way in which budgetary control was exercised at Astoria allowed managers to balance the inherent rigidity of their budgets with the more organic processes of innovation. A key part of this seems to be the embedding of budgets within a wider management control framework. This gave managers the tools to reconcile the tensions between budgets and innovation, while aggregated variance analysis allowed innovation to be accounted for in the budgetary process.

Overall, our research suggests that the dovetailing of formal procedures with informal processes supports the resolution of tensions between budgeting and innovation. In the light of this case study, calls for the demise of budgeting may be overstated. **FM**

References

1 *J Hope and R Fraser,* Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap, *Harvard Business School Press, 2003.*

2 *C Jackson, D Starovic (eds),* Better Budgeting, *CIMA/ICAEW, 2004.*

3 *Robert Simons,* Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal, *Harvard Business School Press, 1995.*

David Marginson (david.marginson@mbs.ac.uk) is a senior lecturer in accounting and finance at Manchester Business School, where **Stuart Ogden** is professor of accounting and finance.

Financial ratios

If non-financial managers feel that you're speaking double-Dutch whenever you talk figures, **Richard Bull** offers the accounting equivalent of the Rosetta stone.

How often have you sat across the table from your colleagues at a board meeting or stood in front of a sea of faces at a cross-functional performance review and seen their faces go blank as soon as you mention numbers? Too often, those who are unfamiliar with the technicalities of finance find a numeric description of how the organisation is doing rather distant from their own way of seeing it. As a result, they can find your presentation boring or even irrelevant.

Such a gulf in communication creates a number of problems. It can make it hard for you to find common ground with your colleagues. This can lead to a lack of mutual trust and understanding, which are vital for effective teamwork. If people aren't able to link financial strategy with operational strategy, it's hard for them to see the implications of one for the other – eg, where the tight control of working capital can restrict stock availability for customers. So it's crucial to find a way to engage colleagues in the financial view of the business. Only then can you be sure that they're making the best use of its resources.

The gap in understanding is often characterised by different ways of thinking. Finance is usually identified with left-brain or rational thinking, while other functions are associated with right-brain or intuitive thinking. If you are to explain financial indicators in the wider context of business indicators, you need to translate the financial view into one that everyone can understand. Nowhere is this more challenging than in the presentation of results in the form of financial ratios. Let's try using a visual representation – the enterprise stewardship model – to bridge the gap.

One of the most comprehensive financial ratios for a company is the dividend yield ratio. This expresses the dividends that shareholders receive as a proportion of the equity they hold. The ratio has a wide scope and it's hard to comprehend the relationship between the equity put into a firm and the dividend it pays. Dividends come out of profits, which are generated from sales of goods and services, which are produced from purchases and the use of facilities, which are financed by funds, some of which come from the purchase of shares.

This chain of causality is hard even for left-brainers to grasp, so it's helpful to draw it as a process and see it split into manageable chunks. At the same time we can break down the dividend yield into its component ratios. It's possible to identify sub-ratios within the dividend yield that combine to produce it and, in turn, the sub-sub-ratios within those. For the purposes of this example, let's take a series of ratios that complement our chain of causality and apply the enterprise stewardship model to map the process alongside them.

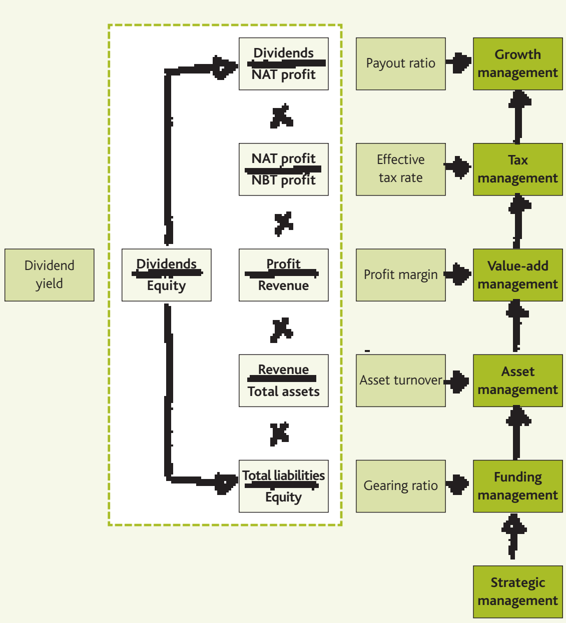
If people aren't able to link financial strategy with operational strategy, it's hard for them to see the implications of one for the other

Figure 1 tracks the respective process steps alongside the ratios that are familiar to financial managers. The gearing ratio, asset turnover ratio, profit margin, effective tax rate and payout ratio all correspond to key steps in the business process. And their arithmetical expression shows that, if multiplied together so that their numerators and denominators cancel out, they boil down to dividends divided by equity – ie, the dividend yield. If we look at these ratios in turn, we can see that what they are measuring can be identified as sub-processes within the total. Now we need to shift our thinking to the right brain to identify the reality of these processes and the relevance of financial ratios for the broader management of the business.

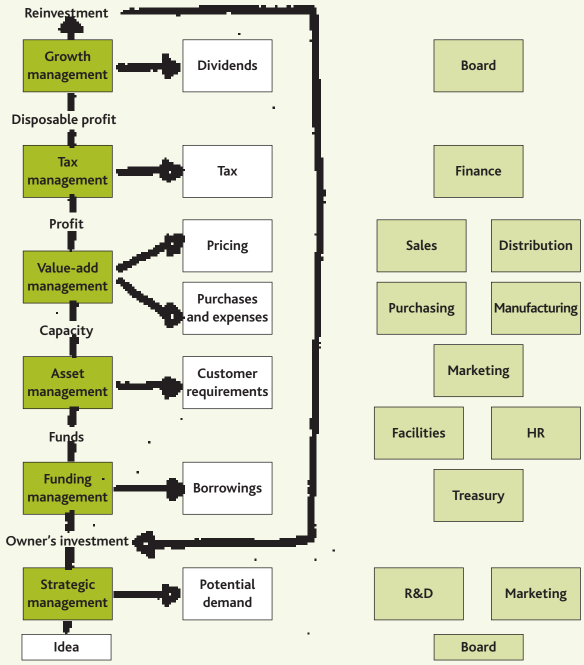
Figure 2 identifies the inputs and outputs of the activities that the financial ratios are measuring. These are the responsibilities of the functions represented in the boardroom or at the cross-functional review. If the link can be made, there is a chance for everyone to see their contribution to financial results and to debate wider issues in that context.

Every business starts with a plan. The planning process in this case is given the grand title of "strategic management" to reflect its importance as the model's foundation. But it's not until planning translates into action that finance is required. Funding is available from a combination of sources and the gearing ratio measures the respective contributions of equity and borrowings. The funds generated allow the firm to establish its asset base. In doing so it's crucial for it to understand customer requirements, which specify the people and facilities it will use. The capacity that's made available is used to produce goods and services from the goods and services that are purchased from suppliers. The price at which these are sold determines how the value added is shared between the customer and the company – the latter's share determining the profit it retains. A portion of that profit is deducted in tax and a further slice is then considered for distribution as dividends or retained for reinvestment. Such reinvestment adds to the amount of equity vested in the firm.

1 THE ENTERPRISE STEWARDSHIP MODEL: ANALYSING THE PROCESS (LEFT BRAIN)



2 THE ENTERPRISE STEWARDSHIP MODEL: MAPPING THE PROCESS (RIGHT BRAIN)



The last step in bridging the gap between the financial ratios and the people who influence them the most is to map their functional territories against the activities within the process model. Appropriately, the board is placed at both the foundation and the summit: the directors are responsible for the strategic management of the idea that started the business and they must also judge the appropriate distribution or retention of profits to fund future growth.

The processes that lie immediately within these – funding and tax management – fall within the remit of the treasury and finance functions. At the heart of the enterprise, the processes of asset and value-add management are where the functions that deal with operations come into play. Facilities, HR and marketing are crucial in the design and management of the asset infrastructure, while purchasing, manufacturing, sales and distribution are directly responsible for adding value.

The above example illustrates how a shift in thinking can be achieved to bridge the gap between other directors' views of the business. In this way they can relate your presentation to the actual processes they are responsible for and see that finance is not simply playing with numbers on the balance sheet.

This approach has a further benefit, although some people may see it as a risk: a management team that understands the financial report will be in a stronger position to challenge the numbers. This is particularly relevant to non-executive directors, who have been criticised for not questioning financial statements enough. But, if the management team is to work in unison, it's crucial that everyone understands their interdependence in the context of financial performance as well as their individual business measures. For example, a balanced scorecard is a step forward from relying purely on numbers. But if the financial measures on that scorecard can be related to the other components, the scorecard can be a more powerful management tool. Apart from the technical benefits of bridging the gap, life can be a lot more enjoyable for the financial manager without having to see all those blank expressions. **FM**

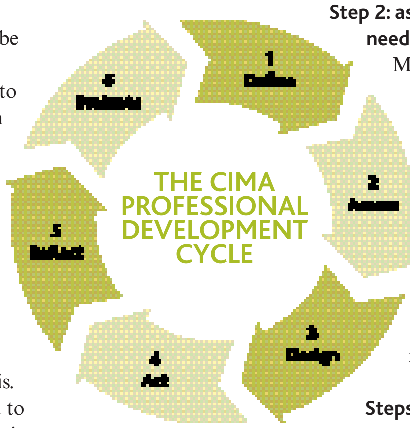
Richard Bull ACMA is an award-winning business writer. His book, *Financial Ratios: Building a Model of Success for Your Business*, is published by Spiro Press at £29.95. To order your copy at a £10 discount, call +44 (0)870 400 1000 and quote reference FMAN.

Professional development

CIMA's new principles-based CPD framework will ensure that members see it not as a chore but as a way to increase their employability, argues **Nigel Race**.

Continuing professional development will become mandatory for the entire CIMA membership from January 1, 2006*. To support members in meeting their CPD requirements, the institute has developed a professional development framework that focuses on the benefits of the process to individual members and their stakeholders.

The belief that the whole development process should be built on mutual trust and be beneficial to members is key to the framework. It is based on principles rather than rules in order to ensure its relevance to all members. CIMA differs from other accounting bodies in that the vast majority of its members work in unregulated areas and occupy a wide range of roles. The framework allows for this.



Members will be expected to formalise their CPD by following the professional development cycle. This is designed to support them in identifying and closing existing capability gaps, and in demonstrating how they are maintaining their professional competence to meet stakeholders' expectations.

Members will be required to:

- Progress through the professional development cycle.
- Keep a record that demonstrates their progression through the cycle.
- Be prepared to submit their development record to the institute if called upon to do so.
- Keep their record for three years.

Progression through the development cycle forms the core of the requirement. It comprises the following six steps:

Step 1: define your present and desired roles

Members will be required to state broadly what is expected of them in their current job and take into account their career aspirations. This statement should recognise the expectations of employers, clients, regulators and the public.

Step 2: assess your development needs and goals

Members will be required to determine any capability gaps by identifying what is expected of them in their current role or a future role and comparing that against their existing capabilities. This activity would need to continue throughout the year to address changes in their role or environment.

Steps 3 and 4: design a programme – and then act on it

Members will be required to design their professional development programme around activities that they believe are relevant and would best meet their development needs.

Step 5: reflect on the outcome of your development activity

Members will be required to reflect on the activity they have undertaken, decide whether or not they have met the objectives they had set themselves and make a succinct statement about the outcomes of the activity.

Step 6: evaluate your CPD record

Members will be required to evaluate their record, verify its accuracy as an account of their key development during the year and define the extent to which they have achieved their objectives. Any outstanding development needs at the end of the year should be carried over to the next year's plan.

Every year the institute will ask a sample of the membership to submit their CPD records as evidence of their progression through the development cycle. The essence of the monitoring process would be to encourage members to formalise their learning and development by planning, undertaking, evaluating and recording the key development activities that are relevant to their role.

Where a member is deemed to have wilfully and continually failed to comply with the requirements, the institute would call on existing disciplinary procedures as defined under its byelaws and regulations. CIMA would normally invoke such procedures only as a result of a pattern of persistent non-compliance. FM

Nigel Race is continuing professional development manager at CIMA.

* Pending approval at the institute's annual general meeting in June.

CPD RESOURCES

The CIMA website includes the main principles of the professional development policy, recommended development activities, the institute's obligations to its members and details about a range of support tools. These can all be found at www.cimaglobal.com/cpd.