



BARRIERS TO SCALING YOUR IT

How to Overcome the Top 5 Challenges to Scaling Your IT

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THE MANAGED CLOUD COMPANY

In early 2021 ITWC surveyed 80 Canadian technology leaders across multiple industries to develop a snapshot of the barriers most consistently faced when scaling IT. The majority of the responding leaders represented private sector companies with between 100 and 1000 employees.

With the problems identified, we reached back to leaders in the community for their response to the findings and their stories on surmounting barriers. This paper identifies the top five challenges to scaling IT in Canada, and offers ideas on how to overcome them.

COST PRESSURES ARE HOLDING BACK IT INNOVATION

With the pandemic, and tightening economic circumstances in many sectors, IT leaders are feeling the pressure to reduce cost. In our survey, 68 per cent of respondents identified the pressure to reduce costs – not spend – as a significant or very significant impediment to growing their IT stack.

“The major factor here in uncertainty”, said the operations manager with a national security solutions provider.

“Whenever we approach executives to ask for resources, buy-in is difficult because we’re often looking for decisions based on the forecast of a number of factors, and they are looking to spend on concrete facts.”

Another significant resource factor preventing businesses from ramping up their IT efforts is a shortage of workers with the right IT skills or tool sets to innovate. Indeed, 50 per cent of respondents indicated their internal skills gap was a significant barrier to scaling.

I don't have executive buy-in to spend the money to drive the required transformation.

SIGNIFICANT



VERY SIGNIFICANT



I don't have the internal skills to "action" a roadmap to scale.

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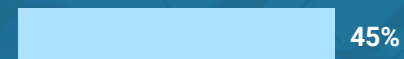


VERY SIGNIFICANT



There's pressure to reduce costs, not to spend.

SIGNIFICANT



VERY SIGNIFICANT



In a continually changing market, I'm having trouble proving my plan will increase revenue, efficiency, and reliability.

SIGNIFICANT



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With a recent ITWC Skills Survey finding 67 per cent of respondents expect that cloud skills will be increasingly important over the next five years, this challenge will need to be tackled sooner rather than later.

Bik Dutta, VP Product & Marketing with Carbon60, identified another challenge in the survey results. He said IT leaders find that the move to cloud challenges the traditional cost models they have become comfortable with.

“Decision-makers and executives are used to a very predictable model. For companies early in their transition from on-prem to a managed service or a public cloud, there is an unpredictability of the cost based on use and service that is a huge challenge.”

OVERCOMING THE BARRIER

A recent Harvard Business Review study found IT management practices at hundreds of companies around the world were not generating the value from IT investments that they could be. The companies that manage their IT

investments most successfully generated returns as much as 40 per cent higher than those of their competitors.

The key for top-performing companies? Senior managers that took a leadership role in a handful of key IT decisions. Innovation was most successful when senior executives understood that adopting new tools and systems pose both a business and a technological challenge.

If you want to overcome this barrier to innovation, create a clear plan and get executive buy-in early.

CLOUD COSTS ARE DIFFICULT TO ESTABLISH

While most of the technology leaders surveyed were confident they had the technical knowledge required to migrate their operations to a public or private cloud if required, they identified the uncertainty of cloud costs as a real stumbling block. Almost 60 per cent of respondents ranked the uncertainty of cloud costs as a significant or very significant barrier to scaling.

This is consistent with the recent finding of an American study of 750 IT professionals that found that while companies reported a higher cloud spend than ever before, they continue to struggle to forecast spend accurately as they significantly exceed their cloud budgets. As a result, optimizing existing cloud use remains at the top of companies' 2021 priority list for the fifth year in a row.

The true cost of cloud seems hard to determine.



48%
SIGNIFICANT



11%
VERY SIGNIFICANT

“The understanding that the cloud can be used to scale is one thing, but how the cloud can be applicable for you and your particular use case to scale is another,” said Dutta. Perhaps, therefore, the true barrier of cloud challenges that companies face is again rooted in resources and the need for a different skill-set.

“Cloud cost is more controllable,” said the operations manager with the security solutions provider. “Most cloud operators we work with have an elastic structure. We have the liberty to scale up and down our spending based on our usage. However, since the cloud is newer technology, we need our people to be well-versed practitioners in order to fully benefit. We need to know not just how to use the service but how to use it effectively.”

OVERCOMING THE BARRIER

The development of cloud capabilities has created a need for a new type of people resource. Necessary now are individuals who can balance the cost element and the technology element, provide value based on technical knowledge, and

have the financial knowledge to make recommendations. These individuals should also be able to truly analyze workloads, to provide guidance on what the optimal result with cloud capabilities could be. This people resource is a very specific one that many companies do not yet have internally, as noted above as a challenge in itself.

Companies that have deep knowledge of their data and environments, and leverage the various services available within cloud platforms, can result in a considerable cost savings. “Cloud done right should save you money,” said Dutta. “Knowing the options, and how they can be applicable to your use case, is key.”

SCALING SECURITY IS EXPENSIVE

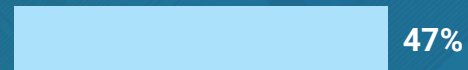
Security challenges are a common and longstanding barrier to scaling for IT leaders. Sixty-two per cent of respondents ranked the cost of security as significant or very significant. This is not surprising given that Herjavec Group estimates that one business falls victim to a ransomware attack every 11 seconds and IDC estimates the cost of cybercrime will rise to \$10.5 trillion, annually by 2025.

It is surprising, however, that 46 per cent of respondents reported that their inability to mesh new security requirements with existing legacy systems was a significant/very significant hurdle to the innovation that would allow them to grow.

“Security has to be at the forefront, as part of the planning process. Factor the cost of security into your business model because as you scale, securing your cloud elevates in importance to your business with added exposure and risk,” said Dutta.

Security is hugely expensive.

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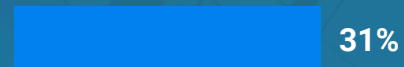


New security requirements don't mesh easily with my existing (legacy) systems.

INSIGNIFICANT



NOT VERY SIGNIFICANT



SIGNIFICANT



VERY SIGNIFICANT



Forty per cent of respondents identified the challenge of wading through the plethora of security options coming to market on an almost daily basis as a significant or very significant challenge to their scaling efforts. How do you know which ones are most appropriate for your business? Will a new iteration be released the moment a company pushes forward with a purchase decision?

“Security requirements are changing so fast, and in ways that we don’t imagine, that it’s hard to keep a handle on it,” said Ted Maulucci, President of SmartOne Solutions Inc. “The security landscape is moving at a different speed to what companies are moving at, and that always creates a challenge.”

OVERCOMING THE BARRIER

In the context of scaling, security must be at the forefront as organizations plan their infrastructure. As a business grows, there are more threats to mitigate, ultimately increasing the cost of security. Therefore, security costs must be built in as a critical part of any significant plans to scale.

While security costs may remain a barrier to some, sorting through the jungle of security options generally only requires a little help from friends. Using a trusted network of advisors, and reviewing widely available industry ratings, should help narrow down options. Look for third-party validation and case studies to make sure the solution you choose is suitable for your business.

While internal research is often a company’s first option, many of the respondents we surveyed said partnering with a managed service provider (MSP) often makes the selection process easier.

“As a cloud MSP, we go through the same exercise of picking security vendors, and maintain a set of vendors we incorporate as part of our services,” says Dutta. “As a client, you get the benefit of experience from multiple types of customer engagements that we have as an MSP. We share that knowledge with all our customers that trust us to protect their critical cloud solutions.”

APPS IN THE CLOUD REMAIN CHALLENGING

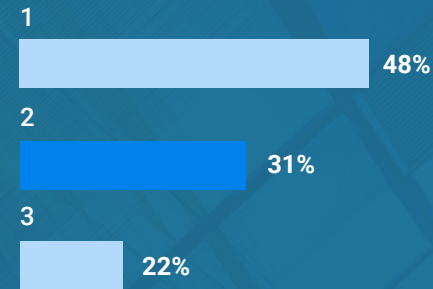
Asked about app development as a barrier to IT scaling, our respondents identified the lack of architecture to re-factor or re-platform apps for a cloud environment as the largest barrier.

“Re-architecting is a complete overhaul. It means going back to the drawing board, finding out what the new requirements are, and then transferring them into DevOps and creating apps,” said Corey Cox, VP Information Systems for Tandet Group. “It’s a huge effort. It takes a lot of planning, and there can be substantial costs associated with that effort. We are moving to an app-driven ecosystem, but companies need to make sure the business case is there to make the shift value.”

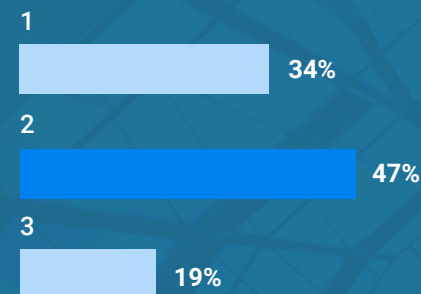
The lack of internal skills to re-factor or re-platform apps for a cloud environment also ranked as a significant barrier. This re-enforces the concern about a lack of internal skills highlighted in an earlier question.

Respondents were asked to rank their challenges, with 1 representing the biggest challenge.

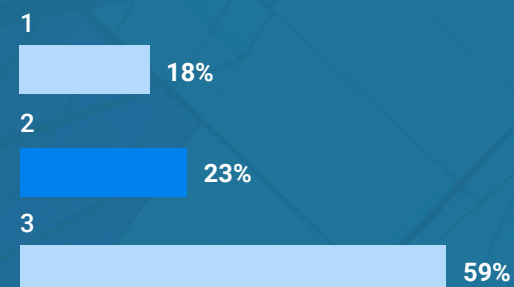
I don't have the architecture to re-factor or re-platform my apps for a cloud environment.



I don't have the internal skills to re-factor or re-platform apps for a cloud environment.



I don't know how to move beyond the media hype around DevOps or containers to actually implement them.



OVERCOMING THE BARRIER

Moving from a legacy to a cloud-based system takes time, effort, and expertise. Often there is value to fixing and modernizing applications, but in some cases the cost justification (for the time, tools, and people) just isn't there. "The problem with legacy systems is they weren't built to integrate in a hybrid model - they encumber agility," said Maulucci. "The way to get to a better world is actually to migrate to newer systems. Understanding and asking the right questions is fundamental in adopting a new framework."

If a cost analysis of modernization is justified, there are many companies (including next-gen MSPs) that can help clients on the path to modernization. There is an ecosystem of partners in the industry that can provide the specific capabilities or skills necessary to get an appropriate architecture in place to re-factor and re-platform apps for a cloud environment.

"Re-structuring can be a one-time thing. Since we don't need to have these skills most of the time in house, we rely on our providers or contractors for these services," says Maulucci.

DATA SOVEREIGNTY REMAINS A HURDLE

While regulations and compliance concerns were not viewed as impediments to scaling, 37 per cent of respondents reported that data sovereignty issues - especially the inability of service providers to guarantee it - was hurting their ability to scale.

“The onus falls on us as a customer putting our data on the cloud,” said Cox. “It’s our responsibility to do our due diligence to make sure we are compliant with regulations, and verify via independent third-party audits that cloud providers can deliver on their assurances of data sovereignty.”

“We certainly have clients that are very skeptical of public cloud,” said Dutta. “We educate our clients to dispel the myths. For those that simply can’t take the leap, we can offer an alternative understanding that every company and individual moves at a pace that works for them.”

The inability of service providers to guarantee data sovereignty.

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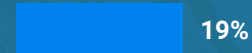
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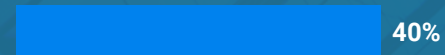


Varying regulation by geography makes keeping track of requirements difficult.

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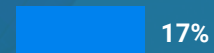


Governance of data – managing its access, consumption and portability – gets in the way of agility.

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VERY SIGNIFICANT



OVERCOMING THE BARRIER

“The big lesson for everybody is systems need to be designed from the ground up, with data sovereignty and privacy issues in mind from the beginning. A lot of systems were not built with these considerations at their core in the past,” said Maulucci.

Depending on what the requirements are, MSPs can provide knowledge and guidance on what the best approach is to alleviate concerns around data sovereignty.

While unable to control the public internet, MSPs such as Carbon60 are able to control - and be transparent about - how the network is running between data centres. “An MSP with its own platform can provide an alternative to consider where they can more easily guarantee that data will be residing in country,” explained Dutta. The availability of hosting platforms located in Canada is a key component of this guarantee.

KEY TAKEAWAYS

The main barriers surrounding scaling relate to cost, skills, and challenges with regulatory compliance. As with any industry trends, it’s important to evaluate whether responses to barriers (in relation to scaling, or otherwise) are based on myths or misunderstandings. Even within the responses of technology leaders, we were able to address areas for learning and opportunities for education in regards to cloud maturity, and the applications available to companies of all sizes.

There’s an ecosystem of small, medium, and large professional service companies in Canada that can assist with assessments and proofs of concept, to help dispel some of the concerns related to the fundamental shifts often necessary when scaling. As far as a resource like the cloud has come in terms of accommodating the transformation to a responsive, dynamic organization, there is still a long way to go. With the correct resources, knowledge, and partners in place, many of the barriers identified can be overcome. The only way to know is to try them out.

ABOUT CARBON60

Carbon60 specializes in delivering secure managed cloud solutions for public and private sector organizations with business-critical workloads. Carbon60 provides secure and SOC2 compliant 24/7 managed services using its cloud platforms across Canada, including AWS, Microsoft Azure and Google Cloud, to deliver scalable hybrid IT solutions. Carbon60 guides customers on their cloud journey and can engage with clients at any stage of their transition. Carbon60 provides cloud adoption frameworks, migration services, application modernization combined with white-glove managed cloud operations and optimization. Carbon60 focuses on customer experience with a deep level of technical support services and an agile approach, making it the trusted choice for companies that need a partner to deliver solutions with exceptional reliability, performance, and security.

ABOUT ITWC

ITWC is the Canadian AI-enabled digital media and marketing platform reaching Canada's most influential, engaged and targeted technology decision-makers. Using first-party data, the science of demand generation and industry knowledge, we create value for both our community of participants of over 280,000 CASL-compliant subscribers and our leading vendor customers.