

Why Cloud Migrations Fail – some practical, key factors from the Trenches

It is widely accepted that cloud computing offers benefits such as agility, flexibility and scale.

There is also a shift in the financial model from capex to opex.

In order to maximise the benefits offered by the cloud, as well as leverage and properly manage the financial model, changes are required across the organisation, particularly in larger organisations.

Changes and plans for changes must be made for the organisational structures and processes (people and processes) as well as the technology which the organisation wishes to migrate into the cloud.

Practical experience and challenges observed in large cloud migration projects show that many organisations did not anticipate and were not ready for challenges such as

- 1) Impact of the changes to the political climate and organisational structure;
- 2) Preparing for the necessary changes in organisation behaviour, culture and ways of working
- 3) Upskilling, training and employee communication.

These are non-technical issues which can and often are overlooked by what is seen by senior management as a purely technical domain (i.e. cloud migration). Certainly, there is a purely technical side to the cloud migration coin, however, the non-technical aspects are often overlooked. These non-technical aspects have the potential to derail otherwise well intentioned, valid cloud migration initiatives.

Lets briefly touch on each point above in the context and practicality of what happens during cloud migrations.

People don't like change – especially if they feel threatened by potential loss of influence (turf, staff, influence etc.) and the uncertainty which follows cloud driven changes. There are always numerous touch points (departments, teams, etc.) in an organisation impacted by any decision to migrate to the cloud. These may have been unforeseen by decision makers.

An example of this is procurement. Traditionally organisations have always had staff working in procurement to procure IT resources, potentially with long standing relationships not just internally, but with various vendors built over many years. Cloud computing does not need a procurement department – or at least not of the size maintained traditionally. This realisation, when it comes, leads to resistance as people fear for their jobs – people use their networks and, in many cases, go to extreme lengths to sabotage the cloud migration - and succeed in doing so.

This example can also be seen in the 'traditional' IT organisation, where the entire org structure is resistant to the Cloud migration for all the same reasons – protection 'of turf' by senior management all the way down to junior staff members, fear of losing their jobs, etc. Another factor in this equation is mindset – the 'we have always done it this way' mindset, where staff are resistant to change and fast, agile ways of working for any number of reasons, and one of the reasons why many 'agile' projects and methodologies fail in 'traditional' environments.

So, what can be done? First the groundwork and lines of communication with staff at all levels must be thoroughly planned and invested in. Time and funding must be allocated to ensure the

message/communication is right from the onset. Channels of communication via forums, regular meetings etc. are in place to allay peoples fears and put minds at rest as best, and as soon as, possible. There will be inevitable redundancies, or re allocations as a result of a cloud migration, and it is best to get these out of the way as soon as possible, so the rest of the workforce can get trained, educated, and prepared for the new structures and ways of working.

Training and upskilling will play a huge part in the success of the cloud migration process. For instance, procurement team members tend to have good accounting skills and existing relationships with finance for instance. These skills and relationships can be immediately leveraged by retraining procurement staff in how cloud billing works, chargebacks to various departments, setting budgets per department, division, etc. Most people tend to settle in after the initial shock/resistance mode and enjoy the new skills and challenges brought about by the new ways of working, particularly once the threat of losing their jobs/livelihood is addressed.

The same applies to other departments more directly related to cloud migrations such as engineering. By investing in communicating with existing staff, investing in retraining them, staff feel valued and no longer under threat of losing their jobs.

Staff tend to buy into agile and CI/CD methodologies significantly more once they realise, they will be spending more time thinking about, and coming up with more creative (and interesting) IT solutions rather doing mundane, repetitive tasks which can now be handled by code and automated.