Cloud BI Solutions Architecture

What is Cloud BI?

Cloud BI is the use of cloud services to store and process data in order to provide valuable information to your business. The wide range of services that are available and the efficiency with which we can utilise them means that this work can take a lot of different forms.

Why should I use it?

The flexibility provided by utilising the enormous capacity available in the cloud whenever you need it and not paying for it when you don't, means that you can get more valuable information to your business sooner and at lower cost. The risk is also much lower - you can have experimental projects without any ongoing commitment to pay for infrastructure.

Can you help us work out how to use it?

Yes - our consultants at Cloud BI Limited have extensive and deep experience with many of the AWS services, especially Redshift, and both of our co-founders are qualified AWS Solutions Architects. We also have strong capabilities outside of the specifically technical cloud services area and this combination allows us to design and implement complete systems that work.

There are many functional aspects of a system for which services are provided in the cloud which can be used at low cost and with a short setup time. For example, the autoscaling functionality provided by AWS means that there is little effort involved in making infrastructure far more robust than more traditional solutions. Our experience with and knowledge of the available tools and also with BI and data warehousing means we are able to save you time and money by designing an efficient architecture.

Some of this work involves making sure a system such as a data warehouse has the most appropriate set of associated systems and processes, such as logging and alarming mechanisms.

Some of this work can be a requirement for extension of functionality of a system. For example, our consultants were asked to create a mechanism to replicate the processed data from one Redshift cluster to another. There was no core Redshift functionality to do this, and there were tables with over 5 billion rows in, so simple unload/load mechanisms were not viable. Our knowledge and creativity led us to a selective publish-subscribe model which satisfied all requirements and was easy to operate. We had the first version of this from request to running successfully in production in a single two week sprint.

Can you help us implement it?

Yes - our co-founders are architects, and are also able to get involved with implementation, including writing code. We also have several associates with extensive development experience.

We give our customers tremendous value and shorter lead times at low cost by preferring the use of existing services and open source tools rather than developing new products. Thus we find that the Solutions Architect role for Cloud BI projects tends to be most effective in a hands on capacity.

For the cases where new mechanisms do need to be created, our experience at requirements gathering and logical design, together with extensive automated testing means that the process is efficient.

Our experience with infrastructure and configuration management via CloudFormation and Puppet means that we can implement robust solutions efficiently and consistently. Cloud services offer an effectively limitless capacity for making more environments, but it's essential to have mechanisms that can build them correctly at short notice.

Our knowledge of cloud services best practices mean that we implement and enforce robust security.

Can you help us operate it?

Yes - and we're used to a quick turnaround on this type of work whereby we get components of the solution into production as fast as possible and then build on that, making use of short feedback loops to give more value quicker. This means that we don't typically hand over monolithic solutions at the end of a project - normally operations resources would receive components incrementally and we can optimise accordingly.

What extra value does Cloud BI Limited add?

With extensive experience of successfully using cloud services for business intelligence solutions, broad architectural skills and deep technical skills, and the ability to communicate effectively at all levels of the organisation, you can rely on us to ensure solutions are designed and implemented efficiently and effectively according to best practices.

When you need a custom solution, we have the ability to understand what you need, get creative with components available as existing services and tools, and then to implement them including developing the necessary additional components and orchestration. We're easy to work with and want to see you succeed.

To explore how we can help you further, please contact info@cloudbilimited.com