



PROFITABILITY ANALYTICS
CENTER OF EXCELLENCE

eBook

How to Implement a Customer Profitability Management System

Sponsored by



plante moran



www.profitability-analytics.org

INTRODUCTION

Effectively measuring and managing customer profitability is crucial to organizational success. Yet implementing customer profitability management (CPM) systems that enable organizations to manage existing customers and attract new customers, thereby increasing the profitability of their organization, often remains challenging for a variety of reasons, including:

1. Technical barriers that include IT related issues such as data quality and governance, and database accessibility
2. Perception barriers regarding excess complexity and affordability
3. Organizational behavior barriers that involve resistance to change, culture, and leadership.

Now, let's discuss the steps involved in implementing a CPM system, along with the challenges that may arise during the process.

"We've observed numerous cases where a client has invested in technology but not in its people. Ensuring that the right staff have the capabilities to leverage the CPM results to support executive decision-making is critical to the long-term sustainability of a CPM system."

Jon Wood – Principal, Plante Moran



IMPLEMENTATION DECISION

When considering whether to implement a CPM system, the purpose needs to be clearly established. The value and reasons for pursuing a CPM system should be explored and the financial consequences analyzed.

Another important consideration is the behavioral issues that can arise in implementing a CPM system, which can determine its success or failure. As part of this, obtaining leadership's support is essential, as well as the support of all those who will be affected by the CPM system.

"Inconsistent and inaccurate profitability reporting due to the use of offline spreadsheets and shortcomings of installed ERP systems often create the business need for CPM systems."

Sean McBride – Partner, Plante Moran



Many of the steps in implementing a CPM system are interrelated. For example, decisions about which activities to include in costing are dependent on what data can be provided by the existing systems. On the other hand, the transaction data to seek for availability is dependent on what activities should be costed. And the cost objects and costing principles must be compatible with both the available transaction data and the proposed costing activities.

“We’ve seen CPM projects fail early because the required elements couldn’t be connected within the system. Understanding technological limitations and requirements is a fundamental implementation step. Consider a round table approach to involve all key business unit leaders in the decision-making process for your CPM.”

Stewart Zellars – Senior Manager, Plante Moran



FOUNDATION BASICS

A key first step in implementing a CPM system is to identify cost objects, define the system's costing principles and how profitability will be calculated are established, and identify and resolve potentially contentious accounting issues.

Design of a CPM system starts with definition of cost objects: customer, customer segment, product, channel, customer account, etc. This determines what needs to be measured and managed.

Selection of cost objects must be compatible with both the transaction data available from the company's core application systems and the organization's costing principles. Compromises may be required as desired features may not be available in the transaction data. Cost objects must also be defined at a level at which revenues are measurable. Finally, the cost objects chosen must support the CPM system's purpose as defined in the decision phase.

Companies that have customer account cost objects can take advantage of multidimensional profitability, yielding the ability to assess profitability along a variety of dimensions, such as product/service line, sales channel, organizational unit, geographic location, and more.

A final consideration is the amount of detail desired within the CPM system, which will impact the ability of users to drill down and uncover underlying problems or answer specific questions. The desire to add as much relevant data as possible to provide deeper drill-down needs to be balanced against the additional cost involved in doing so.

Define Customer, Product, and Channel

During the initial phase the following also need to be defined:

- What constitutes a customer and whether customers will be combined in some way. If so, a customer hierarchy table (a document or database table showing how subgroups roll up, or are combined, into groups) should be developed.
- Products or service lines. A product hierarchy defines the products and how they are combined into groupings. It is often practical to roll up products with similar processes into a higher-level product for costing purposes. If the like-kind products appear to be homogeneous in their consumption of activity costs, then combining them into one costing product will reduce system and reporting complexity.
- The organizational hierarchy. The organizational hierarchy defines general ledger cost or profit centers, displaying the relationship of the centers or departments where work or activities take place and resources are consumed.
- Customer delivery channel, where appropriate. The customer delivery channel is where customers interact with the company, the customers' "touchpoint."
- Relevant customer segments. Customer segments define patterns of customer characteristics and behavior that drive customer profitability. In some cases, it may be necessary to segment customers to obtain measurable cost objects; otherwise, it may be more appropriate to combine customers by segments once customer profitability information has been obtained.

Calculating Customer Profitability

During the foundation basics phase, the method of calculating customer profitability and how various accounting issues are handled must also be determined. These are covered in PACE's Customer profitability: How to measure it and why it matters eBook and include such items as:

- Types of customer costs
- Treatment of business sustaining costs
- Identification of cost drivers
- Return on capital considerations
- Cost of unsuccessful sales efforts
- Cost of unused capacity



Customer Costs

A key underlying principle of the PACE Profitability Analytics Framework is causality (see [Why causality is essential for effective performance management systems](#)). When building operating and financial models, causality must be used to describe, quantify, and calibrate the many relationships that exist between the key elements of the model.

During the customer costs phase, consideration should be given to the extent to which costs (both product costs and cost-to-serve) can accurately be traced or assigned to cost objects based on causality. Accurate customer-level costing requires some form of driver-based costing, such as activity-based costing (ABC).

If a company is currently using a driver-based costing system, the application may have to be modified to include all customer-related costs and to apply these costs to customers as the cost objects. If the company is not using such a system, then its subsequent design must be driven by the requirements of the CPM system.

"Inaccurate, over-simplified and/or over-complicated costing systems will do more harm than good. A pragmatic, sustainable driver-based approach must be used, right-sized for the organization, and based on business decision-making needs and technological capability. In many ways this balance becomes more of an art than science!"

Jon Wood – Principal, Plante Moran

TECHNICAL INFRASTRUCTURE

Transaction Data

Regardless of the desirability of a particular cost object, that cost object cannot be used without transaction data to support it. Obtaining data may pose challenges as while most companies have vast sources of disparate data, leveraging it to serve a CPM system can be costly and time consuming. The sources of the transaction data used in the CPM system will vary by industry and will likely come from disparate computer systems within each company. Some data may come from the financial systems, other data, may come from core application systems such as sales and ERP systems.

There are situations where activity cost pools can be built but activity driver usage data (the number of times an activity is performed) is not available for the cost object. In this case, an alternate approach will be needed, such as combining the cost pool with a more general customer-sustaining activity cost pool. While necessary, this is not an optimal approach as it may result in the resources in the pool being disproportionately consumed by a subset of customers, but charged to all customers using the more general activity driver.

The analytical robustness of the CPM system can be enhanced with the addition of cost object data that is not cost- or revenue-related, enabling greater multidimensional profitability analysis. An example is customer demographic data, which can provide information such as age, mail delivery code, income group, and purchasing preferences. Other data may be internally generated, such as the length of the customer's relationship with the company, the customer's sales representative, and the customer's payment history.

With the addition of additional data, once profitability is determined for the cost object, profitability can then be viewed not only for the cost object (e.g., customer), but also by the demographic variables added. For example, one can analyze customer profitability by age group or generation, or by the length of a customer's relationship, if this data is sourced for the cost object.

"Before implementation of a CPM system, we often assess the client's mIQ (or Margin Intelligence) in five key areas: data accuracy, data governance, data-driven culture, right-sized technology, and right-time analytics. This allows us to map their mIQ score/level, and where they need to be to gain the expected value of the CPM solution."

Jon Wood – Principal, Plante Moran

Selection of the Database Engines

Once a company has completed the previous steps, it can work on designing the information system infrastructure needed to support the CPM system. Two calculation engines are needed for CPM. The first of these is for costing and is used to calculate the cost driver rates. The other is used for calculating cost object profitability and applies the cost driver rates to the cost object. While some commercial products combine the cost system and the profitability system into one CPM database infrastructure, usually the costing and profitability systems are separate modules or application systems. Several choices are available when selecting a CPM application system. These include developing in-house, purchasing off-the-shelf on-premises software, or cloud-based solution. Each has advantages and disadvantages:

- The maximum opportunities to custom design the CPM system is available when developing the system in-house. Yet this approach has drawbacks, including requiring significant effort from management accounting and information technology resources, long implementation timelines, maintenance and creating new features, and the possibility of being quickly outdated.
- Purchasing a commercial, off-the-shelf, on-premises software application may reduce the cost and time to implement a CPM system, but you are still responsible to install it on each computer, maintain each computer, perform updates (which are often time consuming), and create and maintain any integrations with existing systems. It may also reduce the ability to customize the system. The vendor is responsible for new features, but on their timetable.

- A cloud-based or hosted solution involves allowing your company data to be stored off-premises with a third-party vendor (typically in the same country). The benefits are that you do not have to install or maintain the software (because it does not reside on your hardware), it is very fast to get up and running, they usually offer opportunities to tailor the experience using options (and you can add your logo and in some cases colors), but you cannot extensively customize the look, the placement of buttons, or what's on each menu. Non-customization means upgrades take very little time and resources, but you are often required to do updates on the timetable of the vendor's choosing, and the software is often more expensive

Other Systems

In addition to the CPM system, external systems will be required to provide the information used by the CPM system in calculating activity driver rates and customer profitability. The accounts receivable system would likely provide data to the CPM system, as would an ordering or sales tracking system.

Additionally, an end result reporting system will be required to deliver the calculated costing and customer profitability information to employees. Examples of these include summaries on departmental balanced scorecards, the profitability of specific customers reported to sales staff, or data warehouses with query tools for costing or customer profitability analysis. How the costing and customer profitability results are disseminated throughout the organization can have a big impact on the success of the CPM system.

BUSINESS ALGORITHMS

Business algorithms are the processes used to generate cost driver rates and cost object profitability. Designing and building business algorithms takes place after the prior stages are complete as they must integrate with the IT systems and be consistent with the principles established in the foundation basics. Testing of the business algorithms runs concurrently with their design and build, and is followed by a total and thorough testing of the completed system.

The extent to which a company is involved in the design and implementation of its business algorithms will depend on decisions made in the system options phase. To the greatest extent possible, employees should be involved in the design of the CPM system as they know more about how their areas work than the model builders. Including employees in the design of the CPM system, or at least providing them an understanding, will also help secure their buy-in.

Outsourced or hosted CPM systems can provide less opportunity to customize business algorithms, but this has some advantages. Vendors providing outsourced solutions draw their methodologies from best practices, minimizing political manipulations of the CPM design.

CPM system implementation start and end with the availability, reliability, and accessibility of the required data elements. Before moving too far into the process, identify key technologies that will be integral in the set up and maintenance of your CPM system."

Stewart Zellars – Senior Manager, Plante Moran

Customization and Costs

There may be more than one approach to calculating activity driver rates and cost object profitability in a given situation and these can result in different results. In such situations, control of the business algorithms may result in political infighting over which methodology to use, with each department manager encouraging whichever methodology benefits his department the most. As mentioned in another PACE eBook, a company may assign the cost of marketing campaigns to current sales or capitalized and amortized it; the marketing department will generally favor capitalization since it lowers the cost driver rate of making a sale.

In order to avoid political infighting over business algorithms and accounting methodologies, difficult accounting choices such as these should be made during the foundation basics phase, when the focus is on designing an accurate and strategic CPM system.



System Documentation

It is important to document the design of the CPM system. Responsibility for developing the documentation will vary depending on the approach taken for designing the system. Purchased applications will come with extensive documentation on how they work and, in some cases, documentation of rates, calculations, rules, and algorithms used. In-house developed systems will require internally developed documentation.

In both cases, however, a company will need to make sure the business algorithms it uses are documented. The calculations built into the costing and profitability systems can be complicated and documentation is the only way to retain system integrity in testing, production, maintenance, upgrades, and understanding.

“Alignment of business requirements and technical requirements should happen early in the implementation and follow all the way through testing, training, conversion, and user acceptance. Conference room pilots, or similar, will drive all of the above, including documentation.”

Sean McBride – Partner, Plante Moran

Testing

It is essential that business algorithms be tested after they have been programmed into the costing and CPM systems. Testing is an implementation step that is easy to downplay and minimize. This is a mistake as thoroughly testing all aspects of a CPM system is crucial to its accuracy and success.

A testing regimen should be built into the CPM system's design and implementation plan. This should include any change, no matter how small. Although every attempt should be made to build quality into the system (e.g., good documentation and data quality checks), testing the results will help ensure their accuracy and integrity. For high-quality CPM systems, testing will be quick and relatively pain-free; for hastily built and shortcut-ridden CPM systems, it will likely be long and painful.

"During initial conversations with CFO's, I get confident answers when asking about their costing approach. Then I review the income statement and see significant material, freight, labor, and overhead variances. While implementing a CPM system, measuring the results to ensure they match the financial performance during the analysis period is critical to gain acceptance."

Jon Wood – Principal, Plante Moran

PROFITABILITY INFORMATION

Once the test phase is completed, a CPM system can enter production generating monthly or quarterly results. Production of accurate CPM results depends on the system's sustainability and repeatability.

Sustainability of a system is the ability to run the system as scheduled each period. For example, manual data collection or manual processes built into an information system can cause delays—and errors—and lead to missed production schedules. It is important to automate as much as possible.

Repeatability is the ability to produce the same results using the same inputs no matter how many times the system is processed. If different results occur when processed with the same inputs, the system is unpredictable and unusable.



It is also important to carefully consider how customer profitability information is distributed. CPM reports should communicate to managers the profitability status, the changes, and the profitability potential of a company's customer base. The CPM reports should be timely, understandable, relevant, usable, and actionable. They should also provide the ability to drill down and link results with source documents and transaction data.

Since customer profitability information is based on activity driver rates developed during the costing phase, these rates should be updated periodically, ideally every 12 to 18 months. Periodic updates ensure that activity driver rates are reliable and less susceptible to error and criticism. Rates should be updated sooner for any significant changes in business processes or inflation that could materially impact activity driver rates.

"All of the above can be executed, but the sustainability of the installed CPM system will fail without appropriate Governance."

Stewart Zellars – Senior Manager, Plante Moran

CPM System Risks

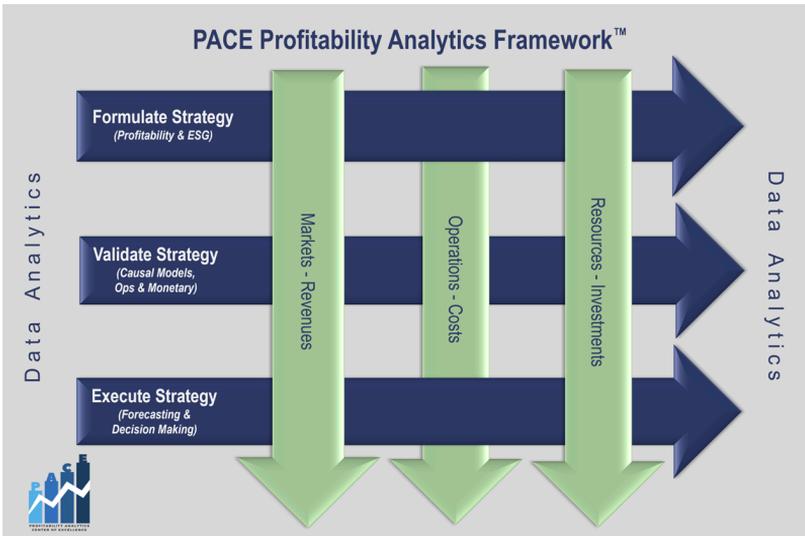
Once a CPM system moves into production the following risks must be managed:

- **Data.** The quality and timeliness of cost object data that is sourced from the company's core application and GL systems potentially poses great risks to the CPM system. Procedures should be established to ensure the timely delivery of high-quality data files. A strong data quality control regimen will catch many errors, and error traps built into the business algorithms will catch many of the rest.
- **Accuracy of Results.** The customer profitability results must be accurate and believable to be useful. The only way to ensure result accuracy is to thoroughly test the CPM system and all data sourcing when the system is built and whenever any change is made. Monthly results should be tested for accuracy. This can include comparing monthly CPM totals to independent company- wide results and other quality checks.
- **Timeliness.** Customer profitability reports and information must be provided in a timely manner to be meaningful and useful. Steps must be taken during the design phases to reduce opportunities for delays. Manual collection of data or manual running of processes, for example, can cause such setbacks and should be avoided.
- **Capability.** Appropriate staff must be trained to run and manage the system post-go-live while maintaining data integrity

STRATEGIC INTEGRATION

The PACE Profitability Analytics Framework encompasses three stages of strategy management - strategy formulation, validation, and execution - and the CPM system should be integrated within each of these.

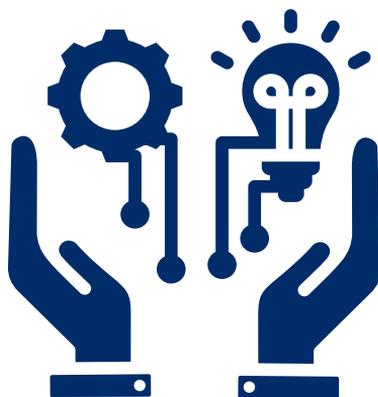
As a system, CPM should be integrated with the company's strategic performance measurement system. An organization's strategy maps and balanced scorecard (BSC) should reflect the objectives that management sets as a result of CPM and the focus on the leading indicators of infrastructure and learning and growth. Such metrics



STRATEGIC INTEGRATION

would include the development of the CPM system infrastructure, training, and data collection. These will lead to the necessary operational decisions that will reflect their results in service cycle time, customer service, delivery, and operational changes and adjustments. In turn, these will result in improved customer loyalty for profitable customers and improved understanding of how to make break-even and money-losing customers more profitable. The customer perspective will lead the profit, EVA, or ROI metrics.

In the strategy execution phase CPM results should be incorporated into the organization's performance measurement systems. The ultimate goal is to use customer-based information to improve company performance and profitability.



ORGANIZATION BARRIERS

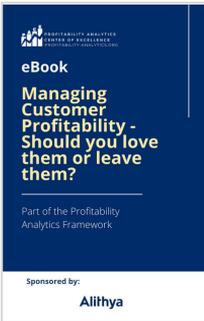
Introducing CPM into an organization requires manager and employee involvement and strong and effective leadership. Management and employee buy-in and acceptance are essential for successful CPM implementation. Effective change management practices are required, including engaging employees who will be affected by implementation of the CPM system. If the implementation is managed internally, managers and employees should be involved from the start. Even if a consultant is involved, it is a good idea to ensure the consultant has a plan for how to win the support of managers and employees.

CPM is intended to change the patterns and ways of thinking about customers within an organization, which means the potential for resistance to change will likely be strong. Long-held perceptions of which customers or customer segments are profitable may be shattered by a CPM system. Employees in sales or customer-contact positions are likely to react to the new information with disbelief. Vested interests, if not considered and dealt with in a constructive and positive manner, can lead to employees hindering the implementation of CPM-based strategies.

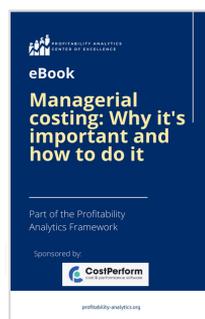
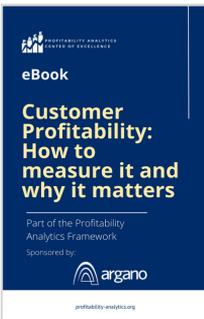
New ways to measure and manage customer profitability also require that incentives be realigned with what is best for the company in light of the new measurement and management system. A transitional period may be necessary to allow managers and employees to adapt and realign their actions to the new system.

NEXT STEPS

Having an effective CPM system is an important part of implementing the PACE Profitability Analytics Framework. In three PACE eBooks, we've covered the essentials of customer profitability management: how to measure it, how to manage it, and how to implement a CPM system. Isn't it time for your organization to start implementing one now?



Check out more helpful eBooks from PACE:



You can find these eBooks and more at www.profitability-analytics.org/eBooks.

OUR SPONSOR

23



plante moran

Audit. Tax. Consulting.
Wealth Management.

Your vision. Our expertise.

At Plante Moran, we believe every challenge inspires the next great idea, and a true partner doesn't settle for the same but pursues what's possible. See how our cost and margin intelligence experts help you understand where you're making money and where you're not, so you can accelerate performance and margin improvement.

Jon Wood | jon.wood@plantemoran.com | 248-223-3529

Stewart Zellars | stewart.zellars@plantemoran.com | 248-223-3721

plantemoran.com/subscribe

PACE would like to extend thanks to Nabil Elias and Dan Hill for their contribution to the contents of this eBook.

Now that you know more about implementing customer profitability management systems, we invite you to explore the Profitability Analytics Center of Excellence Library for related podcasts, webcasts, case studies, eBooks, and articles.

Contact us: Info@Profitability-Analytics.org
Website: profitability-analytics.org

©2023, 2024 Profitability Analytics Center of Excellence. All Rights Reserved. Permission to quote, reproduce, and disseminate granted provided appropriate attribution is given.

profitability-analytics.org