# 6R’s of cloud migration

## What is Cloud Migration?

Technology and time go hand in hand. Before the cloud era, we had a giant hardware system that required high maintenance and significant capital. But with time the technology advances and we got introduced to an entirely new concept of cloud. Although it also requires maintenance and capital the benefits are innumerable. One such advantage is that it is beneficial for all sizes of enterprises. Migration is a process of moving a software application from an existing infrastructure to another environment.

## Some of the benefits of cloud migration

         In case, the application you are using for your business is flourishing and you are experiencing a sudden surge in traffic. With this increased demand, the resource requirement increases. So in this case look nowhere and go for a cloud-based solution for the application.

         The client always comes first and when the end-user wants a better performing application. Cloud is an all-time solution, migrating to the cloud gives reduced innumerable benefits with better performance and at a reduced cost.

          One of the main advantages of the cloud is that it’s easily scalable. Storage issues can be easily managed with a cloud-based application solution.

         With the teams scattered across the globe, with cloud options world seems to be a global village. It allows the employees to work as a team through internet solutions.

This article covers the 6 migration techniques that organizations usually implement to migrate applications to the cloud. Application migration is a tricky job; it requires meticulous planning to achieve the desired results. The organization needs to ponder upon various factors before moving the application to the cloud. Understanding the complexity of the application is the first step to the process. It involves determining which part of the application needs to migrate first and in which order, what are the interdependencies that need to be taken care of, the existing license agreements, etc.

## 1R Rehost

The method involves maintaining the data, business logic of the application across architectures. The technique is carried out when organizations want migration with very little changes. This technique is also known as “lift-and-shift”. It usually happens when a legacy application needs to be modified to meet certain business requirements. An organization was able to save 30% of the application costs just by rehosting. Some of the rehosting tools are AWS VM Import/Export, CloudEndure Migration.

## 2R Re-Platform

This method involves making a few modifications here and there to achieve cloud migration. The minor changes would involve migrating to a different database like RDBMS for instance. It does not involve any change in the core architecture of the application. The technique is known as “lift-tinker-and-shift”.

## 3R Repurchase

As the name suggests the migration involves purchasing new products to facilitate the changes in cloud architecture. However, this technique would work only for applications already on the cloud. For this, the organization needs to identify the legacy application and compares it with a cloud based application available in the market. This way they would find several applications that solve the purpose with better features. Some of the common trends observed in the market are moving a CMS to Drupal, a CRM to salesforce applications.

## 4R Refactor

This technique would require a complete alteration to the very core of the application. It is often done when organizations need very strong cloud features for the native application. The technique is also called as Re-architect. This might also include transitioning of applications to microservices architecture from a monolith. Such drastic transitions require a considerable amount of money, time, and the risk involved is also pretty much high. But this method would prove highly beneficial in long run.

## 5R Retire

Sometimes the application does not require an overhaul of the architecture; it just needs scraping the redundant processes, services to make applications perform efficiently. To fulfill this, few things need to be taken into consideration

  Go through the project to identify unessential parts of the application. Scraping off the unnecessary services, processes will result in cost reduction.

  There might be some plan to close the application or merge with the existing project. This would require the application to shut down completely.

## 6R Retain

The cloud migration is not limited to just scraping the old processes, services, and tools. It also takes into consideration the resources that need to be retained in the process. This would save effort and time. There could be several reasons to retain the resources

  The organization’s business principally revolves around existing applications.

  The legacy application does not fully support cloud architecture.

  The application is working perfectly and does not require new enhancement or modifications.