Azure Cost Review

Right size | Right architecture | Right spend

On a regular basis we are helping organisations to significantly reduce their Azure spend. There are many ways to achieve the same outcomes in Azure, but some are more expensive than others. With more than a decade of experience in optimising cost/performance in Azure, we can help you spend less and get more.

Our process goes through the following steps:

1. Understand your current application and infrastructure architecture.
2. Analyse your current spend and utilisation in Azure.
3. Provide you with a set of options and recommendations for how you can reduce your Azure spend.
4. Help you to implement the plan.

Each step is outlined in more detail below.

Current Architecture

| Area	Example questions
What is your application architecture?	• What is the logical application architecture? • Is it amenable to queues or does it need to be synchronous? • How "spiky" is the usage?
What does your infrastructure look like?	• What Azure resources have you got deployed? • Where is data stored? • What different kinds of data do you have? • Do you have multiple environments (Live, Test etc)?
What is your code like?	• What languages and frameworks do you use? • How likely is the code to require "high trust"? • What operating system(s) can the code run on?
What monitoring do you have in place?	• Application trace logs? • An APM tool?
What about your team?	• What skills does your team have in relation to the cloud? • What capacity do you have?

Analyse your current spend

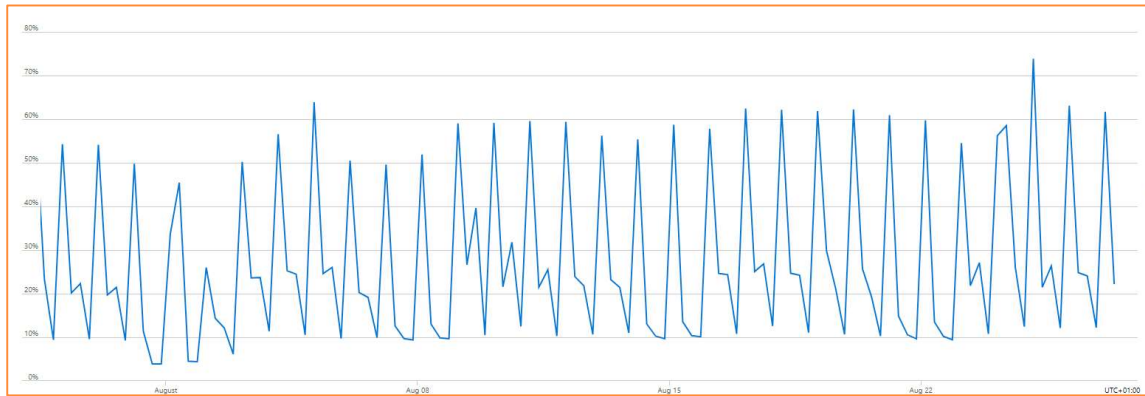We will analyse your current cost and utilisation.

Overall

We will look at where you are spending the most to help focus in on where the most benefit can be obtained.
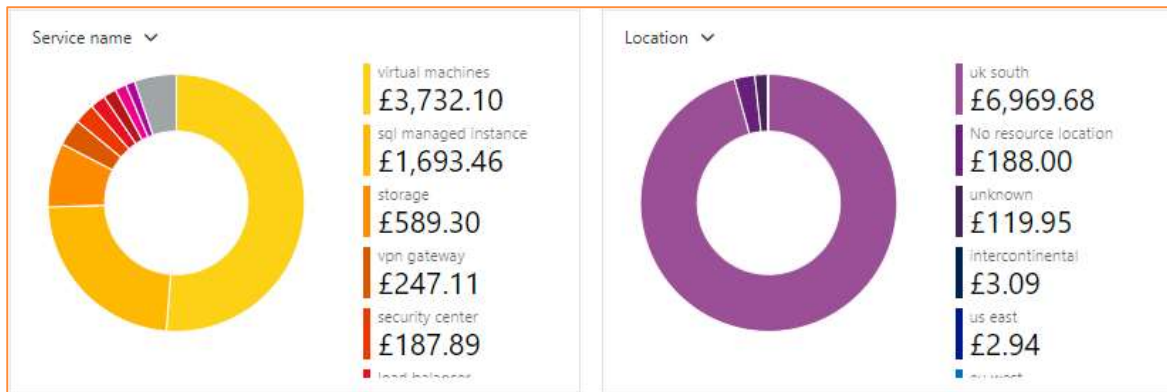
For each area

We will look deeper into the different areas of spend, to understand how that spend is made up and how much you are utilising those specific resources.

Notes:

1. *In order to do this analysis, we will need access to your Azure Subscriptions(s) with Reader access.*
2. *Some Azure CSP's have not enabled the option to let their clients view costs in the Azure Portal. If this has not been enabled for you, please ask your CSP to enable this for you as we won't be able to analyse the costs otherwise.*

Analyse options

Once we have the spend and utilisation data, we will review each resource area to identify where savings may be made in accordance with our internal checklist. This includes, but is not limited to;

- **Right-sizing**. Do you use the appropriate scale or performance tier for your purpose? Azure will often default to higher performance tiers than are required.

- **Scaling opportunities**. Can you use scheduled scaling to reduce the number of servers at quiet times? Can you use auto scaling to only spin up additional servers when needed?

- **Sharing of resources**. Can you share resources between different services? I.e. using SQL Elastic Pools, share an App Service Plan between different web sites and function apps etc.

- **Architecture changes**. Are there architecture changes you could make to reduce the cost? For example by moving some types of data to cheaper options or using queues to reduce the always-allocated capacity.

- **PaaS vs IaaS**. Generally speaking Infrastructure-as-a-Service (i.e. Virtual Machines) is often more expensive and have higher total-cost-of-ownership than Platform-as-a-Service. Are there opportunities for moving IaaS to PaaS?

- **Unnecessary services**. It is common to deploy certain services either out of habit when coming from an on-prem background or because Azure defaults to suggesting them.

- **Reserved Instances**. Azure gives you substantial discounts on compute cost if you are willing to commit for one or three years in advance (you can still pay monthly).

Note: We will usually require one or more follow-up calls with you during this process to clarify various aspects.

Provide options

We will provide you with a series of options for how you can reduce your cost, similar to the following.

Service	Cost	Change	Impact	Confidence	Ease	Additional benefits
SQL	£5,000	Managed Instance	£1,500 - £3,500	6	7	Better resilience and access to other Microsoft services that are available with Managed Instance, such as logging and some security features.
		Change to Standard license	£2,000	2	6	
Storage	£2,500	Switch to Blob storage	£750 - £1,250	7	10	
		Switch to Cool tier	£100 - £150	6	9	
Web front-end	£450	Scale Set	£100 - £250	8	6	
		Azure Web Apps	£100 - £250	3	4	Better resilience and security. Lower management overhead (i.e. lower TCO).
Function Apps	£360	Combine to one	£150	2	4	
		Reduce scale	£150	7	6	
Reserved Instances	N/A	Use Reserved Instances	£800 - £1,200	7	10	

Note: This is just an example – the list is usually a lot longer.

Implement

NewOrbit can help you implement some or all of the suggestions;

- We can help to make the configuration changes in Azure.
- We can work with your development team to investigate further what code changes may be required to implement other changes.
- We can help design the architecture you need to make better of use of cloud capabilities to reduce cost and increase scalability.