



Morena kotou katoa
nau mai haere mai
Ko David Morrison tōku ingoa

Good morning! My name is David Morrison.

Thankyou David Jenkins for the invite to come a talk with you today.

I am the CEO at Thankyou Payroll - a provider of a software as a service payroll intermediary service. I been in this role since June of last year.

But today is not to talk to you about payroll.

Really excited to chat with you today about cloud technology. Firstly, this is not a technical presentation and we will focus on what cloud tech is and some of the key pros and cons to consider.

A little bit about me

- over 20 years in a wide range of technology and leadership roles.
- my career has grown with the Internet
- one of my earlier roles (17 years ago!) was delivering hosted services for SMEs before it was called the cloud.

Please use the Q&A to pop up questions - we should have time at the end to work through these.



Before we get into talking about cloud technologies it is helpful to provide some context in the form of what was in the "before times"

This diagram highlights all the things you as a business needed to have and maintain in order to run a business application.

Pre and early internet meant that most of your core business systems resided on your computer infrastructure.

A lot of work and knowledge was needed to maintain it all and to keep replacing the hardware every 3-5 years

THE INTERNET GOT FASTER, AND MORE RELIABLE



 Thankyou
Payroll

But then the Internet ramped up.

From the early broadband days of ADSL - you might Jetstream - to the nationwide rollout of fibre to most populated parts of NZ, we now have access to fast, reliable mobile and fixed broadband internet.

We now rank 16th in the world for fixed broadband.

What this meant is that the servers sitting in your office hosting your business applications no longer had to.



So faster and more reliable Internet enabled the "Cloud"

The use of the term "cloud" is often confusing for people as it makes what you are purchasing a lot more abstract.

When you are using cloud technologies you are typically using an application (like xero or thankyou payroll) over the internet most commonly via an internet browser or mobile app...

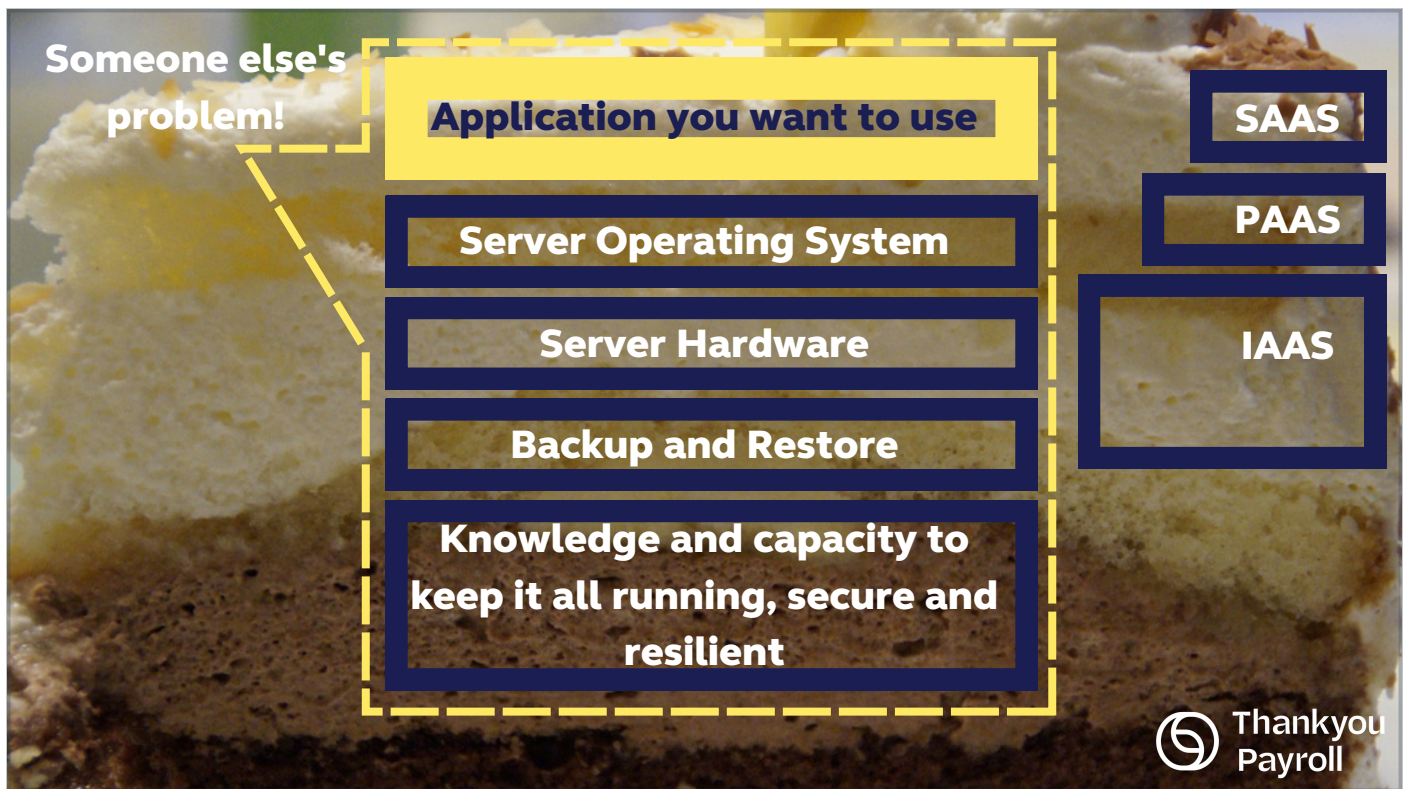
However, this is not the cloud....



This is the cloud.

Using principles of scale service providers moved to making more and more computer infrastructure available as a service. In the past 15 years in particular the technologies to support computing at massive scale have improved exponentially.

Ultimately, when you are using cloud technology services or applications you are using technology on someone else's infrastructure.



What this means is that all of those technology management headaches you used to be responsible for are now some else's problem. Or are they?

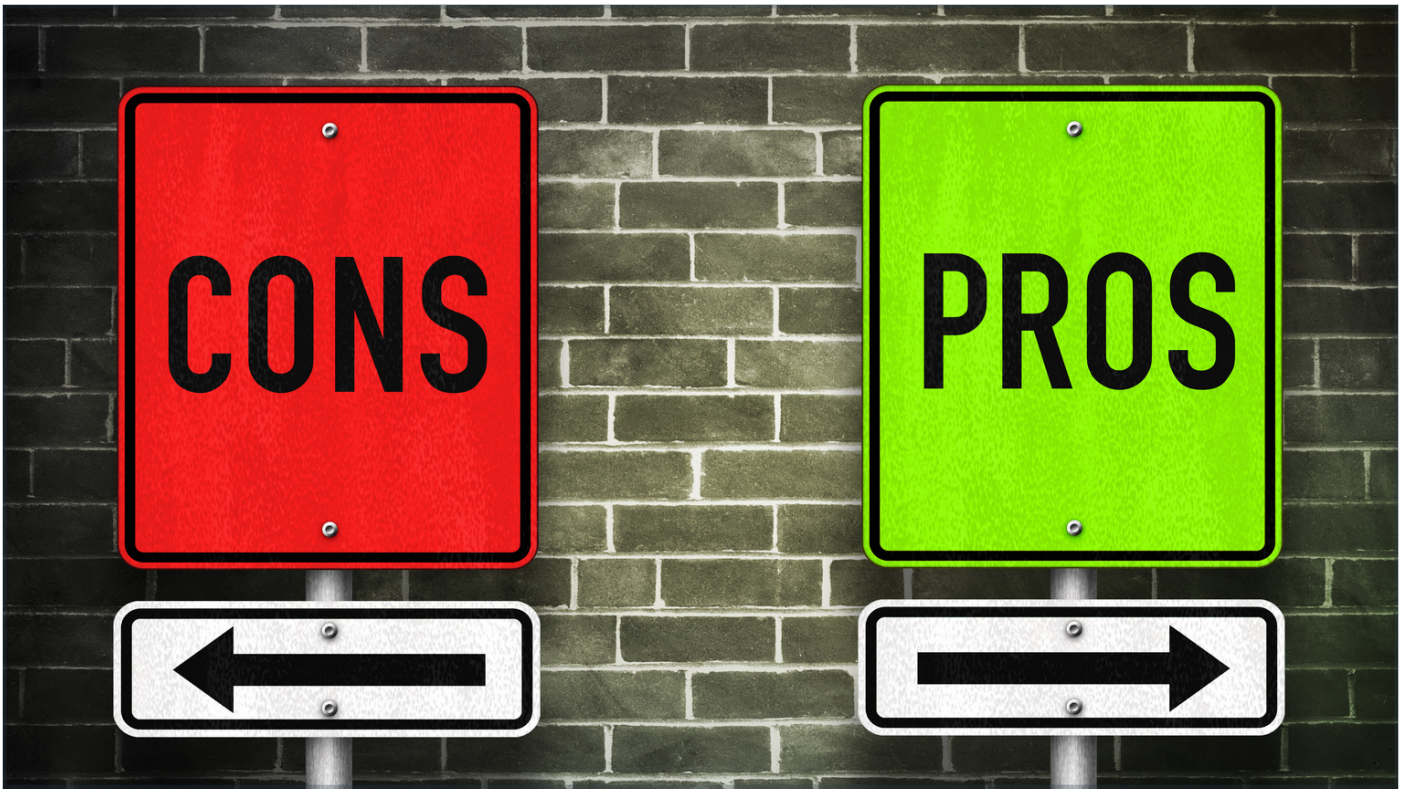
You have paid to transfer the risk to someone else as part of using an application in the cloud.

Some terms you may come across:

SAAS - provision of discrete software applications

PAAS - platform for software creation - AI , DL, DL

IAAS - infrastructure provision via virtualisation



So what are the key pros and cons to think about when using cloud technologies.

A point to note is that the sign up processes for applications today are really slick experiences. That often means that these pros and cons are not always being considered in advance of their use.



First pro is speed

- speed to make it available to your staff.
- just open a browser and login

and the second aspect is often cloud apps can be used anywhere where you have decent internet connectivity.

Imagine if the Covid pandemic took place with the internet we had 20 years ago. Our economy and our businesses would be a in very different place.



Pricing has become massively simplified.

What used to be complicated multi year licensing and maintenance agreements have now mostly become monthly per user fees



Cloud tech can allow you to easily scale up usage, storage or users and conversely scale back when not needed.

Historically you would often pay for software and commit to usage on annual terms



Reduced administration of technology
backups and restore,
storage,
deep IT knowledge,
and reduced capital expense on tech

These are all things that have transferred to the provider of the service you are using.



And my final pro is that cloud applications give access to scale, technology and security most SMEs would be unable to afford if done independently.

Ella's presentation on AI is an example of hyper scale technologies enabling entirely new spheres of technology.

In using your payroll or financial service via a browser you are leveraging a vast array of technology you never even new existed and would typically never be able to afford.

INCREASE IN OPEX



So what about the cons?

One of the most noticeable is the increase in subscription fees.

Just like you now have Neon, Netflix, Disney+, Prime and other streaming costs for watching TV your business is now incurring monthly subscription fees for your finance, payroll, human resources, project management, inventory and point of sale systems

One of the big financial shifts has been that software has moved off your balance sheet as an asset to your profit and loss as an expense.

REDUCED CONTROL



The cloud solution you use will be managed by others which can bring a reduction in control. The features you want but are not there, processes that are run and being a small voice in a hyper scale environment can mean you have less control.

THERE IS AN APP FOR THAT! (SHADOW TECH)



The idea of Shadow Technology has been around a long time. Essentially the introduction of software tools by staff that have not gone through proper selection and procurement processes.

The simplicity of sign up processes for cloud technology can result in lots of different tools being used to support your business processes without your knowledge.

This can bring risk into your business in relation to data leakage, data privacy, increased costs and unknown processes.

DISCONNECTED CLOUD APPS



There are thousands of cloud applications supporting thousands of discrete business needs. As businesses adopt cloud technologies it is easy to end up in a situation where you have a bunch of solutions in use that do not play nicely together in terms of sharing data and processes.

Something to consider when selecting a cloud solution is to understand what other tools it plays nicely with.

SECURITY AND MONITORING COMPELXITY



With multiple cloud technologies being clear on your security posture and monitoring all of the apps gets a bit harder.

using two factor authentication and password managers using unique passwords become really necessary to prevent password reuse and account compromise. Alternatively an increasing number of solutions offer federated or single sign on where you can authenticate using a primary login like Microsoft or Google.

Verifying staff are using systems securely can get increasingly complex.

VARIABLE SERVICE AGREEMENTS



Cloud technologies each come with specific terms and conditions, support and service level agreements. The more cloud tools in use the more diverse these might be.

Be mindful of critical cloud solutions and what exists in terms of

- solution resilience and uptime,
- support : hours and days of service, timezone, location of support staff.
- data privacy and security
- ability to extract your data in the event of changing systems

RELIANCE ON THE INTERNET



Cloud technologies have exploded as a result of greatly improved internet speeds and stability.

However this has created a reliance on the internet. No internet will often mean your business processes stop.

IMPLICIT



EXPLICIT



IN SUMMARY...

- there are significant productivity benefits to cloud solutions
- remember that cloud technology is managed by someone else
- but consider the wider business benefits, not just solving specific user problems
- make choices that meet your needs and risk profile
- consider your decision making process - what is important to be explicit about when making a decision



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