

# HOW TO IMPROVE YOUR SUCCESS IN THE CLOUD

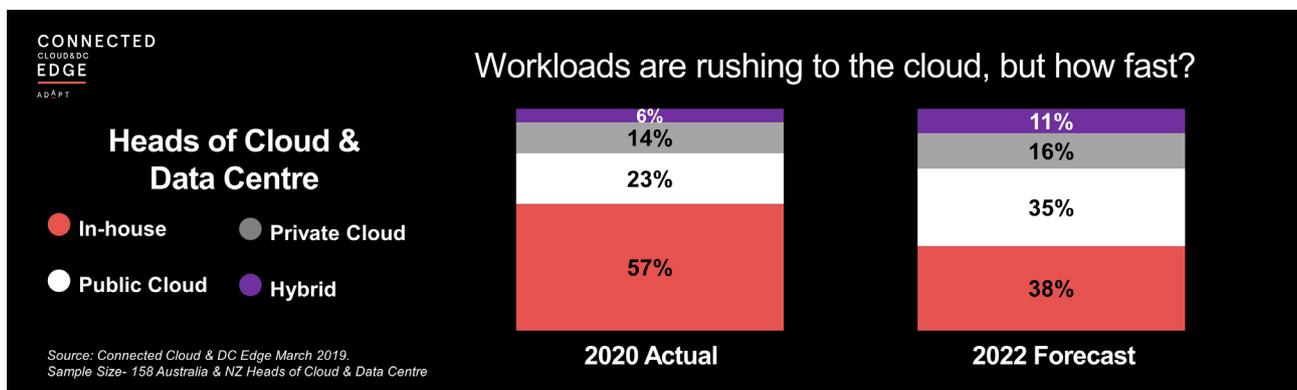
## SUMMARY OF THE DISCUSSION AT THE UNISYS ROUNDTABLE AT CONNECTED CLOUD & DC EDGE- MARCH 2020

**THOUGHT LEADER:**

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### Background to the discussion

At its CCDC Edge event in March 2020 ADAPT hosted an executive roundtable discussion sponsored by Unisys that examined how organisations could improve their level of success in harnessing cloud computing. As the below slide illustrates, ADAPT’s most recent Australian research reveals that by 2022 62% of Australian IT workloads are expected to be cloud-based, whether that be Public Cloud, Private Cloud or a hybrid combination of the two. Yet, despite its growing popularity, organisations have a mixed track record of success with their cloud implementations.



In 2019, Unisys surveyed over 1,000 senior IT and business executives in 13 countries to examine their level of satisfaction with their use of cloud computing. The resulting Unisys Cloud Success Barometer report<sup>1</sup> documents how well an organisation’s cloud transformation expectations have been met across six dimensions: revenues, costs, agility, competition, security and productivity. On a scale of 0 to 100, the current global score is 49, indicating a ‘middling’ level of success but clearly suggesting room for improvement and the need to better integrate cloud into existing IT infrastructure.

This was the context for the dialogue among senior IT executives at the roundtable facilitated by Peter Hind, ADAPT’s Senior Analyst, and Leon Sayers, Unisys APAC Consulting Leader, with representatives from Australian business and government organisations.

<sup>1</sup> Cloud Success Barometer report: [www.unisys.com/cloudbarometer](http://www.unisys.com/cloudbarometer)

## Key Takeaways

1. Focus on the business outcomes that are sought from an investment in cloud. Problems or issues will be encountered that may delay the migration or necessitate extra resources. The perspective of a desired business outcome provides the appropriate context for considering these matters.
2. A cloud migration entails surrendering control over IT delivery to a third party. This can have significant implications in areas like user experience. This requires some intelligence platform that can monitor delivery at an application level, ideally utilising AI and machine learning functionality, so it can optimise application performance without the need for human intervention.
3. Training and dialogue with end users is essential. Adopt a partnership mindset rather than a service delivery one. Cloud entails changes to the way people are asked to work. An investment in their training is a reflection that you want to bring them along on the transition journey.
4. Seek out quick wins that can establish your credentials to deliver and build trust and confidence. Many business leaders have been seduced by the potential of cloud and a challenge CIOs face is grounding these expectations without creating the impression of being a naysayer.
5. Don't do everything in-house. Engaging a third party in aspects of the cloud migration enables the business to draw on real-life experiences from other organisations. In addition, external parties offer a neutrality that makes it easier to get executives to define the business outcomes they seek. A third party can also provide a useful sounding board for CIOs when problems are encountered.

## Challenges in realising the potential of cloud

The ten delegates who attended this roundtable explained what drew them along to the discussion. Collectively, the responses fitted into seven broad categories.

1. **Executive buy-in:** Executives can have a reticence about getting involved in what they see as IT matters, often arguing they don't have the time. As a result, IT finds itself interacting with a leadership that can abdicate its responsibility for driving the strategic outcomes sought from an investment in the cloud. Another challenge in this area can be the presence of a multitude of legacy applications, often the result of corporate activities like mergers and acquisitions, and the executive can balk at the investment needed to rationalise these systems to make them cloud ready.
2. **Unrealistic executive expectations:** Cloud as a concept has attracted a lot of business attention. Yet there is a lot of hype about its capabilities. This can give many executives the impression that cloud computing in itself will offer them benefits such as cost savings, greater agility, the ability to experiment and fail-fast and an inexhaustible, on-tap, supply of computing resources. Unfortunately, few business executives fully understand the implementation challenges and likely trade-offs entailed in securing these benefits.

3. **Quantifying the benefits:** It can be difficult quantifying business benefits such as greater operational agility or increased productivity that cloud computing might generate. Moreover, without being able to place a value on these benefits it is then difficult to track and measure whether these outcomes are being realised.
4. **Managing hybrid multi-cloud environments:** These are increasingly becoming the norm for many large organisations. However, each supplier offering is different so supporting a variety of cloud environments is not straight-forward. Several attendees were keen to discuss toolsets that might enable organisations to support, orchestrate and manage multi-cloud environments.
5. **Rearchitecting for the cloud:** There is an increasing recognition that migrating applications from an on-premise data centre to cloud computing is not a simple 'lift-and-shift' activity. Applications will need to be redesigned to work in a cloud environment and there are important cybersecurity and networking questions to address. Another point to be considered here that software licencing requirements may make the use of certain products unfeasible and necessitate the migration of key application and infrastructure components to different product sets.
6. **Change resistance among experienced employees:** Long-standing employees can fear the adoption of the cloud because it requires them to relinquish their local control over key data sets as these are moved to a cloud-based repository. They also may resist making the necessary changes to their work practices to operate effectively in a cloud computing environment.
7. **Governance:** IT departments can find that their organisation's control over cloud computing is undermined by end-users committing to the use of cloud offerings through expensing recurring monthly costs on their credit cards where the amounts are small enough to avoid scrutiny.

## Success factors for the cloud



**Too often cloud implementations are viewed from a technology perspective rather than desired business outcomes.”**

Frequently, cloud can be mandated as an answer to a problem with the IT department tasked with defining the roadmap and technology choices to make this happen. This though, tends to result in the cloud initiative being seen by those outside IT as a technology project.

Instead, the primary task with any cloud implementation should be to establish at the outset the outcomes and requirements that the business wants to achieve. Inevitably, a cloud project will encounter potential hurdles such as: software licencing; where the data will be hosted; and possible cybersecurity exposure. Moreover, end users are likely to need to change the way they work when they use a cloud environment. If a cloud migration is framed in the context of the desired business outcome, then this will ensure a more-rounded analysis of what needs to be done to make the project a success.

## Rearchitect for cloud computing

The reality is that the adoption of cloud computing will involve the IT department surrendering control over the IT architecture to an external organisation. This dependency will make it hard for the IT department to structure service level agreements, (SLAs), with business units. It also adds a level of complexity in ensuring the business complies with potential statutory obligations such as adhering to GDPR legislation or client data privacy responsibilities. In addition, a third party now has responsibility for aspects of cybersecurity.

To regain some level of control the IT department needs to give careful consideration to how they rearchitect their applications to work in the cloud world. Unless they are careful, businesses could find themselves beholden to a single cloud vendor which would further limit their control and diminish their negotiating power. A particular concern is the need to architecture applications so they can work across multiple cloud vendors and sites. Executives must appreciate that they cannot easily take an application that is running under one cloud vendor's offerings and transfer this to an alternative cloud supplier. Deploying an application across a multi-cloud environment requires it to be constructed with this flexibility in mind.

In particular, developers need to ensure that the code they are creating works against all the web services from the major cloud vendors or else it is constructed in an agnostic way which protects the organisation if it seeks to change cloud suppliers. An agnostic way was described as one where an organisation is not developing against a specific vendors API sets or technology items. This entails not directly calling APIs in the coding because in a cloud world vendor specific APIs are a real 'gotcha' as they will lock-in a client to a specific supplier. Yet developers have a natural tendency to choose the option that is easiest for them. Typically, these are the API sets they know or else they are presented to them by the cloud vendor as the default. As such, an agnostic way can be hard to enforce and building software using this approach will be more expensive and will take longer. It will also have cost implications for application maintenance going forward as it will ultimately entail supporting a more complex environment.

The discussion then turned to whether automation or orchestration tools could act as an intermediary to assist organisations in operating effectively in a multi-cloud world. However, the one delegate who had been investigating these toolsets had reservations about whether they were able to do this in a production environment today. He had assessed a couple of offerings and had concluded that they were not sufficiently mature or robust. At this stage, he believes that if organisations are looking for functionality to help their applications operate across different cloud environments then they will probably need to develop something themselves.

## The management of cloud implementations

One key area for ensuring the success of any cloud implementation is to see how well it is managed. When an organisation implements a public cloud environment it must abandon its traditional SLAs. The dashboard showing the uptime of equipment like servers and routers is futile in a world where there are no servers.



**The business must move the management of the IT environment from the focus on uptime to one where the realisation of desired business outcomes is monitored.”**

This though entails overseeing all the suppliers in your IT ecosystem who, at the same time, must be willing to commit to delivering these outcomes. One of the best ways of ensuring this commitment is including them in the commercial arrangements you have with your suppliers.

The example was given of a Public Sector agency that was about to go to market for a public cloud solution. It recognised that it needed to reposition its desired SLAs before it made this transition to reflect the business outcomes it sought from the move. Factors it recognised that would be important were ensuring the business was available between 8:00 am and 7:00 pm and whether times for users to log on and for applications to load provided a satisfactory user experience. These requirements presented a clear challenge to most cloud vendors who were comfortable supporting the physical infrastructure and operating system but expected their clients to manage application delivery.

This raised the question of whether it was reasonable to expect a cloud service operator to guarantee performance at the application level. Many factors can impact application performance such as the efficiency of the network, the capabilities of the hardware, application design, etc. Effective governance of applications entails overseeing a lot of moving parts and obtaining a granular perspective of the efficiency of these. Moreover, as was the case with this Public Sector agency, there can be a myriad of suppliers overseeing all these different parts.

The task then is how can all these components be consolidated into a single operational platform that sits across each of these vendors and components to provide a dashboard or reporting structure that monitors all the suppliers and their products in the business' IT ecosystem. The aim is to enable the organisation to drill down into how each component is performing. In an ideal world it should be possible to leverage AI and machine learning to identify the deficiencies in service delivery. While this level of insight would be highly desirable in ensuring the effective management of the IT environment the fact remains that only a few organisations have such an intelligence platform today. Nevertheless, the view was that organisations should work towards its construction if they want to be able to effectively manage their cloud implementation to ensure its meeting the outcomes the business wants for it.

One attendee said that his business had used Splunk to monitor core applications that it had built. This highlights where there are periodic contention issues over application resources such as a database. However, he acknowledged that despite being aware of this contention it is time consuming to scale up resources to deal with it even though elasticity of supply is a core promise of cloud computing. In effect, managing the capacity requirement in a cloud environment is not that different from on-premise management. The desired service level would be to use machine learning and AI to detect performance issues in advance and seamlessly rectify them via automation without the need for the manual intervention of IT staff.

For several attendees these issues were reflective of the unrealistic expectations many executives had gathered, typically from high profile cloud vendor conferences, about what cloud could provide their business. The view was that the only way for these expectations to become more grounded was to bring the discussion with the executive back to the business outcomes they sought. This context makes it easier to have a more measured assessment about what is required in terms of technology, applications, resources and likely costs for this outcome to be achieved. It also ensures that statutory data obligations and the impact on cybersecurity defences are considered.

One important consideration is the organisational and operational adjustments that will be required for the migration to cloud computing to succeed.



**A cloud implementation is likely to entail changes to how and where people can work. It could have a major impact on productivity and is likely to have significant cybersecurity implications.”**

### **Managing cost expectations**

Many of these implications have cost consequences. It was acknowledged that highlighting the need for extra expenditure to realise desired business outcomes, when the business has a mindset that cloud is going to save them money, can be a difficult conversation. It can create the impression that IT is trying to pour cold water on the use of cloud computing by introducing ‘obstacles.’ The CIO and their leadership team must have established their business credentials before their advice on these matters will be accepted.

These credentials are established by IT’s track record of delivery, especially outcomes from IT-related activities that have benefited the business. This might include cost-savings that have been achieved or by demonstrating a consistent ability to execute and deliver IT related projects on time and/or under budget. One delegate gave the example of overseeing a project that entailed migrating an application from a managed service provider to AWS.

He was able to bring this project in under budget while achieving the required business outcomes. This outcome gave him a recognition in the business for delivering. As such, he was able to stand his ground in opposing the CFO when he wanted to make Chrome the default company browser. He was able to highlight all the application changes, and their associated costs, that would be required. After this, he said the CFO “backed off”. He saw this as an acknowledgement by the CFO of his business credentials.

### **Identify potential quick wins**

The conversation then turned to the importance of quick wins in establishing the business credentials of the IT department. Quick wins usually revolve around one of two elements. They either generate cost savings or else they create a better user experience. The point was made that if you can help someone in the business have a better experience with their use of IT, no matter how big or small that improvement is, you will foster within them a favourable impression of the IT department.



**Another recommendation was to ‘never waste a crisis’ as these present an ideal opportunity for the IT department to demonstrate its capabilities.”**

One attendee spoke about how he had won plaudits in the business because he had moved the core networking to Azure which had greatly assisted the company response to the heightened need for remote working because

of the COVID-19 pandemic. This had helped users access legacy applications and provided them with the cybersecurity protection offered by the corporate Virtual Private Network, (VPN).

### **Prioritise organisational change management**

One issue that the Unisys Cloud Success Barometer highlighted was the importance of training. When respondents were asked what their organisation should focus on next time to make their cloud transformation more successful the most popular response was employee training and upskilling. The view was that this recognised the importance of taking a disciplined approach to organisational change management, (OCM), where staff training is a key component. It also highlights the importance of IT collaborating with other business units like HR when it rolls out these changes as these executives have the assigned responsibility to help with the career development of employees.

The IT department has a reputation in many businesses of forcing things onto users like systems upgrades and new application releases which can have a big impact on the work they do. Yet often users do not understand the rationale for these changes.

“ **An investment in training indicates that the organisation is sincere about wanting to bring its current employees along on the transformation journey.**”

Training is also a time when the project managers have to explain to the workforce what is happening and why and provides an opportunity to the staff to give feedback about these changes, especially their thoughts on how the changes could be enhanced.

Nevertheless, there was broad agreement that training needs to be tailored to meet the requirements of each group of employees in the workforce. In one example that was shared, a government agency was moving from a 25-year-old Lotus Notes implementation, that many of the long-standing employees had grown up with, to an Office 365 environment. The project team was conscious that bombarding people with emails about these changes was not the best way to get the message across. As such, it consciously offered a variety of ways to reach staff, including SMS, Yammer, social media and formal training as well as email, using different communication mediums to reach different groups of employees.

“ **It is important to present the move to the cloud as a journey and bring the business along with you by being upfront and telling them what is happening, why and how this will impact them.**”

An interesting recommendation was consciously to target the naysayers first in any transformation. While this will entail some probable confrontation with people who have entrenched positions these staff will appreciate, perhaps grudgingly initially, that you have taken the effort to reach out to them early on and listen to their concerns. By involving them they will have some ownership in the changes that are happening. This can help turn a naysayer into a product champion which will have a huge influence on others in the business.

Nevertheless, one likely obstacle to an organisational change is the fast-paced dynamics of the business. Key personnel overseeing the change could leave. This happened to one attendee whose organisation was undertaking an application migration to a private cloud. In this case responsibility for overseeing the change management fell on the project manager whose skillsets weren't in this area. In another example that was shared the change management tasks were left to the oversight of the business users and the work was done poorly.

One other danger with change management is that its importance can be under-appreciated. This means the work is frequently rushed, especially when there is an urgency to meet a "go-live" date. Furthermore, there can be an expectation that it will happen by osmosis or by what is commonly called learning on the job. Another approach can be to ask staff to watch a few YouTube videos. Short-cutting change management will be counter-productive as it will delay the time before staff get proficient using the new cloud-based systems.

## Final observations

The key factors in any successful cloud transformation are mapping why the activity is happening to the business outcomes that are sought and the impact these changes are expected to have on the user experience. This requires the IT department to have conversations with the business at the outset. Often one of the best ways to do this is to delegate IT staff to do walk-and-talk activities around the organisation where they collect and compare the views of those at the front line. For those who are new to any organisation, this is an ideal time to get a richer understanding of users' thoughts and frustrations about IT. This provides the input into the strategy and product roadmaps that are then developed to oversee the migration to the cloud.

One critical success factor that the research from Unisys has highlighted is that organisations that worked with a third party to help at some stage with the transition to the cloud were much more likely to succeed compared to those who managed the process solely in-house. For example, it is much easier for a third party to collect the thoughts of business users on IT operations compared to a CIO who may have been with the business for some time and who may be expected to already know the state-of-affairs. A third party can also draw on past experiences and user change management stories that give a practical perspective to what the business is seeking to do. Finally, the third party can also provide a useful sounding board that the CIO and their team can bounce ideas off. In most cases the aim is not for the third party to drive the entire project but rather to help lay the project's foundations, (i.e. plans, strategy, roadmap etc.), which the IT department can then build on.

Finally, Unisys gave their approach when they are engaged by a client. The first workshop will be targeted specifically at the C-suite. The aim is to get them to articulate the business results they are seeking from a migration to cloud computing. Obtaining this then ensures that the project has their buy-in as the activity is taking the business towards outcomes they want. The next workshop targets application owners and groups of users who use these systems. The objective is to make them feel part of the process for change and to gather their insights about what are issues with the existing application that concern them, (e.g. poor performance, security, the look-and-feel etc.). Many of these pain points will provide the potential quick wins that will be essential for ensuring the support of these key users in making the organisation's overall journey to cloud computing successful.

For more information: [www.unisys.com/cloudwhatsnext](http://www.unisys.com/cloudwhatsnext) or email [APAC.CloudForte@unisys.com](mailto:APAC.CloudForte@unisys.com)