

Taking Cloud to the Boardroom

An Insider's View

We have bet on innovation for millennia. Today, that innovation is cloud. We know from working with the largest organizations that institutional barriers are preventing some companies from executing cloud effectively. And with the ongoing effects of the COVID-19 pandemic reshaping how businesses operate, organizations of all sizes are recognizing the urgency of change.

Companies are betting the business on digital transformation to connect people, services, and initiatives in ways that are possible only in a cloud-enabled world. For instance, Capital One—the \$40 billion financial giant—is shuttering its last data center in a move to AWS.1 In their own words: "In 2020, we left our data centers behind and moved to the public cloud to create exceptional banking experiences for our customers. The agility, scalability and elasticity of the cloud are helping us build the bank of the future." At the same time, the US Department of Defense awarded a \$10 billion contract to Azure, Microsoft's cloud service, to support its JEDI project. JEDI (short for Joint Enterprise Defense Infrastructure) is one of the largest and most complex technology initiatives in history. High-stakes cloud deals worth tens or hundreds of millions—or even

About the Authors

Andy Dupertuis

Andy Dupertuis, CEO of Optrilo, former Director and Senior Principal PM @ Microsoft

Mike Miles

Advisor to Optrilo. Mike led New Product Introduction for the cloud at Microsoft and helped drive the company's Cloud for Global Good Initiative

Tim Edgar

CTO of Optrilo, led engineering and strategy for the Long-Range Cloud Planning team at Microsoft, authoring the 5-year capital plan for the company's cloud infrastructure

Optrilo.com

Bellevue, WA USA

E info@optrilo.com

Myths vs facts about the cloud

billions—of dollars are now almost commonplace, attracting industry leaders like Chevron, AT&T, Walmart, and many others. And just as companies need to revolutionize how they think about the cloud, the managers of this digital transformation need an equally significant overhaul to how they lead the cloud dialogue.

Optimizing organizations' investments in cloud is fundamental. Businesses understandably do not want to pay for more capacity than they need—or overpay for it. On the other hand, they cannot afford to hamstring their growth by failing to deliver enough capacity in this bet the business scenario. For many IT stakeholders, navigating this delicate balance is a new challenge.

To effectively participate in top-level business decision-making, cloud capacity planners need credibility, and a credible cloud plan. This requires understanding - and communicating in business terms - how cloud capacity affects revenue, market share, and other real-world business goals, which vary by organization. We have seen many instances where organizations are held back because IT focuses only on metrics such as reliability and uptime while P&L owners are asking for a conversation about goals such as revenue and margin; both parties are working toward different goals.

With new technologies that allow deeper understanding of the relationship between cloud capacity and business drivers, cloud planners have an opportunity to exert greater influence on top-level decision-making. For the first time, they have easy access to the tools needed to frame the cloud in terms strategic for their companies. That's essential, because even in the most knowledgeable

boardrooms, certain myths about cloud capacity are holding enterprises back.

Myth: The cloud is limitless and scales easily.

Fact: The cloud is based on a complex supply chain of physical assets, including servers in physical data centers. New data centers need power, cooling, fiber and networking, generators, physical security, and much more. That means build-out of new cloud capacity requires long lead times and huge investments summing to more than \$100Billion USD per year in capital expenditure from the cloud providers.

Myth: The cloud is global.

Fact: Geographic region affects which cloud services and capacity are available, and this is unlikely to change anytime soon. Cloud regions are unequal in their ability to meet your business needs: in performance, capacity, and offerings. Further, regulatory considerations and data sovereignty laws all constrain the options businesses have access to in different areas.

Myth: There's enough cloud capacity for everyone.

Fact: A key risk businesses face when they invest in cloud capacity is whether it really comes with the near-limitless scalability they may assume will always be there. They may not realize it, but they are at the mercy of complex global supply chain constraints, slow implementation lead times, and geographic limitations for new cloud capacity.

Myth: Scaling up and down in real time minimizes costs.

Fact: Companies that can make accurate long-term forecasts about their cloud needs can save up to 75%. They do this by leveraging one to three year commitment-based pricing models and eliminating the need for "safety stock." Just as importantly, they find it easier to align their planning to business needs and enact a unified strategy across teams.

SCALING CLOUD CAPACITY IN REAL TIME IS NO LONGER ENOUGH

The common myths about how the cloud works have led businesses to underestimate risks and adopt a cloud capacity planning model that seems optimized, but is not. To support the business and optimize cloud spend, cloud capacity planners need to plan far enough ahead to take advantage of commitment-based pricing. While scaling up and down in real-time can be a useful IT operational task, it's the wrong approach to forecasting the cloud capacity necessary to support future business goals. Cloud capacity has to scale to support business growth, so scaling up and down in a way that prioritizes cost reduction may do more long-term harm than good. And in any event, scale up and down sacrifices long term commitment benefits in pricing and planning. For example, when digital transformation leaders pursue cost reduction while the rest of the business pursues growth, their cloud planning efforts diverge from other business initiatives, and cloud capacity owners are increasingly excluded from strategic conversations. Instead, cloud capacity planning and decision-making needs to support the rest of the business.

Historically, enterprises have taken one of three approaches when it comes to cloud spend. Some over-purchase, spending more than they need. Others purchase just-in-time, based on whatever optics they have into short-term future needs—at full, on-demand pricing, or a small discount at best. And some simply

don't buy enough, "hitting the wall" in terms of capacity and leaving potential revenue on the table.

None of those options are desirable. But organizations are still adapting and identifying the data and analytics tools they need to confidently decide how much cloud capacity is required—and especially how much will be needed several years in the future. Currently, many companies rely on a single forecast, which is often based on wishful thinking. More often than not, that forecast is wrong, which can damage the P&L. Without a view that incorporates all stakeholders' plans and priorities, there is a real risk of missed revenue, stymied growth, and a widened gap between people, services, and initiatives that digital transformation is intended to close.

OPTRILO RESOLVES THE TENSION

Scaling cloud capacity up and down as needed may be possible with minimal involvement from other parts of the business, and this is a key driver of its attractiveness. However, cross organizational cloud need forecasting, long-term planning, and ensuring continuity between today's and tomorrow's decisions all require unified governance. And that means eliminating the friction between the cloud planning process and the rest of the business.

Our experience shows that a key way to resolve that friction is to start with existing measures of business success, including those already in use by P&L owners. Margin, market share, and revenue growth are all projections that can serve as groundwork for more effective cloud capacity planning. When these measures are centered in the planning process, cloud capacity will be inherently more aligned with broader business objectives - and more approachable to stakeholders in all areas of the organization. The ultimate goal is a plan that advances the larger business strategy and

"...analyses must be grounded in predictions about cloud capacity needs, uncertainty, risk, and mitigation strategies."

takes advantage of commitment-based pricing from cloud providers to optimize spend and mitigate capacity risk.

Extrapolating cloud capacity budgets from the ones used last year is insufficient.

In a business environment where the pace of change makes it more difficult than ever to make predictions about the future, organizations need a plan that is effective and adaptable over a multi-year horizon. Achieving this requires mechanisms to forecast and model those scenarios, which is an underdeveloped muscle at most organizations. This weakness is especially common in organizations accustomed to prioritizing cost control when planning their cloud capacity scaling. This approach often relies heavily on past outcomes for future projections, and it is not appropriate where businesses' needs are changing.

Cloud capacity planners already have the inputs they need to model multiple long-term scenarios and develop cloud plans. They know not only last year's cloud consumption, but also their organization's financial data, P&L history, and other measures of success. What they lack are the tools to connect all the patterns in these data, because traditionally, cloud capacity planning has not centered these metrics and KPIs.

As planning continues, new conversations with business stakeholders also become part and parcel to your new cloud dialogue. All parties need to be aligned on where the business is going, the plan to get there, and high-priority measures of success, in business terms, paired to an executable plan. These conversations are an opportunity to pull IT out of its traditional

cost-center silo and help elevate its role to a more strategic one.

To further leverage this opportunity, the most forward-thinking planners are also looking at data from beyond the walls of the enterprise. What is the industry growth rate, both historical and projected? How is the organization performing against competitors? What is the technology growth rate in general, and where is the company today on that bell curve? As digital transformation progresses, what can be expected from efficiency and productivity increases? And finally, stakeholders need to be on the same page about their risk tolerance for potential blackswan events.

Assembling a wide-ranging set of data opens a new range of analytic possibilities-and to keep these manageable, it's necessary to identify what to optimize for. Some organizations focus on margin and getting the best return on their cloud spend. Others set top-line growth as their first priority, with the goal of being prepared in case the sales team is more successful than projected. When there's ambiguity about this, cloud capacity planners can reset the dialogue by starting with the end in mind. That means drawing on other stakeholders' knowledge to determine specific business goals and a broader vision for the organization. Knowing these clears the path toward justifying cloud spending's alignment to business strategy.

At all stages, these analyses must be grounded in predictions about cloud capacity needs, uncertainty, risk, and mitigation strategies. Cloud capacity planners can ask themselves:

What scenarios do we want to simulate, and what are the potential outcomes?

"When cloud capacity forecasting is effective, IT plays a different role in the organization"

- What if we buy too much cloud capacity?
- What if we don't buy enough cloud capacity to support agreed-upon business goals?
- Should the sales team overachieve, can we support it?
- What's our range of confidence, and what's the added cost to support the last 1% of revenues?

Business strategy is core to these questions, as are the risks and costs of supporting that strategy with adequate cloud capacity.

Capacity planners may even discover that it's not worth supporting all possible scenarios.

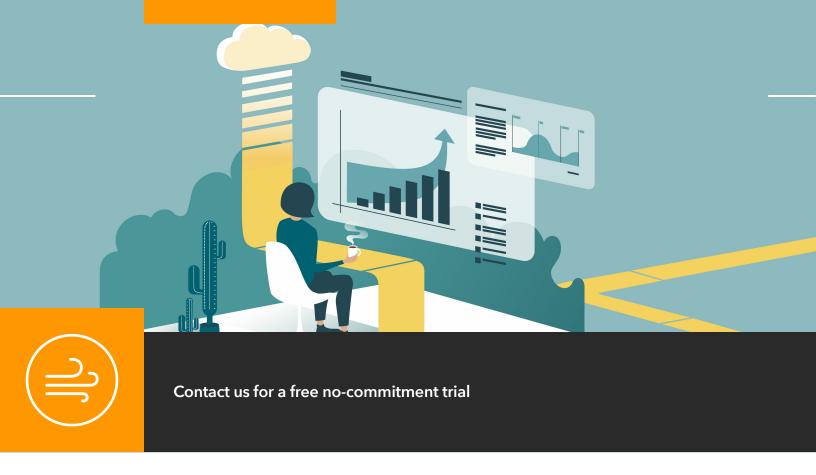
Optrilo's clients tell us that modeling and simulation are fundamental as they work to ask themselves the right questions, get useful insights, and apply what they learn to refine their analysis. But often, this modeling and simulation work falls outside the scope of decision makers' expertise. They need a system that lets them quickly work through all permutations of outcomes - and just as guickly, incorporate new data as it becomes available. This is beyond the capabilities of spreadsheets, which cannot track the complexity of relationships between data points. The ultimate tool is one that lets users rerun their simulations at any time, in minutes, to understand the entire cone of probabilitiesall of the "what-ifs"-that may come into play.

The deliverable goes beyond a report; it is a cloud plan that supports company strategy. Having the right data and scenario analyses at their fingertips prepares cloud capacity planners to steer other parts of the business through uncertainties, direct the conversation

to agreed-upon strategic goals, and ultimately facilitate IT's evolution into a key pillar of organizational strategy.

When businesses scale cloud capacity up and down, the narrow scope of the approach limits opportunities for transformational change. However, a new paradigm is achievable and in use today. The federal government's Joint Enterprise Defense Infrastructure (JEDI) contract - a \$10 billion, 10-year commitment - is a prime example of an approach to forecasting cloud spend that's grounded in long-term capacity planning. But regardless of budget, the same principles apply to all businesses whose operations depend on the cloud.

Executives tell us that when they have the necessary data and take full advantage of analytics to understand this information, IT's role in the business - and their own role in the boardroom - fundamentally shifts, no matter the size or organization type.



When cloud capacity forecasting is effective, IT plays a different role in the organization

Optrilo is software for the enterprise cloud that can help cloud capacity planners and other digital transformation leaders develop a credible, long-term cloud capital plan. Every aspect of the Optrilo product is tailored to deliver insights and analysis that help cloud capacity leaders present proposals that speak the language of the business, support business goals, and are synchronized to an actionable cloud capacity plan.

Optrilo

Bellevue, WA USA

E freetrial@optrilo.com

W www.optrilo.com

(c) 2021 by Optrilo, Inc.