Ready Your Organization for Agility's Impacts on IT Spending

Published: 18 November 2019 **ID:** G00387850

Analyst(s): Jim McGittigan

The need for speed in technology requires leveraging new delivery methods, such as agile, DevOps and cloud computing. These new delivery methods still require effective financial management, so CIOs should ensure the organization adjusts IT financial management practices as required.

Key Findings

- The need for agility has led to increased adoption of newer delivery methods like agile, DevOps and cloud computing.
- Once organizations implement agile and DevOps, complications arise in effectively governing and managing total IT spend.
- To deliver on the value of digital business, organizations must move from being project-centric to product-centric.
- Organizations' effective adoption is inhibited by confusion over what a product is, what costs are included and how to effectively manage the total cost of ownership (TCO) in a product world.
- Often, cloud adoption creates an unwanted shift from capex to opex that is not being effectively managed and communicated.

Recommendations

To evolve IT financial management practices to effectively manage in an agile world, CIOs should:

- Implement necessary financial governance changes when adopting agile and DevOps. Communicate to the CFO how these changes will enable effective financial controls.
- Define the financial operating model so that all key stakeholders clearly understand how IT financial management will be accomplished across all of IT spend. This definition is of particular importance if moving to a product-centric model.

- Manage the IT opex-capex mix on an ongoing basis, and effectively communicate the value driven by shifting to cloud services.

Table of Contents

List of Tables

List of Figures

Analysis

Effectively Manage IT Spend Even If Your Organization Has a "Need for Speed"

CIOs and IT leaders are keenly aware of the demands for new technologies to be delivered more quickly to meet ever-increasing business demand. This need for speed is real and is often referred to as a shift that emphasizes "speed over cost." However, often, that can be misconstrued by CFOs as "speed at any cost." In reality, it is "speed at the right cost." CIOs should make this message clear to the C-suite to avoid the misconception that IT is fiscally irresponsible and operates with a blank checkbook.

CIOs should ensure that their IT financial management practices are clearly documented and communicated with IT, business and finance leaders alike. Regardless of the delivery method, IT must still ensure that all digital business capabilities (new or existing), projects, products or services are effectively managed so that cost, value and risk are optimized.

The key is to determine the impact of increased agility on IT spend. CIOs should focus on the impact of these new practices on overall IT spend levels and on the needed changes to financial governance. CIOs must determine whether the organization is prepared for the shift from being project-centric to product-centric.

Implement and Communicate Necessary Financial Governance Changes When Adopting Agile and DevOps

Two of the biggest trends over the past three to five years are agile and DevOps. Organizations' significant uptake is largely driven by the need for speed and velocity to deliver the value promised by digital business. While it does not change the need to be fiscally responsible by balancing cost, value and risk across all IT spend, it does change in many cases "how" organizations manage the financials.

The key is to determine what changes need to be made in each area for fiscal responsibility to still be realized (see Table 1). Unfortunately, many organizations are leaving these processes unchanged. As a result, the CFO's organization is often left confused, and others may come to the false conclusion that IT is not effectively managing its spend (see "Tell the CFO the Agile Team Isn't Asking for a Blank Check").

Table 1. Agile Financial Governance Changes

Areas Impacted	Description	What Changes	What Doesn't Change
Operating Model	The model used to manage IT financials. Best practice has historically been explaining capital expenditure (capex) and operating expenditure (opex) via projects and services.	Agile development focuses on products, not projects. Rarely do products entirely replace the use of projects and services. CIOs must clarify the definitions of each.	Regardless of the model, CIOs still need to be able to explain 100% of IT spend (both capex and opex) in terms that the stakeholder understands.
Governance	The bodies and processes to make decisions on investments in new capabilities leveraging technology.	CIOs must revise the process to approve agile development initiatives. The focus shifts from approving a whole project upfront to approving an investment in a product for a certain period of time.	Organizations still need active governance to balance cost, value and risk when making investment decisions.
Funding	How the initiative receives funds to accomplish its objectives.	The work is not fully planned and estimated upfront. An initial funding rate is set, typically in months. Continuation of funding is dependent on measured value outcomes exceeding cost.	Funding is still limited. Agile does not equate to an open checkbook without controls.
Budgeting	Annual planning process that allocates funding to IT for both opex and capex.	Budgeting shifts from discrete projects to blocks or pools of funding at a higher level (such as product, release and program levels).	Organizations allocate budgeting for new investments at an aggregate level. There should still be a clear view of run vs. change across all IT spend.
Business Case	The decision document that lays out cost, value and risk so that investment in new capabilities can be made.	Agile means that the business case is not viable at the traditional project level but can be done at a level higher. This is often a lightweight business case consisting of a simple one-pager focused on similar blocks of work.	Accountability does not change. The stakeholders are responsible for ensuring benefits. IT typically focuses on managing cost and quality with the stakeholder.
Cost and Value Tracking	Tracking both the benefits and costs associated with developing and sustaining a system.	Cost tracking can be simplified if dedicated teams are leveraged. Value tracking early and often is the key difference.	Organizations need to link success to business outcomes that can be monetized where possible.
Labor Capitalization	Understanding how much labor is eligible for capitalization under accounting guidelines.	CIOs should leverage a simplified approach that does not erode the value of agile development, but reasonably estimates the amount of capex.	Organizations must follow accounting standards and guidance for labor capitalization. Organizations should comply with audit and internal accounting policies

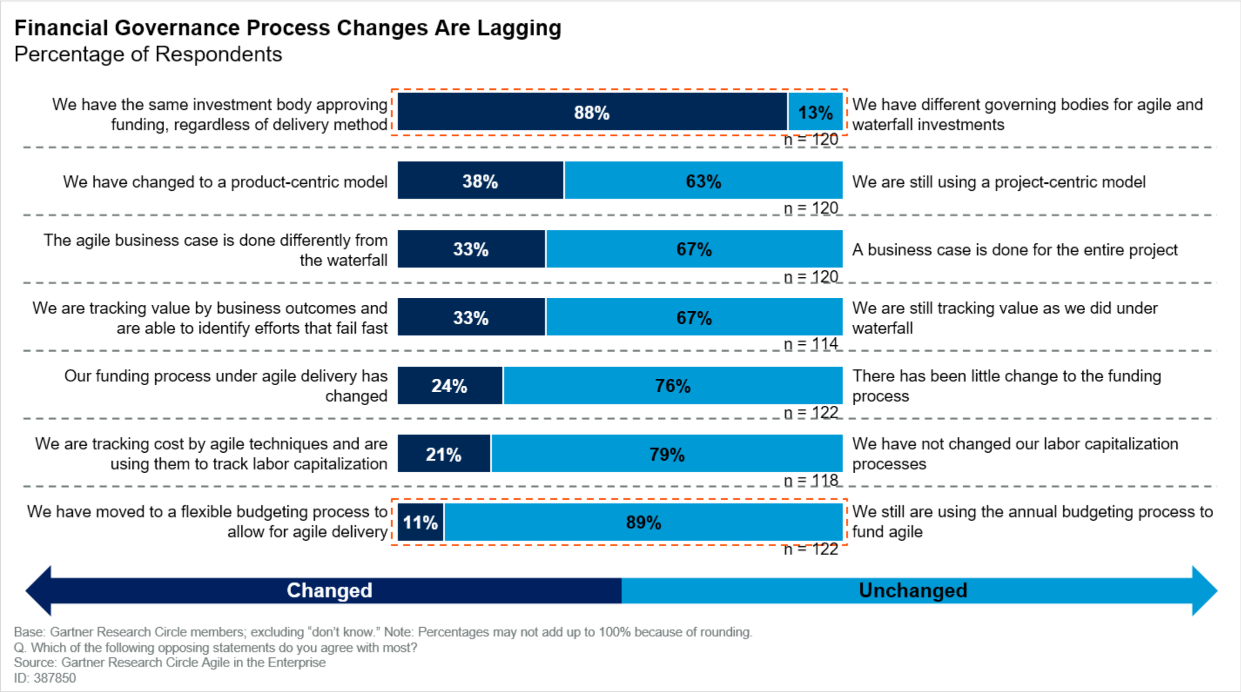
Areas Impacted	Description	What Changes	What Doesn't Change
			even if a change in practices is needed.

Source: Gartner (November 2019)

CIOs should carefully examine each of the seven areas in Table 1 and existing financial processes. CIOs should assess whether they are working or not and decide which ones should change and which ones should be left as is. Most will require at least some tweaking, if not a complete overhaul.

With agile, CIOs should not make the mistake of trying to leverage all of the old governance processes that may have worked well in a slower, waterfall-driven world. This is the proverbial case of trying to fit a square peg in a round hole, and often leads to high levels of confusion and even distrust within the CFO's organization. Unfortunately, many organizations are not changing these governance processes (see Figure 1), often eroding confidence in IT's ability to effectively manage spend.

Figure 1. Financial Governance Process Changes Are Lagging



While "best" financial management practices in each of the areas above are still emerging, clients who are successfully addressing these areas have often created their own processes that work in their enterprises. Given the nature of agile, these new financial governance processes are typically at a higher and lighter level. For example, the organization may do multiple one-page business cases at the epic or release level, as opposed to one big business case upfront.

CIOs who effectively leverage agile development will recognize the need to change the financial governance model and associated activities so that all involved parties, beginning with the CFO, understand why the governance process needs to change.

A fundamental change is occurring in how organizations develop and support applications that, done right, enables more value, faster. CIOs should use this as an opportunity to further strengthen their relationship with other C-level executives by showing them what changes as a result of agile and DevOps and what does not. The CIO should play the lead role in identifying and communicating to executive stakeholders what needs to change and why, ensuring that effective financial governance processes are in place.

Agile development requires changes, but not at the expense of investing in the right capabilities that effectively balance cost, value and risk. The "how" may change, but the "what" does not.

Regardless of how CIOs proceed, the key is to ensure a clear understanding of how all IT cost, not just the cost of agile and DevOps standing teams, will be managed effectively in this faster-paced world.

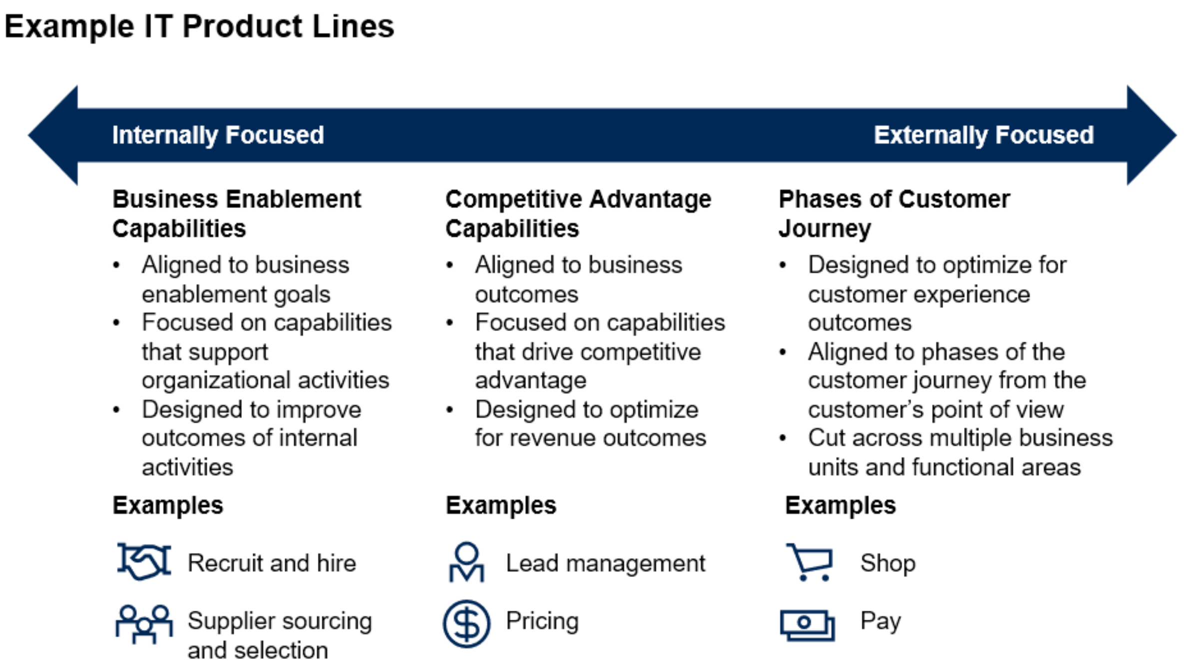
Define IT Product Lines When Moving From a Project-Centric to Product-Centric Model

Moving from waterfall to agile delivery often requires a change in the operating model to enable digital business that drives increased value. Agile does not lend itself well to a structured project world where all of the one-time costs (such as labor, hardware, software and consulting) are identified upfront. Yet, more than half of our clients are still operating in an agile project world. Gartner recommends exploring the move from a project-centric model to a product-centric model (see "The CIO's Essential Guide: Digital Product Management").

Often, there is initial confusion around semantics in IT product lines. We have seen the terms "products," "value streams," "end-to-end services," "platforms" and more used interchangeably. CIOs should eliminate any confusion around terminology inside the organization prior to implementing IT product lines. The key is that, regardless of terminology, IT product lines need to be defined by how they are consumed, rather than how they are produced or the functionality they offer (see Figure 2).

CIOs should ensure that all key stakeholders across the enterprise clearly understand what the IT product lines are and how the resultant IT financial management will be effectively accomplished (see "Ignition Guide to Launching an IT Product Line").

Figure 2. Example IT Product Lines

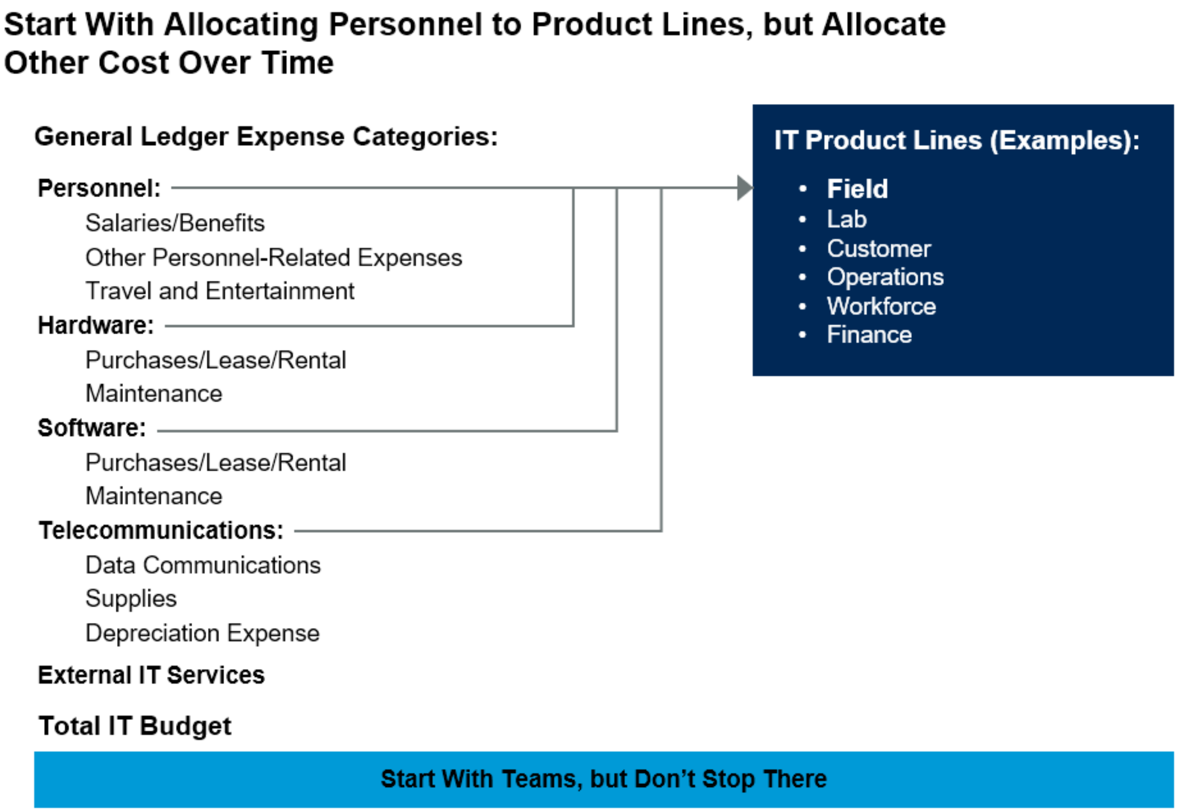


Source: Gartner
ID: 387850

Having established IT product lines, CIOs also need to decide on how much IT cost will be allocated to each IT product line. Regardless of what costs are included in the IT product line model, CIOs should make sure the C-suite has the necessary visibility and actionability for all IT spend.

Most organizations start with only a few product lines and often just with their agile and DevOps teams, and not total life cycle cost. However, most adopters are planning to mature their IT product lines to manage all costs directly attributable to their product (labor as well as nonlabor cost) over time (see Figure 3 for an example).

Figure 3. Start With Allocating Personnel to Product Lines, but Allocate Other Cost Over Time

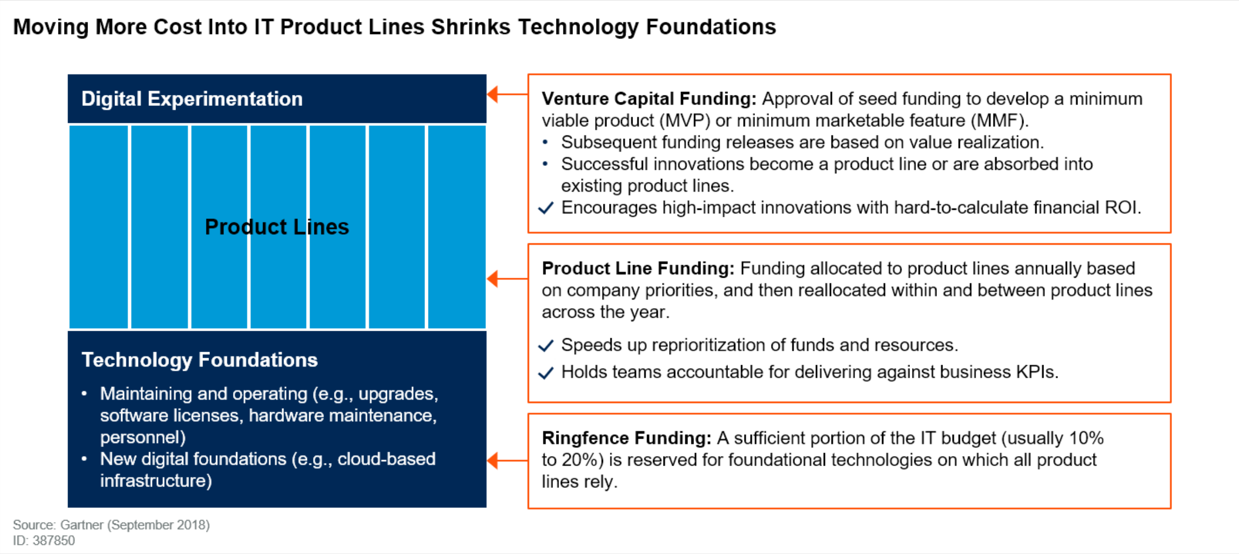


Source: Gartner
ID: 387850

As more costs are allocated to IT product lines, the "technology foundations" portion at the bottom of Figure 4 shrinks to include only those foundational costs that support all products. This allows for the product owners and key business stakeholders to be accountable for more than just the labor to develop and support the product and to own true end-to-end life cycle responsibility for all product cost.

Some mature clients who have done this have shared that they are increasing value via a product-centric model, and that business stakeholders are finally gaining visibility and accountability beyond just project cost.

Figure 4. Moving More Cost Into IT Product Lines Shrinks Technology Foundations

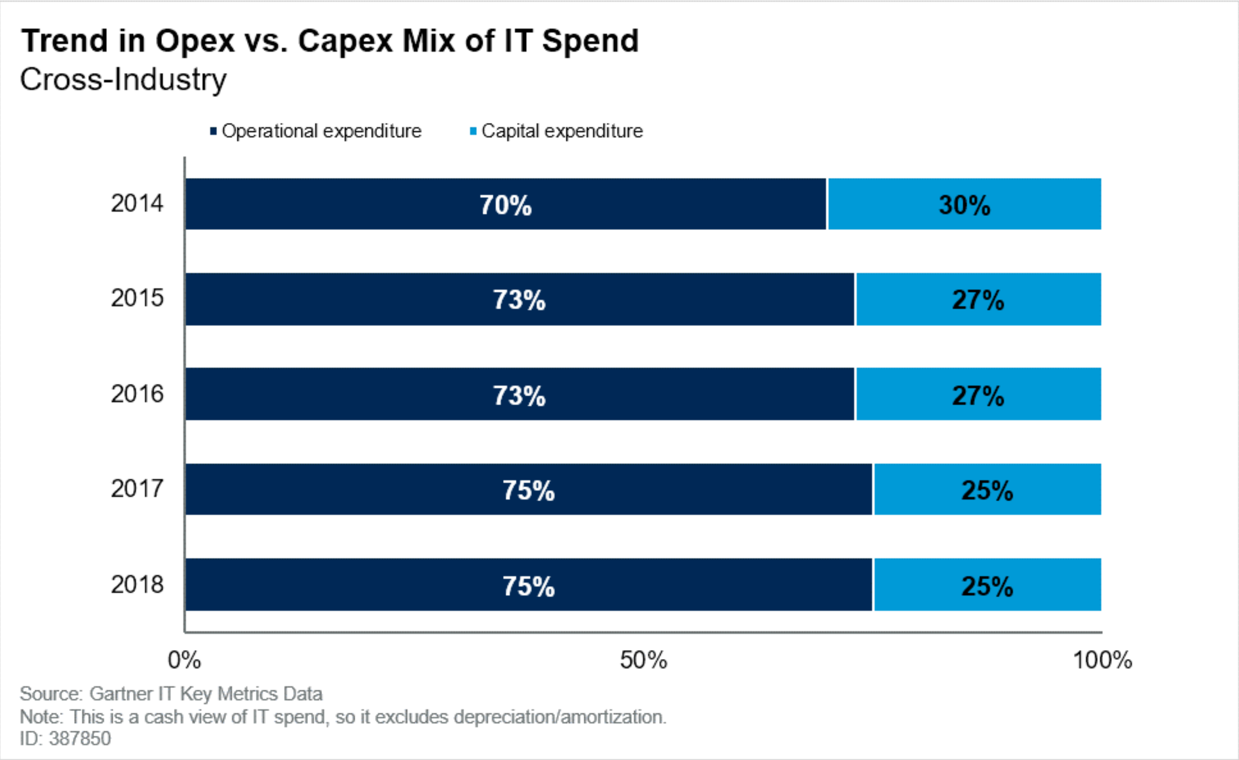


Understand the Opex-Capex Mix of IT Spend to Ensure Adequate Funding

IT opex has increased from 70% to 75% of total IT spend since 2014 (on an annualized cash basis — see “IT Key Metrics Data 2019: Executive Summary” for the definition, and Figure 5, which is taken from Gartner’s IT Key Metrics Data).

While a number of variables impact this ratio, the adoption of public cloud services is the primary driver for this increase, given that the vast majority of cloud spending is for subscription-based services, typically recognized as opex.

Figure 5. Trend in Opex-Capex Mix of IT Spend



Public cloud spend is growing more than five times the rate of total IT spend, but is still a relatively small percentage of total IT spend (see the compound annual growth rate [CAGR] column in Figure 6). Total public cloud spend is projected to increase from just over 5% of total IT spend in 2018 to slightly more than 9% five years later in 2023. This likely means a slight continued rise in overall opex as a percentage of IT spend, similar to the trend in Figure 5.

Figure 6. Public Cloud as a Percentage of Total IT Spend (in Millions of Dollars)

Public Cloud as a Percentage of Total IT Spend (in Millions of Dollars)

	2017	2018	2019	2020	2021	2022	2023	CAGR
Total Cloud Spend	155,460	190,958	221,594	259,125	300,191	344,870	392,561	15.9%
Total IT Spend	3,537,000	3,717,000	3,740,000	3,878,000	4,026,000	4,167,000	4,312,000	3.0%
Cloud as a Percentage of Total IT Spend	4.4%	**5.1%**	5.9%	6.7%	7.5%	8.3%	**9.1%**	

Source: Gartner (September 2019)
ID: 387850

However, many of our clients are adopting cloud at a pace faster than average. Understanding the opex-capex mix and how it will change over time is often critical for ensuring adequate funding. CIOs should be able to track their current and projected levels of total IT spend and project their opex-capex mix based on their own strategies (cloud and otherwise).

CIOs should use this data to communicate the financial impact of their strategies and get buy-in from their CFO or funding authority to any increase in opex. Many organizations are constraining opex and prefer capex spend instead. There are multiple reasons why this is happening (see "Be Aware of Financial Roadblocks When Moving to the Cloud" for more insights). Regardless of the reason, a preference for capex over opex is a hindrance to cloud adoption.

If you find yourself in this situation, our recommendation is twofold (see "Prepare Now for the Impact of Cloud on Opex/Capex"):

- Build the business case for your cloud strategy by showing the impact on total cash spend and any changes in both opex and capex. The key here is to show the value of cloud's scalability and flexibility and how it can enable increased business or mission outcomes (which drive increased profitability or improved mission value).
- Look at all legitimate ways to capitalize cloud expense. For example, capitalize eligible SaaS implementation labor, or although very rare, change the terms of SaaS subscriptions to allow for ownership of the code. Realize there are few "silver bullets" that turn cloud opex to capex (see "Manage the Impact of Cloud Applications on Opex and Capex Budgets").

Build a Solid Business Case That Includes a TCO View of IT Spend

Moving from on-premises implementation to cloud can sometimes produce a cash-positive benefit (on a like-for-like usage basis). However, most drivers for a cloud business case are often value-based. When shifting IT spending from capex to opex, CIOs should first look to calculate the total cost of ownership of SaaS vs. an on-premises implementation (see “Toolkit: Total Cost of Ownership for Application Services and On-Premises Software or SaaS”). Most profit-driven organizations are valued on their ability to generate free cash flow from their operations.

CFOs have to constantly prioritize how cash is effectively utilized in the business. This means that, even though capex is the preferred route of spend in many organizations, the main priority of the CFO is to generate cash. CFOs will be more willing to accept a shift from traditional capex investments to opex investments if the TCO of the solution is positive (see “The Financial Case for Moving to the Cloud” to help structure a conversation with the CFO on the financial benefits of cloud).

Regardless of the financial impact, CIOs should build a solid business case for cloud services. Many of our clients are not adopting cloud to save money; rather, they are driving additional business value through increased agility, scalability and flexibility. CIOs should incorporate a thorough business case that properly evaluates benefits, cost and risk prior to implementing cloud-based solutions (see “Opex vs. Capex: CIOs Should Partner With CFOs”).

Communicate and Get Buy-In for Your Cloud Strategy, Including the Business Case and Impact on the Opex-Capex Mix

An effective cloud strategy that supports enterprise strategy should ultimately drive the opex-capex mix of IT spend, not a preference for capex over opex. That said, even a small shift from capex to opex will draw the attention of the CFO, who may challenge and impose cost pressure to reverse this situation.

At a macro level, more cost moving into opex can give the appearance that IT “run” costs are increasing, and that the enterprise is not appropriately investing in new technology capabilities. In reality, increases in opex can also be triggered by new run costs from completed projects, as well as from ongoing projects that are heavily SaaS-based.

One of our client organizations has a major digital transformation underway. The client’s project portfolio is in the process of shifting dramatically from an on-premises model for project delivery to a hybrid model that is 50% SaaS projects, beginning in late 2018 and on.

Its overall IT opex-capex mix is projected to change from 76%-24% in 2018 to 86%-14% in 2021. This is largely driven by a reduction in the digital transformation project capex — dropping from 95% capex in 2018 to less than 50% capex by 2021. Fortunately, the organization has built a value-focused business case and communicated this shift and received board-level approval to increase its opex from 76% to 86% of IT spend over three years.

Through planning and communication, this client avoided any potential negative impact on funding by demonstrating early on how the cloud strategy supported enterprise goals and objectives.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Manage the Impact of Cloud Applications on Opex and Capex Budgets"

"Tell the CFO the Agile Team Isn't Asking for a Blank Check"

"Becoming Product-Centric Should Be an Evolution, Not a Top-Down Transformation"

"Transform Application and Project Portfolios Into a Product Portfolio"

"Recognizing Capex in Agile Projects"

"Start Agile Adaptive Budgeting for Digital Transformation to ContinuousNext"

GARTNER HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters
AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit http://www.gartner.com/technology/about.jsp