Building the Right Organisational Capabilities to Succeed in the Cloud

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Technology led business disruption has shaken up the Australian business landscape and companies are now compelled to move towards new and better ways of doing business. Ever changing customer expectations are paralleled by availability of advanced technology that can solve critical business problems. Cloud is one such critical technology solution that can help organisations achieve customer success, digital success and cost optimisation goals all at the same time.

Australian organisations are moving more of their IT budgets from back office 'Run' (currently 62%) to front office 'Transform' (currently 17%) initiatives. A part of the transform budget is moving the workload to the cloud.

Cloud is mainstream today and organisations are contemplating the right mix of on-premise and cloud to support digital business goals.
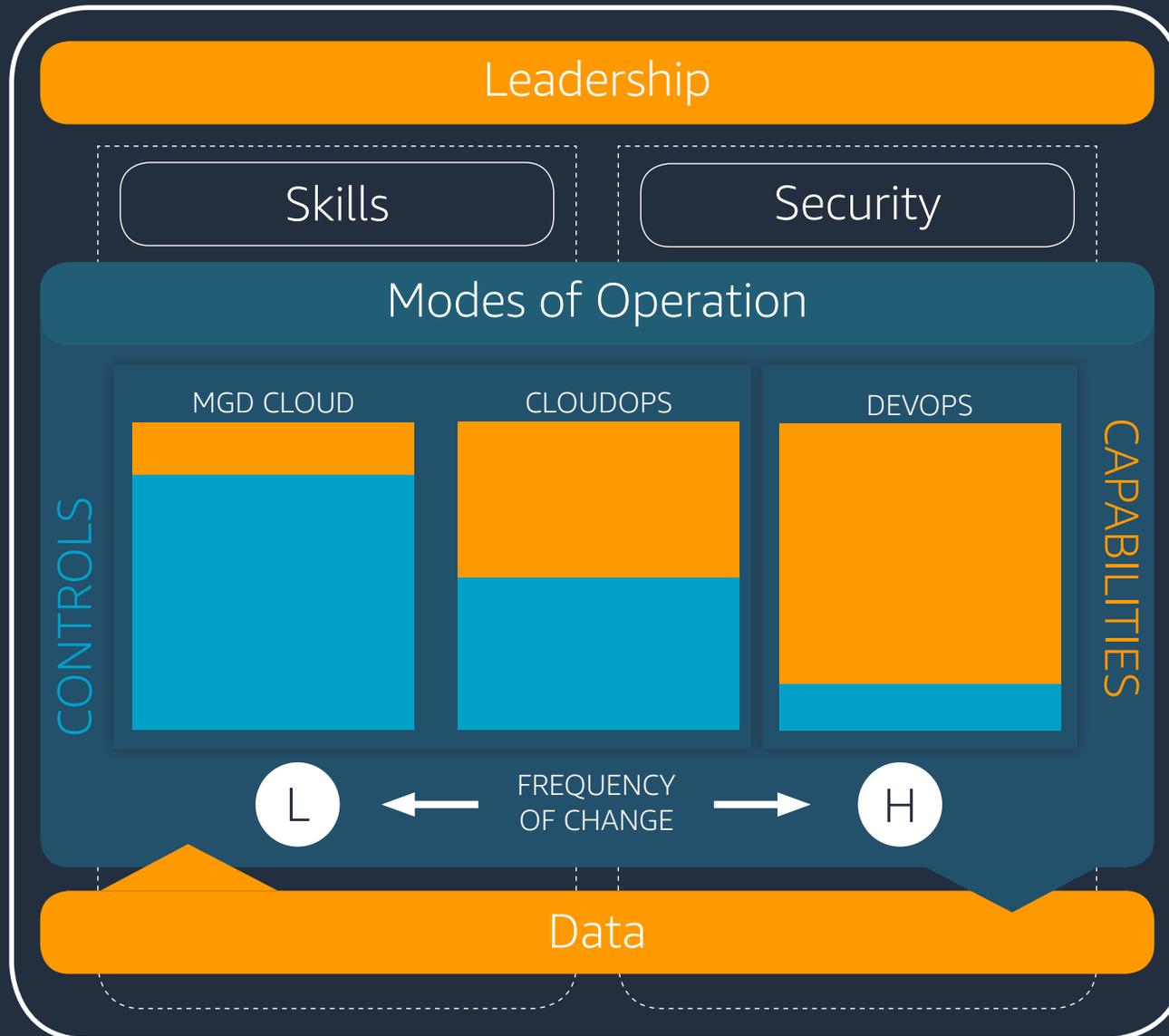
By 2021, 67% of Australian IT workloads will be cloud-based (public/private/ hybrid), up from 46% today.[1]

According to ADAPT's forecast, by 2021, approximately 67% of workloads will be managed in the cloud. The decision of moving to the cloud seems easy. However, it comes with operational challenges of application sprawl, overall workload management mix, and automation challenges to quote a few.

Based on our interactions with thousands of customers, it has taught us that whilst the choice of technology is critical, establishing mechanisms and capabilities are key in accelerating business outcomes. This has been distilled down to a comprehensive 'Cloud Capabilities Blueprint' to help organisations to develop and execute an optimum cloud strategy that minimises redundancies and maximises effectiveness.

1 ADAPT Cloud Migration Study, 500+ c-level executives attending ADAPT Edge events in 2018-19

Organisational Capabilities Blueprint for Cloud Success

Leadership

Skills

Security

Modes of Operation

CONTROLS

MGD CLOUD

CLOUDOPS

DEVOPS

CAPABILITIES

L ← FREQUENCY OF CHANGE → H

Data

The Cloud Capabilities Blueprint

Every organisation has a different adoption curve to the cloud, based on their phase of business growth and transformation journey. On analysing these organisations, Amazon Web Services found common patterns of success in cloud adoption.

"About 78% of users have reported improvements in productivity since using cloud, 48% have seen an increase in IT staff, and 41% in non-IT staff since cloud adoption". [2]

There were three key traits found in progressive companies that were quick to adopt cloud:

- They understand where the market is heading and what the competitors are doing well.

- They always ask," What is a better way to do things"?

- They have a customer-centred approach to technology adoption.

As a result, the success these companies witnessed from cloud adoption included improved productivity and efficiencies, operational resilience, business agility, and faster reaction time to disruption.

Internally, these companies were able to focus on the following five core capabilities for the success of cloud based transformative initiatives.

1. **Leadership**
2. **Skills**
3. **Security**
4. **Modes of Operation**
5. **Data**

Any organisation that is on the cloud adoption curve can use this blueprint to ensure the success of their cloud strategy.

2 Deloitte Access Economics Report, Jul 2018

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Leadership

Everything starts with leadership buy-in. The majority of technology leaders in Australia suggested that their executive leadership were not tech-savvy, making it difficult to get sponsorship for transformation projects such as the cloud. However, it is not the most ideal approach to wait for leadership approval. The change needs to begin at the grassroots level and reach the top, rather than begin at the top. Technology execution is very close to the functional business, and hence it will most likely come from functional levels of the business including technology.

Progressive technology leaders understand that it is not the responsibility of top leaders to understand technology and keep up to date about it or make those decisions. It is the responsibility of the technology leaders to have confidence in the technology solution and educate the other stakeholders about the outcomes in business language.

Culture plays a significant role in educating the leadership and keeping them attuned to modern digital businesses. This is the culture of open communications, trust and transparency that percolates across the organisation. Within the IT department, this culture then transcends into developing business skills, interpersonal skills and communication skills as the team is brought into strategic business meetings

and collaborates better with other functions. Otherwise, it becomes too difficult for the technology leaders to solely drive change and get things done.

Here are some tips **Mithran Naiker, CTO - Transurban**, used to convince his leaders:

1. Discuss your business case in terms of time, agility and speed. At this stage there is no need to get into the technical details of the solution, focus on the outcomes and objectives that are required and how closely and quickly you can deliver them.

2. Have different types of conversations with different departments across the business to fully understand their objectives before you even start the conversation about the technical solution. They all have different objectives and require them to be fulfilled by a technology decision.

3. Once you've made the decision, back yourself and accept the risk associated with implementing any new technology.

"You have to be the evangelist of technology within your organisations and be ready to take risks."

"You can't expect the rest of the business to be as excited about the technology as you are. You need to be able speak to different teams in a way that explains what is changing, how you are changing it and most importantly, how the organisation as a whole is going to benefit from these decisions."

Skills

According to ADAPT's cloud migration study: "Skills shortage is one the top challenges faced by technology leaders when it comes to migrating to the cloud."

Organisations across the world are facing a shortage of technology talent. In Australia, there is an increasing problem of attracting and retaining essential talent within the technology function. One of the reasons is the way traditional organisations have been operating, which is slow paced and lacks the drive that is expected by the new technology workforce. Moreover, increasing accessibility to digital business and the start-up world further reduces the talent pool for large organisations.

One of the biggest criteria for the workforce to choose a company today is its culture. People are inclined to work with companies that offer a free and open work culture driven by trust and transparency from leadership and between teams.

Three approaches work well to solve this problem:

1. Focus on training the existing talent on a continuous basis for upskilling in technology as well as business skills.

2. Build a culture of openness to ideas, new initiatives and support employees when new initiatives fail.

3. Try to augment talent by working closely with technology partners and their teams. However, the assumption here is that the talent at the partner company should constitute SMEs who are up to date with technology.

Mithran says: "Selecting a partner organisation is not just about an exchange of services anymore. Skills are a huge consideration, and part of that is aligning the talent across both teams to achieve joint objectives. Our partners sit in the same building as us to foster this collaboration and are treated like part of the Transurban team."

Security

Security includes data security, privacy and overall technology security. One of the biggest inhibitions of moving to a cloud environment is the complex security perimeter and the scepticism associated with the security and compliance standards of the cloud infrastructure. Considering the number of security breaches that have taken place recently, it is imperative that organisations understand the security implications of cloud solutions and the robustness of security infrastructure offered by the cloud provider.

Some of the key characteristics to consider are embedded security and automated compliance, which can help with important data standards such as GDPR. Organisations should set guardrails not barriers to cloud adoption.

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Modes of operation

The aim of any cloud environment should be to run at the lowest possible cost and at the highest levels of resilience. This implies that your cloud architecture should be scalable, flexible and modular to keep your organisation future proof.

There are three ideal modes of operation for any cloud led transformation strategy.

1. Managed Cloud – Try to minimise cloud sprawl, managing too many vendors, and spending too much time and effort in keeping everything intact. Try to select a few robust providers who follow agile and dev-ops based development approach so that your technology needs do not suffer in the long run. Some of the key criteria used by progressive companies to evaluate cloud providers are talent and vision of the cloud provider, apart from cost and infrastructure elements.

2. Cloud Ops – Set up the right expectations from your cloud projects, translate them into smaller, quantifiable measures and monitor them regularly. Be aware of areas of potential failure and next best actions to avoid dismissing the merit of cloud adoption. Having a core team, monthly reviews and future requirements assessment can help streamline cloud migration to a large extent.

3. Dev-Ops – Reusability, flexibility and scalability are necessary to ensure smooth functioning of your cloud environment. Automate where possible, lower the change frequency and aim for a quarterly stack review. Your bigger stack that runs the business should have minimum changes, so having clear operating principles and mechanisms around it will reduce duplication of effort and costs of operations.

"Initially, the cost of cloud migration will be high. That is because you're creating an enterprise cloud platform from the ground up with automation, security and resiliency built in. The hardest part is to convince people that costs will come down over time. You need to explain that building in that reusability and automation in the beginning means you don't need to outlay that cost every time you do something new," says Mithran.

Data

The more progressive companies have disrupted their respective markets with a holistic data strategy as the foundation for cloud adoption. With an ever increasing amount of data from various channels, organisations need robust yet agile systems to stream, integrate and analyse the data for business decisions and benefit. The current data challenge is a big one where organisations have data scattered around different departments, functions and technology systems. Having a single view of the organisation is difficult.

About 50% of Australian CIOs think they have too much data and it is too difficult to analyse and use it for business purposes.

About 70% realise that they are not on top of their data management game. They are struggling to prioritise, store, manage and analyse their data assets, losing new business opportunities and lagging the global competition.[3]

Before migrating to the cloud, organisations should assess the data sprawl within the organisation and set processes and systems to integrate it so that the cloud platform can act as the ultimate unifying force for organisational data and form a foundation for live, actionable insights that drive growth.

Mithran Naiker says that "we have approx 5.6 petabytes of data. We are using this data to deliver safety improvements, operational efficiencies and service uplift into the business. We are also now looking into harnessing the power of this data using AI/ML."

3 ADAPT CIO Survey 2019

Your Cloud Journey

Cloud is not a destination; it's an evolving journey that will progress with business needs and advancements in technology. The best way to work with a cloud project is not to look at it in isolation but as part of a broad business strategy aligned with an outcome to build a future ready business.

To illustrate this further, Mithran expands on Transurban's approach. "We talk about the fail-fast approach, which everyone does. But we also talk a lot about good judgement. If you've done something and it failed miserably, or you've done something and it hasn't reached its outcome, that's still an important lesson to take away. The most important thing we want teams to demonstrate is good judgment and the way that they thought through a process end-to-end. When they do that, we are more inclined to give them the freedom to explore and try new things. This way I know even if they fail, there is real consideration about what it takes to deliver and they can review and iterate to the right outcome."

Learn More

eBook: Staying Competitive by Investing in Cloud Skills
Take advantage of your employee's wealth of knowledge as company insiders by helping them leverage their existing technical skills to learn the critical new ones.

AWS Executive Insights
Perspectives on enabling cloud innovation and transformation through culture, talent, and leadership.