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eBook

Causal-Based Budgeting: A Better Approach to FP&A

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CAUSAL-BASED BUDGETING

Many CFOs today encounter the challenges of poor quality data, cost information of questionable accuracy, deficient budgeting and forecasting, a lack of collaboration across functions, and an inability to transform business data into critical insights to enable better decisions. The PACE Profitability Analytics Framework (PAF) can help address these and other issues by providing a practical framework that can be used to provide decision makers with comprehensive and accurate decision support information for existing and anticipated scenarios.

"Your costing system should be used EVERY DAY to develop strategies, predict costs, build budgets and forecasts, identify changes, reduce waste, and maintain quality."

Matthew Smith, President & CEO, 3C Software

BUDGETING DEFICIENCIES

The annual budgeting process is often perceived as futile and flawed, for reasons including the following:

- It is viewed as an exercise done by accountants that is disconnected from the organization's operations and strategy,
- It does not adequately reflect future volume and mix of drivers,
- The budget is often obsolete soon after it is produced,
- The budget is biased by managers who know how to sand-bag their budget request,
- In organizations where the next year's budgeted spending is incremented or decremented from the prior year's spending, managers often engage in "use it or lose it." as they approach the last quarter of the fiscal year and
- It is often used for setting annual personal performance metrics which invites distortion and gaming.

Some organizations adopt rolling financial forecasts to address some of these issues, but they can end up similarly deficient information. Use of the causal PAF model for an organization's financial planning process can avoid these issues.

STRATEGY FORMULATION

The first phase of the PAF is Strategy Formulation, in which an organization establishes its plan for identifying and addressing its market(s) and for mobilizing its investments and resources to meet the demands created by that plan.

A common method for formulating and deploying the executive team's strategy is with a strategy map and its associated balanced scorecard. The strategy map and balanced scorecard are the outcomes of the strategy formulation process pictured below.
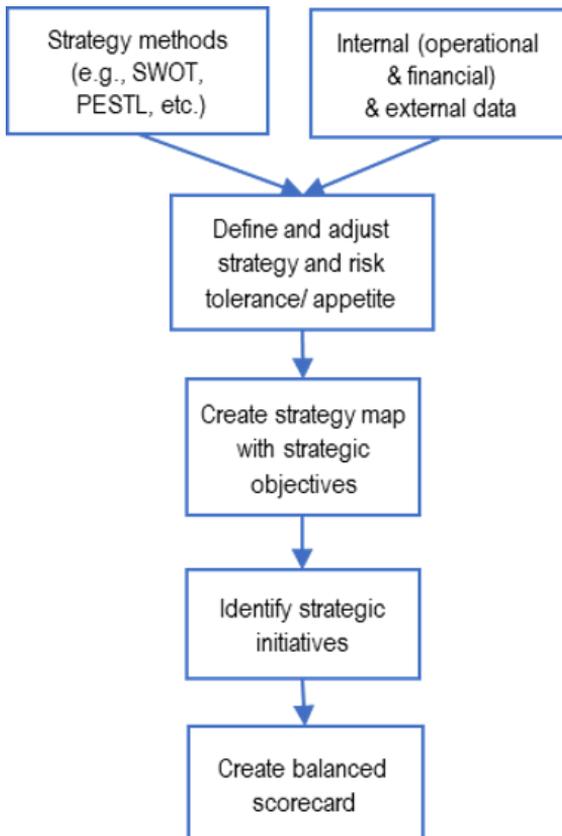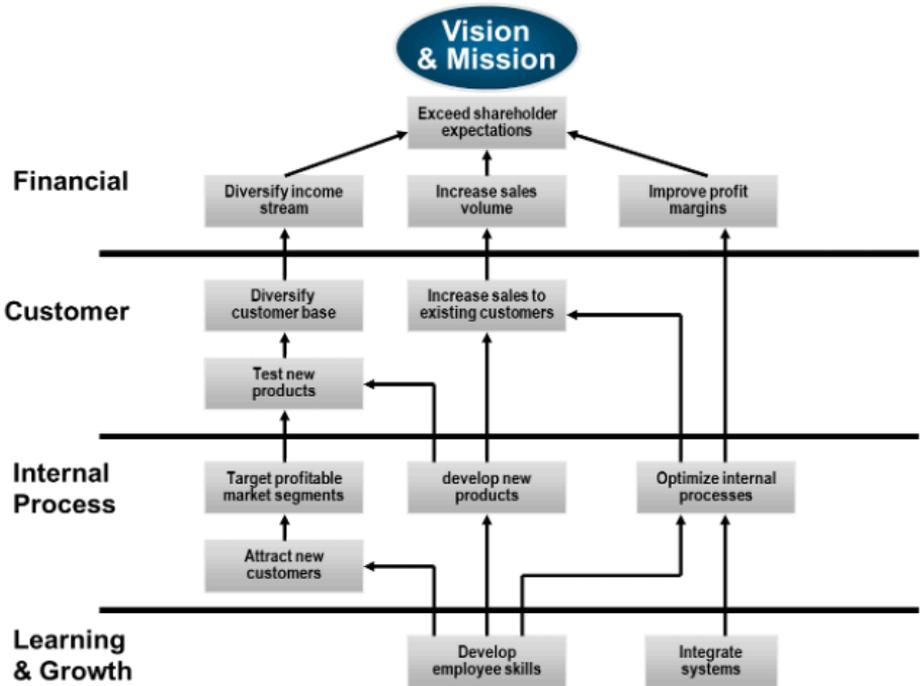
STRATEGY MAP

A strategy map is a diagram that describes the logic of an organization's strategy and the objectives for the critical internal processes that create value. The (fictitious) strategy map below features four common "perspectives": financial, customer, internal process, and learning and growth. Each of these typically has two to four associated strategic objectives, which are key to accomplishing implementation of the executive team's strategy, and are linked through cause-and-effect relationships.

The purposes of a strategy map are: (1) to shift the focus from the financial results in the top perspective to non-financial metrics (KPIs) in the lower three perspectives, (2) to communicate the strategy to managers and employee teams in a way they can understand, and (3) to align the behavior, priorities, and actions of managers with the executive team's formulated strategy.

"It's much more than just standard and actual cost. It's more than just a forecast. You need tools to calculate cost versions at any time, with any data set as an input and calculate the results."

Adrian Rochofski, Costing Solution Expert, 3C Software

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profitability-analytics.org

The Balanced Scorecard translates the strategy map objectives into measures and targets. For each measure on the Balanced Scorecard performance targets are set. Additionally, strategic initiatives, i.e., action plans to achieve the performance targets, are identified.

STRATEGY VALIDATION

During the Strategy Validation phase, causal operational and financial models that reflect resources and processes are developed that directly enable the evaluation of strategy. (A model is a representation of something that is real, with key elements of that reality identified along with how those key elements relate to one another.)

These models employ the principle of causality (see PACE's eBook on Causality, available at https://www.profitability-analytics.org/ebooks) to quantify, in operational and monetary terms, the revenue and cost impacts of an organization's proposed strategy. Put simply, this validation stage asks "Can you afford and resource your formulated strategy? Will you get the results you expect from your formulated strategy?"

The limitations of traditional budgeting can be resolved by employing an integrated enterprise performance management (EPM) system which includes: (1) a strategy map and an associated balanced scorecard, (2) enterprise risk & opportunity management (ERM), and (3) use of causal driver-based managerial costing techniques.

The amount of spending for capacity and consumed expenses should be derived from two broad streams of workload that cause the need for spending: (1) demand driven and (2) project driven. Demand driven expenses are operational and recur from day to day within end-to-end business processes while project-driven spending is non-recurring and can have a duration ranging from days to years.
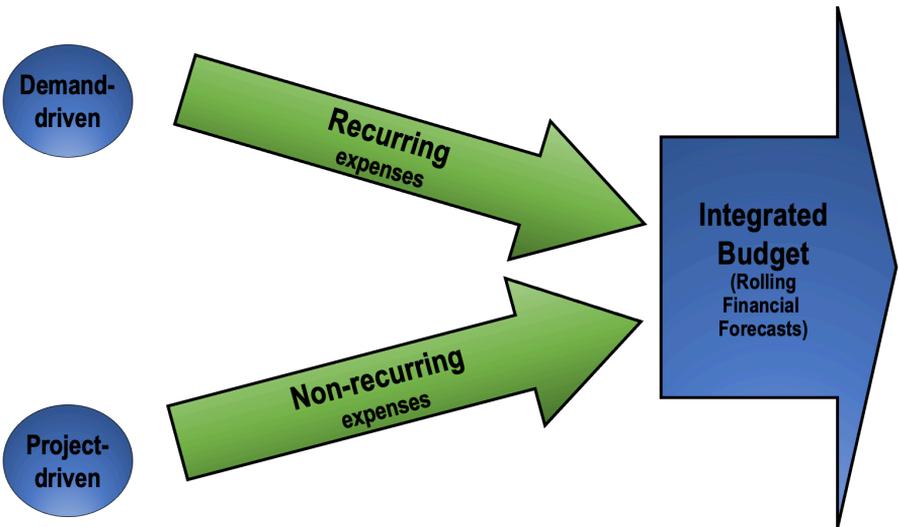
BETTER BUDGETING

Budgeting for the demand-driven and project-driven streams draw on the components of the EPM framework:

- The Operational Budget employing driver-based planning and budgeting, and using causal consumption rates and causal (including activity) driver forecasts, and
- Strategic, Risk Mitigation/Opportunity Maximization, and Investment budgets for one-time projects, investments, and initiatives.
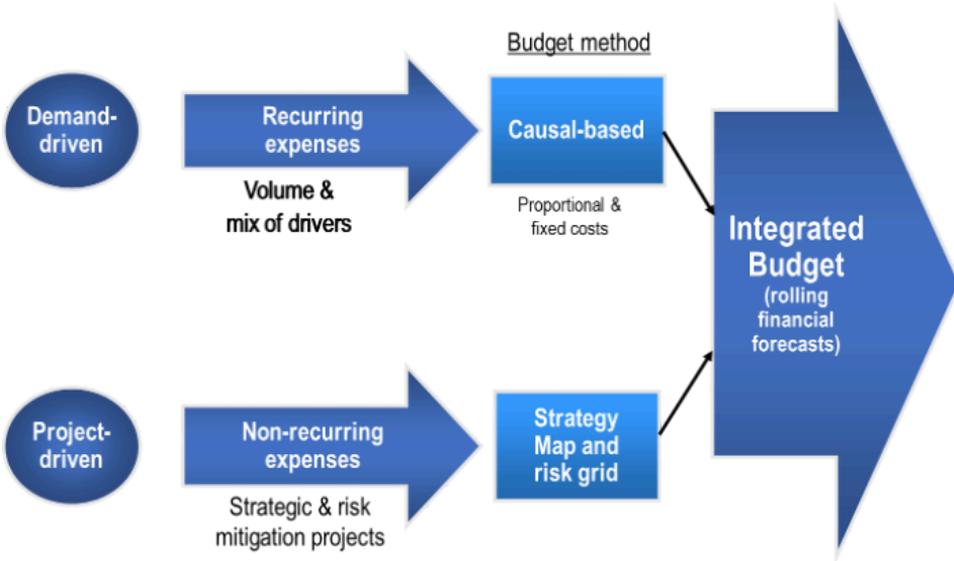
Implementation of these two streams of budgeting should be based on the PACE Profitability Analytics Framework (PAF), with its focus on causal based modeling, as described below.

PROJECT-DRIVEN EXPENSES

This stream includes strategic, risk mitigation/opportunity maximization, and investment budgets for one-time projects, investments, and initiatives.

Strategic Investments

After an organization's strategic objectives are defined a next step is to identify the projects and initiatives to accomplish each strategic objective in the four perspectives. Then management needs to determine the spending required for the identified projects.

Identifying and funding these strategic projects connects the budget to the strategy, overcoming one of the deficiencies in traditional budgeting.

Enterprise Risk Management (ERM)

The second of the three project-based spends involves enterprise risk management (ERM). ERM and strategy setting should be viewed as complementing each other and not as independent activities. If strategy is formulated without identifying the risks embedded in the strategy and assessing and managing those risks, the strategy is incomplete and at risk of failure. Similarly, if ERM does not begin with holistically identifying risks related to the company's strategy, the effort will be incomplete by failing to identify important risks. Note also that managing opportunities is often overlooked: the potentially biggest loss a company can face is not being prepared to handle unexpected success.

When formulating an organization's strategy, top management analyzes its strategic alternatives and identifies events that could threaten their achievement. As the risks embedded in each strategic alternative are identified and placed on a risk map, the alternative can be evaluated against the organization's capabilities and how it aligns with the risk appetite.

Risk assessment grids such as the one below are commonly used. The circles in the grid represent potential risk events that can occur in the upcoming fiscal year. The diameter of each circle reflects the amount of spending to adequately mitigate each potential risk event.

Risk Assessment Grid
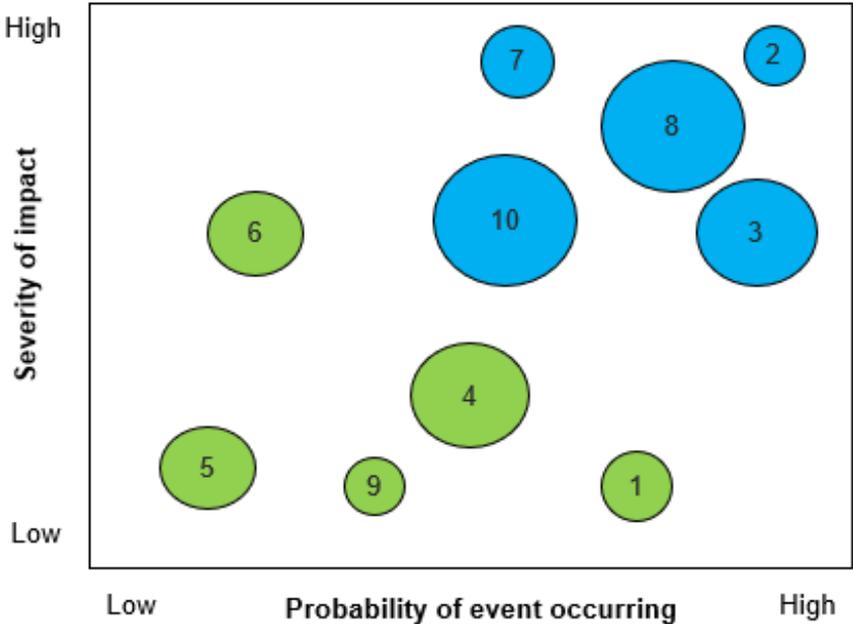
After risks are identified and assessed, management must decide how to respond to them. One of the goals of ERM should be to help make conscious decisions about risk. The actions that management might take for a given risk include avoidance, reduction, sharing, and acceptance. Management determines its response to a risk by considering the impact a given decision will have, the likelihood of the risk, and the costs and benefits of its action. The goal is to take actions that will bring the organization's overall residual risk within its risk appetite. In the figure above, for example, the firm might decide to pursue initiatives that mitigate the high cost-more likely risks indicated in blue and accept the risks denoted in green.

Investments

The third of the three project-based spends is for investments, which include both tangible and intangible assets (e.g., human, brand, intellectual). Most companies use a capital investment evaluation decision method that typically involves return on investment (ROI) calculations involving discounted cash flows (DCF) analysis.

For further discussion of investment management and budgeting see PACE's eBooks on Investment Management.
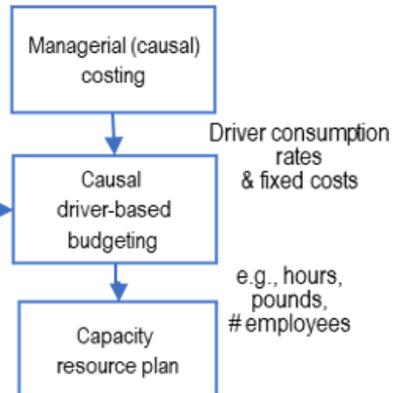
OPERATIONAL BUDGETING

For the operational budget, strategy validation consists of two stages: operational modeling and financial modeling. The operational budget includes those expenses required to continue with day-to-day repeatable processes; it is for the end-to-end processes.
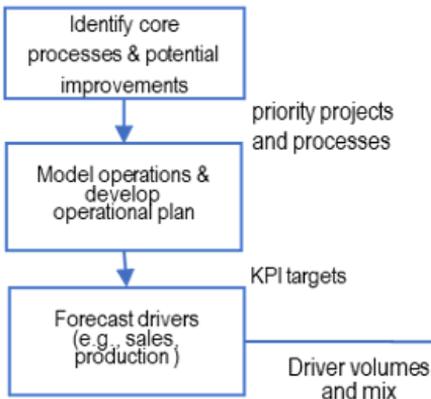
Operational modeling begins with identifying an organization's core processes. These processes, along with potential process improvements, are modeled in operational terms (such as machine hours, sales calls made, etc.) based on the target KPIs. The modeling should be based on the causality principle. In such models the consumption of resources (e.g., salaries, supplies, purchases) is traced through a series of activities & resources in a process, and finally traced to final managerial objectives (e.g., products, service lines, distribution channels, customers, business sustaining, and unused/excess/idle capacity) using causal drivers. The Figure below depicts modeling of a sample process. For more information, see PACE's eBook on Causality.
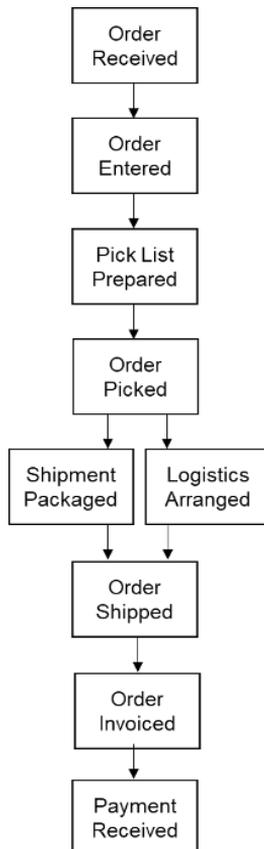
Operational modeling is followed by financial modeling, in which the budget is calculated based on the forecasted volume and mix of the operational drivers of the processes, such as the sales forecast, number of labor hours for an activity, and the number of help desk phone calls.

In a sense, financial modeling is the reverse of historical cost determination. In the latter, the cost of resources consumed are traced to work activities and then to cost objects. In the former, the flow of calculations is reversed: the quantity of cost objects drives the amount of work activities performed and thus the amount of resources required.

The driver volumes are multiplied by planned consumption rates (in financial terms) to determine the required resources capacity expenses and spend with suppliers. These rates can often be calibrated from past time periods.

Modeling for financial projections requires classifying resource capacity with changes in demand as sunk, unused, fixed, step-fixed, and variable. The classification of each resource depends on the planning horizon. This because the capacity of some resources is not easily adjusted up or down in the short term. But in the longer term, as examples, full time employees can be replaced with temporary contractors and assets can be leased rather than purchased. The consequence of these actions is costs become increasingly variable.

Resources can be considered as capacity available and
supplied to be "used". But 100% of a resource's capacity is
rarely used. Some is excess. For some resources this
"unused" capacity is deliberate and planned as "buffer"
capacity. Without this buffer when there are surges in
demand (e.g., customer purchases) delays would result,
adversely impacting customers' experience and
satisfaction.

Alternatively, as illustrated in the figure below, idle
capacity may arise because resources come in discrete
amounts. Companies cannot purchase one-half of a
machine. Companies cannot hire one-third of an
employee. It is all or nothing.
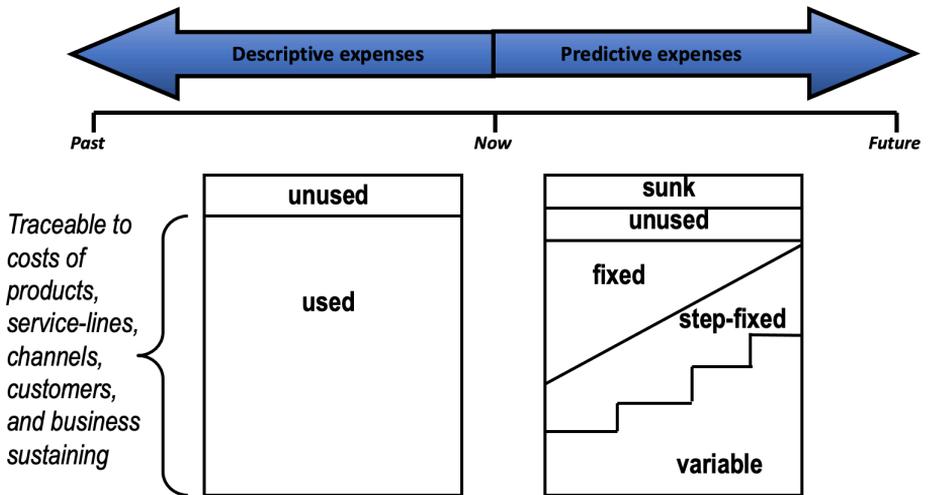
From an historical perspective, when determining the cost of cost objects such as products, customers, etc., the cost of idle capacity should not be included. From a predictive perspective, idle capacity should be included if it is unavoidable or expected to support a given managerial objective (customer, product, etc.).

"Companies use ImpactECS to connect operational cost answers with revenue, pricing, and demand information to unlock an end-to-end view of profit performance and determine the true drivers of cost."

Ian Robertson, Profitability Solution Expert, 3C Software

FINALIZING BUDGETING

After having formulated non-recurring (strategy, ERM, and investment) and recurring (operational) budgets, these can be combined into an overall demand-driven budget, as depicted in the figure below.
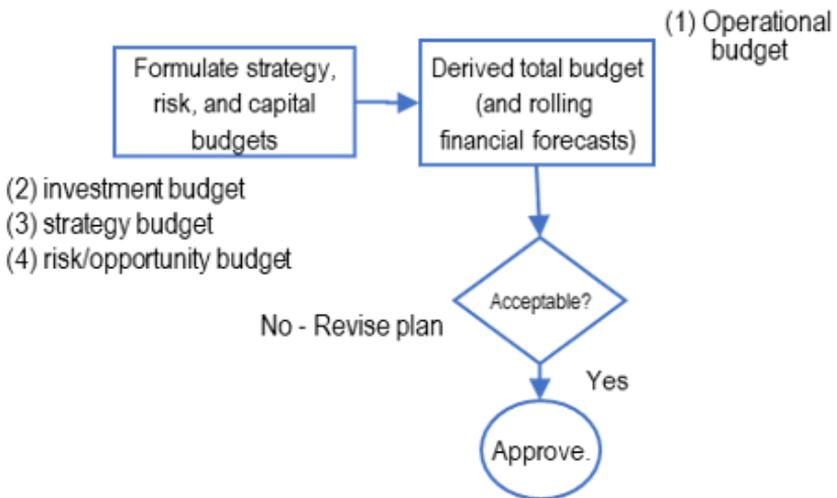
The first pass at the "derived" budget may result in an unacceptably low projected profit, resulting in a need to adjust the plan. Hopefully the project-based strategy budget spending will be protected. That is, organizations must protect strategy spending and allow it to go forward as it is the key to competitive differentiation and successfully accomplishing the strategy. Put your money where your strategy is!

The same goes for the risk/opportunity budget. A company must balance its risk appetite with its risk exposure. Reducing expenditures on risk/opportunity may expose the company to risk beyond its tolerance level.

Another lever to improve profitability (other than increasing sales volume) is to plan for productivity improvements. Examples might be 2% to 5% productivity improvements in the existing end-to-end processes. It is in this way that focused cost/resource reductions (or future cost avoidance) become part of the enterprise performance management (EPM) framework.
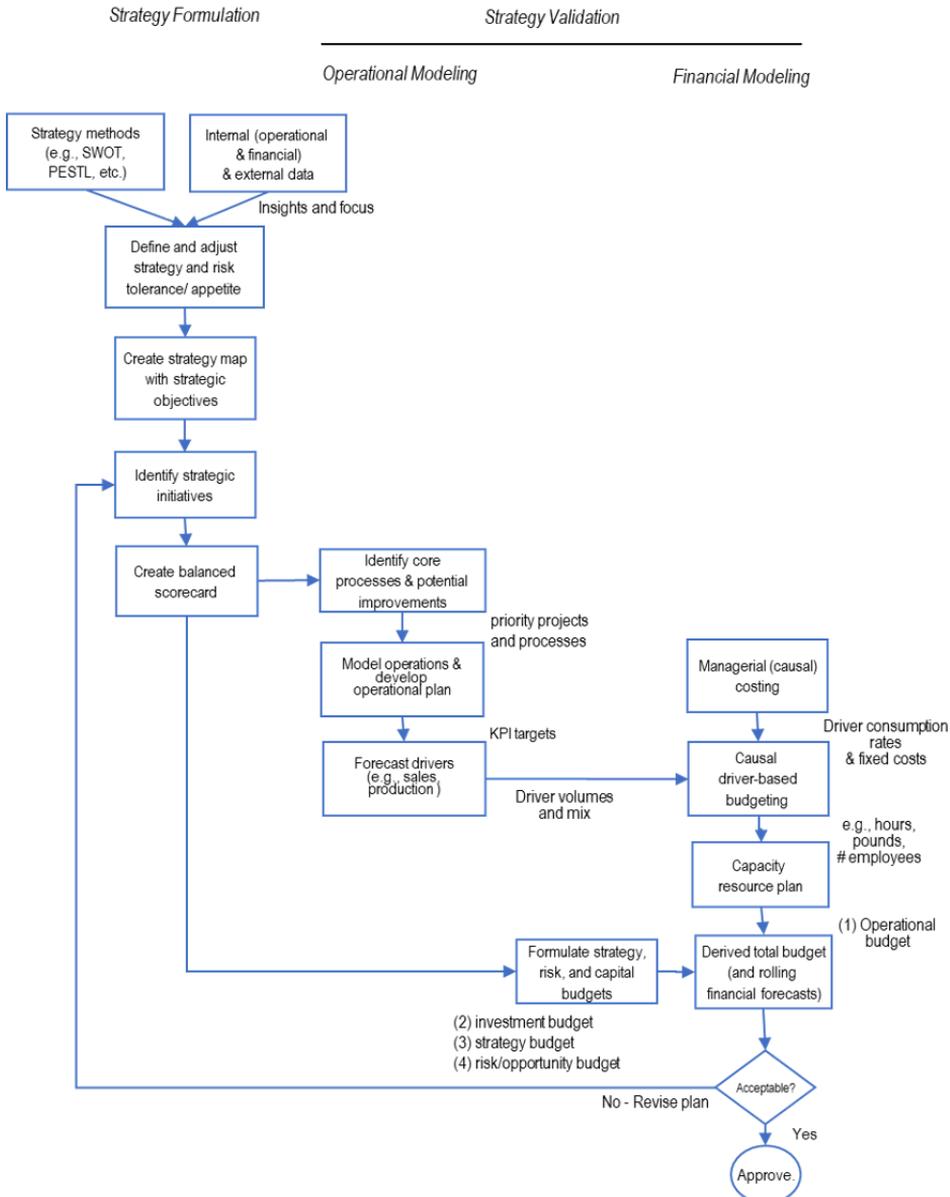
"Access to detailed cost insights elevates the kinds of questions your team can ask and improves your confidence in the answer."

Stacey Adams, Director of Marketing, 3C Software

PUTTING IT ALL TOGETHER

The steps described previously form an integrated, strategy-based model for financial planning, as shown in the figure below.

ROLLING FINANCIAL FORECASTS

Forecasts become increasingly less accurate as the length of the forecast period increases. This is a problem with traditional budgeting, where the annual budget is often outdated soon after its approval. To address this issue companies are turning to rolling forecasts, where the financial forecast model is regularly updated throughout the forecast period's time frame.

Rolling forecasts are causal and allow for dynamic scenario planning, leading to more accurate forecasting. Development of causal business models, as described earlier, is key to implementing rolling forecasting effectively.

The only independent variables in the planning framework presented here are the forecasted drivers; all the other variables are dependent variables or are discretionary, determined and chosen by management. Combined with computer automation that integrates several of the methodologies of the enterprise performance management (EPM) framework, including the use of good predictive analytics to forecast drivers, organization can readily produce accurate rolling financial forecasts.

STRATEGY EXECUTION

The third stage of the PACE Profitability Analytics Framework (PAF) is Strategy Execution, which involves decision making that employs the outputs of the causal models to provide the organization's decision makers with the accurate and relevant information they need to make economically sound decisions as they execute and adapt tactics to meet strategic goals.

In the strategy formulation stage, the executive team set targets for the KPIs. During strategy execution managers are monitored and held accountable for achieving (or exceeding) the target KPIs, with the balanced scorecard serving as a feedback mechanism to monitor the progress towards accomplishing the strategic objectives in the organization's strategy map.

More information on this stage of the PAF will be available in a forthcoming eBook on this topic.
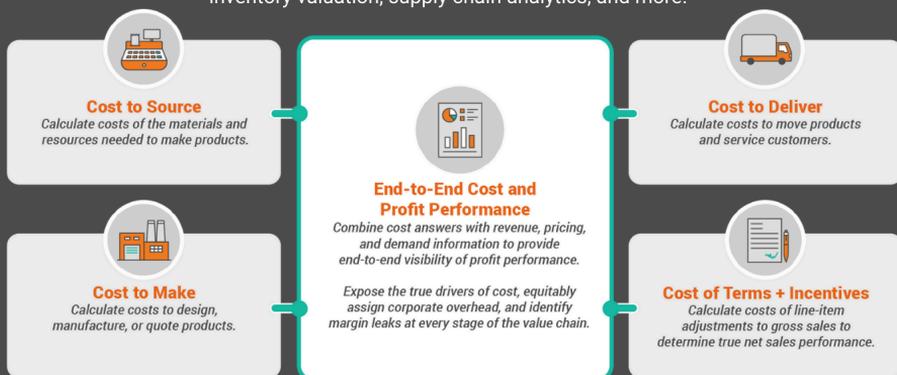
OUR SPONSOR

Challenges from opaque costing processes, patchwork data landscapes, time-consuming and inflexible models, and no safeguards on data make it difficult to unlock true cost insights. 3C Software - with 30+ years delivering world-class costing and profitability systems - helps organizations establish strategic cost and profitability analytics programs to advance your decision-making processes and drive bottom-line growth.

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Combine cost answers with revenue, pricing, and demand information to provide end-to-end visibility of profit performance.

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Calculate costs to move products and service customers.

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Calculate costs of line-item adjustments to gross sales to determine true net sales performance.

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ImpactECS provides finance teams across industries the ability to create detailed, dynamic cost and profit models that provide timely, accurate and actionable results.

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