Expense Management through Effective Use of Cost Analytics and Reporting
Managing Cost in today’s Business Environment

Increasing competitiveness in today’s business environment coupled with general uncertainty in the capital markets have made it harder for businesses to grow revenue and market share. Additionally, the Financial Services industry continues to be faced with new and changing regulatory requirements which have prompted financial services companies to expand their workforces to enhance focus on regulatory response, risk management and compliance. With downward pressure on top line growth and the increasing need for non-discretionary spending, some financial services companies have looked toward reducing operating costs as a means to improve margins and shareholder returns.

Businesses seeking to reduce operating costs should take care not to promote arbitrary or enterprise-wide cuts in spending, which can hurt capabilities to support growth initiatives. A smarter approach is “strategic” cost reduction. For example, instead of reducing project spending by ten percent across all projects, decision makers might reallocate budgeted spending by cutting or deferring low-priority projects and prioritizing projects with presumed higher benefits. It’s all about cutting the right costs, while remaining diligent in challenging the assumptions used in projections.

Identifying the right opportunities for “strategic” cost reduction across an entire organization can be challenging. Decision makers need actionable and timely information about key cost drivers for the company, providing insight into the cost savings implications of adjusting key spending behaviors. The most effective decisions may rely not only on powerful analytics, but on the powerful story-telling that effective reporting can deliver.

The Case for Comprehensive Cost Analytics and Reporting

Implementing a comprehensive cost analytics and reporting framework comes with its own costs. However, those costs may be far exceeded by the benefits of effective cost management achieved through the use of such a robust framework. The end result is smarter more timely decisions that either reduce spending or safeguard available resources, providing companies with the agility to better respond to new strategic opportunities. Some of the benefits achievable through an effective cost management framework include:

- **Improved policy compliance** – Identifying and quantifying the impact of policy exceptions, such as out-of-policy travel or use of non-approved vendors, provides insight into behaviors driving excess spending. Policy enforcement efforts to reduce non-compliance may lead to reduced net spending. Additionally, in high-compliance environments, policies themselves may be found in need of revision. Revised policies with more stringent guidelines, balanced with updated or streamlined processes, may also lead to reduced net spending with minimal impact on employee morale.

- **Improved vendor compliance** – An effective vendor management strategy is a critical component to the cost management process. Key vendor compliance metrics may be included in a comprehensive cost analytics and reporting framework. Such metrics may identify opportunities for businesses to reduce costs. Efforts may include:
  - Training initiatives to manage performance and compliance expectations and ensure consistency across the vendor population.
  - Vendor scorecards to evaluate and hold vendors accountable for compliance and performance against established goals or targets.

- **Improved contract administration** – Having a deep understanding of contract terms and their relative financial impact empowers businesses to engage in effective contract negotiation with several potential benefits, including but not limited to:
  - Reduction of overall contract costs by customizing contract terms to focus on the needs of the business while ignoring unnecessary services;
  - Customizing contract terms to achieve greater value for sustained contract spending levels.
- **Improved internal accountability** – Comprehensive cost analytics and reporting increases visibility of expense performance enterprise-wide, facilitating internal discussions about goals and targets, and providing a robust tool for measurement and accountability.

- **Improved management flexibility** – With a high degree of transparency achieved through comprehensive cost analytics and reporting, management can be more proactive and strategic in implementing cost-saving behavior. This shift away from reactive management also sets a reassuring tone from the top which can inspire employee and shareholder confidence.

Obtaining buy-in can present challenges with some stakeholders or stakeholder groups who may fear the concept of “cost management” as a detrimentally indiscriminate reduction in spending. The key to maximizing internal support for a cost analytics and reporting initiative is communication with stakeholders and stakeholder groups. This includes strategic messaging that is focused on the big picture of financial health. It also includes a campaign of educational discussions and feedback sessions. The most powerful form of communication, and an absolute necessity, is inclusion – involvement of stakeholders in the planning and design process. Listening to and respecting what is important to stakeholders not only ensures their buy-in up front. It ensures their full support after implementation, and allows for the highest level of accountability.

### Developing Key Performance Indicators to Enable Change

**Key Performance Indicators (KPIs)** are metrics which transform raw data (either financial, non-financial, or a combination of financial and non-financial data) into meaningful information about a company’s performance in comparison to its overall performance targets. This information supports decision-making intended to improve overall performance. KPIs then provide tools with which management may evaluate the impact of changes implemented as a result of decision-making. This cycle of analysis, reporting, and decision-making, intended to bring about organizational success is illustrated in Exhibit 1 below.

*Exhibit 1 – Cost Analytics and Reporting Cycle*

In the context of effective cost management, effective KPIs provide insight into significant cost drivers, allowing management to make strategic decisions impacting specific spending behaviors in order to reduce costs. Total expense is normally broken down into groupings or categories which are often aligned with the level of detailed reporting requirements of financial, regulatory, tax, internal or other reporting. After defining these “cost categories”, companies must obtain a deep understanding and identify relevant cost drivers for
each category. Cost drivers should then be analyzed and tiered based on the materiality of their impact on the total cost category. KPI development should likewise be prioritized in the same fashion.

Well-designed and timely produced KPIs promote awareness, provide insight, prompt discussions and create deeper analysis to support proactive decision-making. To be succinct, the best KPIs provide actionable information.

Four important guidelines for the development of effective KPIs are:

- **Customization** – Due to variations in the cost drivers across expense categories, effective KPIs need to be customized for each expense category. While there may be some KPIs that can be used across expense types, often times the more effective ones are category-specific.

- **Frequency** – Effective KPIs give users the information needed to actively manage expenses over time. KPIs produced more frequently (such as monthly versus annually) empower decision makers to be more agile in adjusting spending behavior – enacting strategic and moderate changes rather than reactive and extreme ones – making operational changes resemble “evolution versus revolution”.

- **Focus on Impact** – In addition to actual results – whether in financial terms (e.g. expense per business line) or non-financial terms (e.g. ratios, percentages, time or other non-financial metrics) – effective KPIs also convey impact. The message accompanying cost-management KPIs provides decision makers with an understanding of the financial impact of cost-driving behavior on expenses and, consequently, net profits. Furthermore, impact-focused KPIs may include messaging which specifies the impact of an incremental change to the KPI result. Comparing these insights across multiple KPIs for a cost category allows decision makers to prioritize changes that would have the most material impact on expenses.

- **Prescriptive** – KPIs should be prescriptive, meaning decision makers should be aware of the vital behaviors which may influence the KPI. Users may develop and track KPI goals in addition to general financial and budget goals. Additionally, KPIs can be used in goal setting discussions with employees and even incorporated into performance measurement frameworks.

**Cost Category Considerations**

When analyzing costs, it is important to consider that each category of expenses may have its own composition, nuances and underlying drivers. For example, consider costs associated with external consultants in comparison to costs for travel or entertainment. External consultant costs are usually tied to engagement letters, or similar contractual agreements, and can be classified into relatively few categories of expertise, e.g. regulatory, application development, or transaction advisory services. On the other hand, expense categories such as travel or entertainment have completely different characteristics, including higher transaction volumes, higher numbers of vendors, and potentially more frequent policy exceptions due simply to the transaction volume. As illustrated, these two categories are significantly different and, perhaps not surprisingly, have different cost drivers. These fundamental differences in the “nature” of cost categories necessitate different approaches to cost management.

Given this dynamic, a thorough understanding of an expense category is a critical first step in any cost management effort. To obtain this understanding, consider performing the following:

- **Define expense categories** – Cost categories often contain multiple distinct expense types. Identifying these may lead an analyst to disaggregate cost categories into sub-categories for the purpose of KPI development, as certain metrics may not apply uniformly across their respective cost categories. Understanding where and how expenses are input into accounting records – e.g., whether included in a sub-system of transaction detail or as a monthly journal entry – may affect the approach to data gathering and validation including considerations around automation.

- **Identify Significant Cost Drivers** – Each type of expense may have its own significant cost drivers. These may also vary from business line to business line. It’s important to identify all
significant drivers since they may alternate in significance over time. Such a shift may occur if a company focuses its efforts on modifying one cost-driving behavior and loses focus on another.

- **Understand Budgets** – Understand how budgets are created for each expense category. This can provide a view into significant cost drivers, historical trends, performance goals and even their connection to any incentive compensation for management.

- **Identify Current Analytics** – Find out whether someone within the organization is already producing meaningful analytics – perhaps in a “silo” – which can be expanded across the entire organization. Understand how data is sourced and validated. Ensure that there are appropriate controls in place to support accuracy and completeness of data sets which underlie the analytics. Remember that not every metric being produced needs to be identified as a KPI; focus on the guidelines for effective KPIs discussed above.

- **Policies** – Understand which existing policies pertain to each type of expense. Discussions with policy owners may prove an invaluable method of understanding when developing key metrics.

- **Concentration** – Note any areas where operations are concentrated, such as high vendor concentration, and consider related policies or systems.

- **Financial and Non-financial Data Systems** – Map relevant sources of data to be used in developing analytics. Aside from the company’s official accounting books and records for high-level financial data, determine whether there are other data sources to be used to obtain more granular financial detail. Also, identify where non-financial data is housed. Non-financial data can often contribute to meaningful analytics.

- **Controls over Financial and Non-financial Data** – After mapping relevant data sources, consider whether there are appropriate internal controls to validate the accuracy and completeness of the financial and non-financial data which is intended for KPI development. After assessing the reliability of each data source, define and map the “master data sources”. Limit data collection to these master sources to avoid using unreliable data.

**Key Performance Indicator Development Activities**

KPI definition and development may be the result of various information gathering efforts as outlined in Exhibit 2.

*Exhibit 2 – Effective KPI Definition and Development*
Considerable importance should be placed on *stakeholder interviews*. The first step here is to identify key stakeholders who might include:

- Those charged with governance including board members, executives and senior management;
- Cost category owners or analysts;
- Business process owners or analysts; and
- Systems analysts for relevant financial and non-financial information systems.

These groups or employees possess in-depth knowledge of the various cost categories based on their knowledge of current operations, competition, regulation, spending, strategies, and forecasts. Some stakeholders may even provide valuable insight into how best to relay meaningful metrics to facilitate decision-making and generate significant results. Incorporating stakeholder input into KPI development will also assist in obtaining their buy-in and driving accountability.

There are at least three important considerations related to *currently produced analytics*:

- **First**, the quality of currently produced analytics should be evaluated for usefulness within the context of cost reporting and effective cost management. While some current analytics may hit the nail on the head, some may be deemed irrelevant or even found to be unreliable (if, for example, the metric is not properly reviewed, the data used to produce the metric is not sourced from defined master data sources, or the data is not validated for completeness and accuracy prior to use).
- **Second**, the availability and accessibility of currently produced analytics should be evaluated. Some analytics may be performed for a segment rather than the entire company. Other analytics, although performed for the entire company, may not be widely dispersed, failing to deliver the right message to the right decision makers. In either case, analytics may have significantly less impact in driving changes in spending behavior. This powerful information must be available to the right audience.
- **Third**, consistency of analytics currently produced at the segment level should be evaluated. Analytics produced for a segment can form the basis for enterprise-wide analytics. KPI development can leverage the content and presentation of segment analytics, requiring only additional work to map enterprise-wide data to the KPI calculations. Financial services companies which possess enterprise-wide standards for consistent internal reporting may have an easier job of aligning segment reporting with enterprise-wide reporting.

A comprehensive review of current *expense policies* may provide insight into the nuances surrounding a given expense category. For example, travel expense may have an overall policy, with many exceptions for travel between certain markets, travel of a certain duration, and other factors. Understanding the complexity of an expense category may lead to better KPIs.

**Publicly available information** on KPIs may be hard to find, and may not span the entire scope of a company’s expenses. However, they may provide insight into how other organizations are measuring performance in similar areas and, at the very least, spark some ideas around presentation and form.

**External consultants** may bring a valuable level of insight to KPI development, based on their experience assisting other companies with similar cost management initiatives. Furthermore, cross-functional consulting teams draw from multiple disciplines to provide diverse perspectives and a mix of relevant skills which may include expense analysis, data analysis, management reporting, dashboard design, internal controls, and risk management.

**The Importance of Good Data**

Understanding the current state of business intelligence supports effective cost analysis and reporting. It also allows decision makers to effectively prioritize development efforts. When it comes to assessing the state of system data, there are two important factors to consider: (1) data quality; and (2) data complexity.
The first step in measuring concepts such as quality and complexity is to select and employ techniques to quantify them. Such techniques may be as simple as a ranking system based on pre-defined thresholds, or they may be highly complex based on the nature of the data sets being measured. In the context of developing cost analytics, quantification of data quality and complexity, as it relates to the production of multiple KPIs, can provide comparative measurements which allude to the level of effort and time investment required to produce the KPIs. This information can then be considered when planning the implementation of a cost analytics and reporting program.

**Data Quality** is achieved when data is “clean”, input using a standard format, validated for completeness and accuracy, and has procedures and controls in place to ensure consistency and uniformity across the enterprise. Any attempt at mining, warehousing, or analyzing data must start with an evaluation of data quality. Businesses learn techniques to recognize and address problems, then implement ongoing data quality processes to monitor and mitigate risks of poor data quality. Some components of high data quality include:

- Data is validated by conforming to defined rules or constraints within a data system. In other words, the system used to house data is appropriately designed to ensure that data is input in the proper fields. Such rules or constraints may include:
  - Data Type constraints – Data fields accept only numbers, text, dates, etc.
  - Range constraints – e.g. accounting entries must fall within the open accounting period.
  - Mandatory constraints – e.g. certain fields cannot be left blank.
  - Unique constraints – e.g. individual transaction IDs cannot be duplicated.
  - Set-membership constraints – e.g. an employee must be a member of one of a defined list of business lines, departments, or legal entities.

- Data cleanliness is ensured through established methods to identify errors, such as:
  - Manual transaction matching to source documents, coding (including proper departmental coding and general ledger account coding), review and approval;
  - Batch transaction review and approval;
  - System exception reports;
  - Adjusting journal entry review and approval;
  - Periodic account reconciliations.

- Data accuracy is ensured through many of the methods established to ensure data cleanliness (above).

- Data sets extracted from systems or data warehouses are reviewed for completeness
  - One simple technique is verification of the report parameters input into the system to ensure that the data set includes the right date range, account range, department/line of business/legal entity range, etc.

**Data Complexity** may be measured with relation to various concepts. Some of these include accounting guidance application, accounting system structure, data sourcing and collation requirements. Considerations related to cost analytics include:

- KPIs or other calculations may be based on accounting data which is highly judgmental in nature and therefore unsupported by transaction detail, e.g. accrued expenses or reserve adjustments. It may be difficult to relate such costs to specific cost driving behavior or patterns.

- KPIs relying on enterprise-wide data are dependent on consistent and uniform mapping of transaction detail. Consistency and uniformity of data are ensured through established processes and controls over changes to systems, including:
  - New general ledger account creation and definition;
  - General ledger account mapping to financial, regulatory, management, tax and other reporting;
Non-financial data mapping across multiple lines of business or legal entities.

- Data used for KPIs may be gathered from multiple sources inside and outside the organization. Within the organization there may be multiple financial ledger and sub-ledger systems as well as multiple non-financial data systems. It may require significant effort to link, match and transform the data obtained from multiple systems into a single, usable, reliable format. Many companies have designed data warehouses as a central collection and collation point for multi-system data, making it easier to access usable data for reporting and analytics. Even in data warehouse environments, however, not all systems may be linked; some may still require manual download from a source system, manipulation into a different format, then upload into the warehouse, leaving room for error or data corruption.

- Some KPIs rely on inputs which do not exist in any system, at least not in the form required for the KPI. This requires analysts to develop new information through some form of processing or calculation, leaving room for errors or inconsistent application of process guidelines from period to period. Companies should consider the power of automation to reduce risks of such inconsistencies or errors.

During the KPI design phase, it may be a good idea to use a data ranking system based on data quality and data complexity concepts deemed to be significant for the company. A metric for each selected factor may be developed using defined thresholds. Based on comparison of each selected factor at the cost category level or, better still, at the KPI level, businesses can identify data gaps, categorize KPIs, and prioritize resource investment during implementation of a cost analytics and reporting initiative.

Effective Communication through Reporting

Effective presentation of results, trends, KPIs, and analysis is a critical step in driving change through the organization. Information should be compiled and presented in a format tailored to the appropriate audience. Executive, regional and business unit management require different levels of detail in the information used to make effective cost-management decisions. To address the diverse needs of different levels of management, companies may use technological tools such as web platforms to develop multi-layered reports with the capability to filter, drill-down and otherwise customize reported information.

The most effective reports focus on telling a story rather than simply presenting information. They portray the most significant points to decision-makers in a context that incites timely and meaningful action. Reports may include graphs, charts and other visuals to enhance the message. Visual reporting styles can vary widely. One such style is the use of dashboards which balance eye-catching visuals with high-impact messaging and detailed commentary (when necessary). Dashboards provide a versatile format which can be used to report enterprise-wide expense performance, the impact of significant cost drivers, comparative historical data, budget or benchmark performance.

Dashboards should not provide comprehensive reporting of all metrics and KPIs. Too much information may simply dilute the effectiveness of reporting and blur the focus of decision makers. Instead, effective dashboards should focus on presenting only the most significant actionable information for material expense categories to decision-makers for use in proactively managing costs.

Challenges to Effective Cost Analytics and Reporting

Among the many challenges businesses may face in implementing or enhancing cost analytics and reporting tools, there are a few common challenges which need to be considered:

- As businesses continue to grow – whether through acquisition, expanded product and service offerings, or other means – information systems can become increasingly complex and decentralized, generating incredible amounts of financial and non-financial data.

- As the data universe becomes more complex, many businesses lack the tools to effectively analyze data and turn it into meaningful information. In other words, the amount of “useful information” is growing at a slower pace than the amount of raw data.
Analytics and internal reporting often exist in silos within business lines or expense categories, lacking consistency in reporting or benchmarking methodology, and lacking comprehensive oversight and accountability.

Departmental analytics which have inconsistent reporting formats may not be aggregated into global reporting to senior leadership. As a result, departments may lack the ability to compare performance across the global organization.

Conversely, high-level analytics may not be reported downward to mid-level management personnel who are critical in driving change.

Most businesses have scarce financial resources in both short-term and long-term budgets to invest in data capture and analysis initiatives.

Governance issues may exist that obscure ownership of specific expense categories which dilutes the accountability for the management of costs.

Perhaps most importantly, the corporate culture around spending is a key determinant in the success of any cost management initiative. Each employee must feel some level of ownership in contributing to the bottom line of the company.

**Overcoming the Challenges**

To aid in the transition to an environment of powerful analytics and strategic cost-management decision-making, here are a few final items for consideration:

- **Use Data Warehousing** – Many businesses have invested and continue to invest in building data warehouses to compile and collate data from many existing sources and provide a rich data pool for analytics. The benefits of data warehousing are tremendous, but careful planning should always take place to ensure that adequate safeguards to data quality exist. System access and change controls protect warehoused data and report logic. Data extraction tools should be supported by proper training coupled with detective controls such as management review of report parameters, control values, etc.

- **Start Small** – Implementation may seem like a daunting task. After all, most companies generate vast data sets. The amount of effort and resource requirements may be overwhelming for an enterprise-wide comprehensive implementation, so start small. Focus on one or a few cost categories. Implement, refine, and then iterate. Find champions of analytics at lower levels within the organization (e.g. region, legal entity, line of business, department), and leverage their insights and skills to build enterprise-wide tools.

- **Function over Form** – Reporting is only as good as its usefulness. Prioritize the identification of users of cost analytics and reporting. These are the stakeholders who should be involved throughout the development and implementation process. Useful reporting provides actionable information. This may be achieved by finding a balance between illustration and messaging. Users need to quickly determine what a graph or chart represents, and how it impacts their performance, in order to make sound business decisions.

Overcoming challenges to effective cost analytics and reporting will take time and planning. Implementing analytical and reporting tools is only one step. The overall process cannot be successful without initial buy-in at all stakeholder levels, elicitation of ongoing stakeholder feedback, education on the use of metrics and reports, and a continuous-improvement mindset to drive the evolution of cost management, keeping cost management tools relevant to dynamic corporate strategies and ever-changing economic and regulatory environments.
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