PETROCHINA BUDGET PLANNING AND PERFORMANCE EVALUATION SYSTEMS

One of China's most successful budgeting firms, PetroChina, employs a meticulous budget management system designed to improve the company's overall performance.

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Many business managers feel that they cannot afford to have an effective budgeting system. Such managers could not be more mistaken. Because of the rapid rate of change in today's world, present products or services may be obsolete in just a few years. Through careful planning, a company will be able to budget wisely for future profits, construction of plants and offices, and research and development. Planning makes managers think about their companies' objectives, goals, and problems. A corporate annual budget serves as a blueprint for actions to achieve predetermined objectives and goals. The benefits of a good corporate budget include:

- the efficient use of resources;
- higher productivity;
- more efficient cash flow and management; and
- better overall coordination and communication.

Therefore, in reality, managers cannot afford not to have a corporate budgeting system. This article introduces one successful Chinese petroleum firm's budget-planning and performance evaluation systems.

PetroChina Company Limited is the largest oil and gas producer and distributor, playing a dominant role in the oil and gas industry in China. It is not only

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one of the companies with the biggest sales revenue in China, but also one of the largest oil companies in the world. PetroChina was established as a joint stock company with limited liabilities by the China National Petroleum Corporation (CNPC) under the company law and the special regulations on the overseas offering and listing of shares by joint stock limited companies on November 5, 1999. The American Depositary Shares and Hong Kong shares of PetroChina were listed on the New York Stock Exchange on April 6, 2000 (stock code: PTR) and the Stock Exchange of Hong Kong Limited on April 7, 2000 (stock code: 857), respectively. It was listed on the Shanghai Stock Exchange on November 5, 2007 (stock code: 601857).

CNPC is the sole sponsor and controlling shareholder of PetroChina. It is a large petroleum and petrochemical corporate group, established in July 1998 in accordance with China's plan for the organizational structure reform of the state council. CNPC is a large state-owned enterprise. It was ranked fourth in the March 2013 issue of the Fortune 500 world company list.

Total budget management system planning process

In 1998, CNPC was established when market competition became more severe and complex. The corporation regards that year as the cost management year, and budget control was the core of business management activities. In 1999, the group restructured reforms and established an independent PetroChina Company Limited for separate listing. Over the past 10 years, the company's budget has focused on setting clear corporate strategic objectives, transitioning its emphasis on capital budget and cost budget to the total budget and business development strategy, and gradually combining to form a complete set of the total budget management mode. The total budget management includes all aspects of business activities, including operational activities, investment activities, and financing activities. It also involves full participation by all levels of managers.

Target setting. Every August, PetroChina headquarters' budget committee first sets the company's next year objectives of maximizing the company's value and ensuring continued growth of the company's performance by considering its five-year development plan. Then it sets the next year's guidelines and goals for each nationwide product line company (e.g., exploration and production companies, refining and general sales companies, chemical and general sales companies, and natural gas and pipeline companies) by considering past performance, market demand forecast, group long-term goals, and each unit's input on specific market-development needs.

From September to November, there are several iterations of budget drafts submitted by each nationwide product line company and revised by the budget committee. Each budget draft includes a product line company's specific annual goals, targets, and action programs. Under each product line company, there are several regional companies for oil fields, gas fields, refinery factories, petrochemical plants, and provincial sales departments. Each nationwide company's budget is divided among its regional companies for various fields, factories, plants, or departments. In December, the budget committee submits the final budget to the PetroChina board of directors for approval.

The entire budgeting process includes the "top-down," "bottom-up," and "up-and-down combination" three-step process and embodies centralization, decentralization, and the combination of centralization and decentralization of budget management concepts. Participative budgeting is applied at all levels of management, and top management has been deeply involved in developing company-broad objectives, strategies, and goals.

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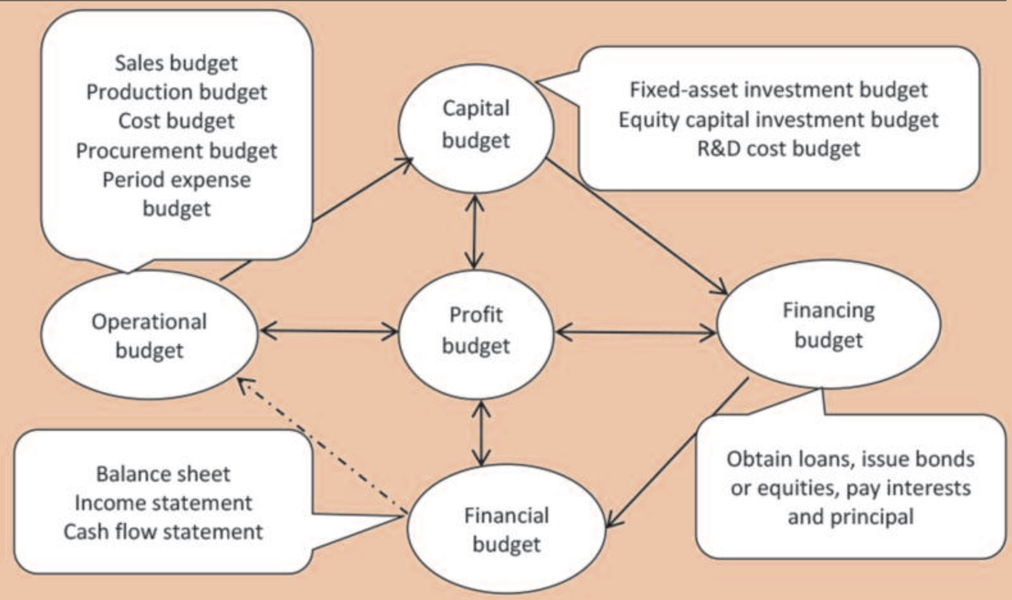
Budget components. The total budget management includes all aspects of business activities, such as financial budgets (including income statement budget, cash flow budget, and balance sheet budget), profit budgets, operational budgets (including sales, production, cost, procurement, and period expense budgets), capital investment budgets, and

EXHIBIT 1 Total Budget Management System



financing budgets (including loan acquisition and payment, interest and dividend payments, and the issuing of bonds and stocks).

Profit budget is the core of the total budget that starts from the operational budgets and ends with the financial budgets. The first step is to prepare operational budgets, such as the sales budget, production budget, cost budget, procurement budget, and period expense budget. The second step is the preparation of capital budgets, including the fixed-asset investment budget, equity capital investment budget, and R&D cost budget. The third step is financing the budgets to determine how to raise capital, obtain loans, issue bonds or equities, and consider the timing and amount of debt services. The final step is to prepare financial budgets, which include an income statement budget, balance sheet budget, and cash flow statement budget.

Exhibit 1 shows the components and their relationships in the total budget management system.

Budget adjustments. Budget targets, once established, cannot be easily changed. If external circumstances change significantly, it can produce a change in operating results and in budget results. This budget escalation requires approval and will ultimately be decided by PetroChina's budget committee.

Budget implementation using KPIs as performance evaluation indicators

Implementation of plans and budgets starts with distributing profit plans and conducting relevant conferences to communicate and educate managers and staff. It ends with the execution of plans, budgets, and operating decisions. The control process includes measuring performance, reporting the results, analyzing budget variances, considering alternative courses of action, choosing the best action, following up on that action, and providing feedback for the next planning process.

PetroChina uses key performance indicators (KPIs) to evaluate each nationwide product line company's and regional company's performance. Exhibit 2 presents an example of KPI for a regional oil exploration and production company.

Signing performance contracts. PetroChina uses performance contracts to achieve performance management. Tying budget targets to the responsible persons reflects the seriousness of the bud-

EXHIBIT 2 KPIs for a Regional Oil Exploration and Production Company

Index type	KPI	Weights (%)
Efficiency	Exploration and production company return on invested capital	10
	EBIT of exploration and production company	15
Operational	Oil reserve replacement ratio	20
	The amount of oil and gas inventories	20
	Oil and gas unit operating costs	10
	Employee casualty rate	15
	Environmental pollution accidents	5
	Planned investment expenditure control	5

get and also serves as an incentive to ensure the successful implementation of the overall company strategy. Performance contracts use KPIs as the key instrument. Specific KPI targets are set for both nationwide companies and regional companies. A nationwide company's KPIs and target value are jointly determined by headquarters' CEO and senior management and the nationwide company's general manager and are approved by the budget committee and board of directors. An individual regional company's KPIs and target value are jointly determined by the nationwide company's general manager and the regional company's top management, in accordance with the requirements of PetroChina's performance indicators. Performance contracts are first signed by nationwide company general managers and headquarters' functional managers and then signed by regional company managers. Exhibit 3 presents the performance contract signing sequence.

Monthly performance evaluation

In order to ensure the realization of the performance indicators, PetroChina headquarters' finance and accounting department regularly collects and analyzes the completion of the KPIs per month and year-to-date through different nationwide companies' accounting personnel, comparing actual performance with the budget targets in a timely manner. Each nationwide company's accounting personnel also performs regional company monthly analysis of the progress of the performance indicators and prepares a monthly performance report for the nationwide company.

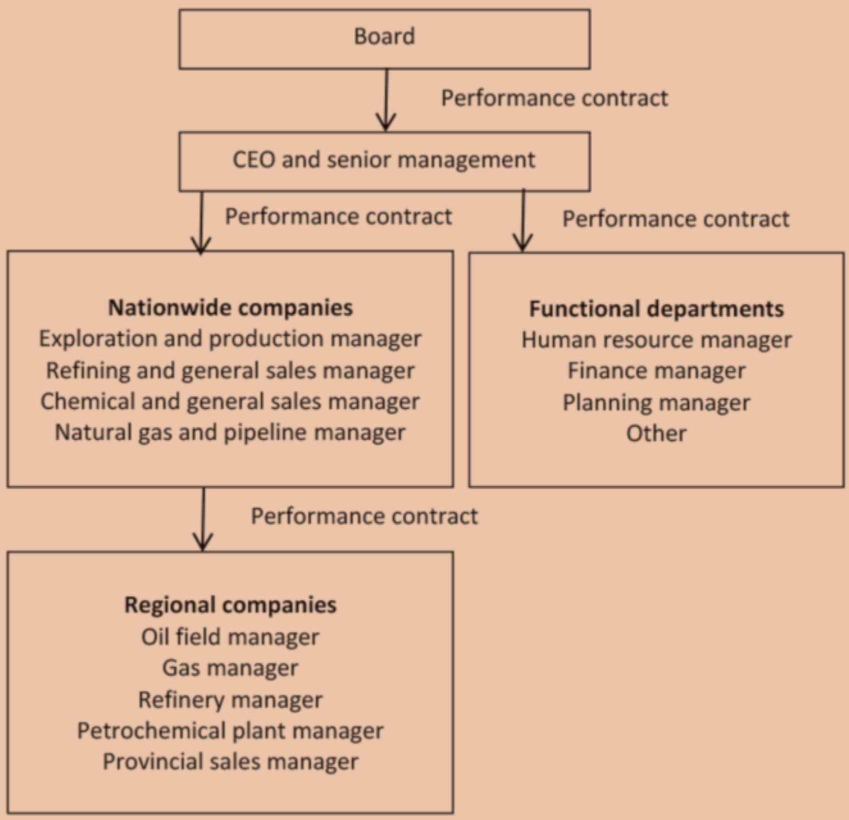
Calculate the performance contract score. Each unit's performance contract score has two components: actual performance score and contribution score. It is calculated using the following formulas (1), (2), and (3):

Actual performance score = Σ(sum) (KPI score x KPI weights) *(1)*.

Where:

- *KPI score* equals the achievement rate x 100 (suitable for when the target value is positive, growth categories of indicators);
- *KPI score* equals 100 + (1 - achievement rate) x 100 (suitable for control-type companies or target value of negative growth indicator companies, top of individual performance score is 130); and

EXHIBIT 3 Performance Contract Signing Sequence



- Achievement rate equals actual amount or value / target value.

In order to encourage companies to create profit over the target amount, professional companies' or regional companies' profit targets assessments include both the profit targets to achieve and their contribution to the overall profits of PetroChina. The following is the contribution points calculation formula:

> Contribution points = total contribution of reward points x contribution coefficient *(2)*.

Where:

> Contribution coefficient = (total target profit of professional companies or regional companies with positive profit / total profit of all the companies of PetroChina) x base rewards coefficient + (actual total profit of professional companies or regional companies – total profit target of professional companies or regional companies) / (actual total profit of PetroChina from all the companies - total profit target of PetroChina from all the companies) x over-target profit reward coefficient.

The total contribution of reward points ranges from 100 to 130 points. The base reward coefficient ranges from 10 percent to 20 percent, and the over-profit reward coefficient ranges from 80 percent to 90 percent.

Performance scores and contribution scores added together is a senior manager's performance contract score, which is calculated as follows:

> Performance contract score = actual performance score + contribution score *(3)*.

The maximum allowable performance contract score is 130 points.

Performance feedback. To help managers improve their work performance, there is a performance evaluation results meeting between superior and subordinate, which entails affirming the achievements, pointing out the shortcomings, providing suggestions for improvement, and helping to develop work plans. If a subordinate disagrees with the evaluation result, he or she can follow the company policy by appealing to upper-level management.

When a manager's performance contract score is below 80 points, the higher-level senior manager will discuss a drastic improvement action plan with him or her. If a manager's performance contract score is below 60 points, he or she will receive a warning notice or risk removal from the leadership position. If a manager refuses to sign the performance contract, it will be regarded as a resignation.

Year-end bonuses. A senior manager's total compensation includes a basic salary and a performance bonus. The basic salary is fixed and given monthly, while performance bonus is based on performance evaluation and distributed at the year-end.

If the performance contract score is equal to 100 points, the manager will receive the annual standard performance bonus amount decided by the board of directors. If the score is above 100 points, for each additional point, the performance bonus will increase by 2 percent. When the score is below 100 points, for each shortfall point, the performance bonus will be reduced by 2 percent. If a company has a net loss that year, for each shortfall point, the performance award will be reduced by 3 percent. When the score is less than 80 points, the manager will not receive any performance bonus.

Current development

Recently, PetroChina's top management is considering upgrading its KPIs to develop a strategy-focused balanced scorecard system. Below are some objectives being considered:

1. Financial perspective:
   - increasing return on equity (ROE);
   - increasing cash flow;
   - revenue growth by product line;
   - improving cost structure of oil and gas; and
   - improving efficient use of capital
2. Customer perspective:
   - increasing customer satisfaction;
   - improving customer perception of value (i.e., product quality relative to cost);
   - improving relationships with customers;
   - improving customer retention; and
   - creating win-win situations with dealers
3. Internal business process and operations:
   - reducing defect rate;
   - increasing on-time delivery;
   - increasing yield;
   - balancing production process; and
   - reducing inventory
4. Learning and growth:
   - training expenditures per full-time employees;
   - improving R&D;
   - IT upgrade with manufacturing information integration system;
   - IT upgrade with final decision support system; and
   - reducing employee turnover.

Concluding remarks

Most business managers are facing the problems of the growing complexity of business, the accelerating pace of technological change, and intensified domestic and international competition. Through careful planning and budgeting, the company will discover opportunities and capitalize upon them.

This article briefly describes PetroChina's (China's largest oil and gas producer and distributor) budget-planning and performance evaluation systems. It also presents rough objectives of the company's proposed balanced scorecard system, which includes both financial and nonfinancial measures.

We suggest that, for any company, an effective budgeting system should include the following success factors:

1. participation by all levels of management with particular emphasis on top management involvement and commitment;
2. a clear definition of goals and budget-planning guidelines determined

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by the objectives set by management;
3. a realistic budget that is based on relevant data and considers behavioral concepts such as psychological needs, motivation, level of aspirations, budgetary slack, etc.;
4. responsibility accounting with emphasis on controllability; and
5. effective communication, feedback, and follow-up system.

For a company that considers incorporating balanced scorecard performance measures into its budgeting system, we also provide the following suggestions:

1. encourage participation by all levels of management with particular emphasis on top management involvement and commitment;
2. integrate the company strategy into ongoing management processes;
3. set targets conservatively at first, and then, as success begins, move to more aggressive targets;
4. build communication and feedback mechanisms, such as a best practice newsletter or an email system; and
5. periodically fine-tune what works, and discard what does not. ■