CLOUD ADOPTION MATURITY:
FOUR STAGES OF THE DATA JOURNEY

What is Cloud Adoption Matrurity?

Most of us are steadily moving toward the cloud, with most businesses planning to migrate to the cloud or expand their cloud footprint within a few years. But how do you get where you want to go? Take a look at the different stages of the end-to-end journey and learn what it takes to get to the next level.

Where is your organisation on the data journey?

Phase one: Cloud Discovery

1

Your company data may still be in on-premises data warehouses at this stage. But you are starting to think about the cloud. You may even have some data in the cloud already, but you're looking to both expand your cloud presence, and see what you can do in a more powerful, scalable environment. In terms of architecture and data, you know what you have, what you want, and what you definitely don't want going forward.

Questions to Consider
- What is your desired business outcome?
- What is your budget and anticipated ROI?
- What are your concerns about moving to the cloud?
- What are the different use cases for data in the cloud across your business?
- What are your infrastructure security needs?

Main Drivers
- Replace what you have and reduce costs
- Reduce time and resources spent on data management
- Gain faster data performance and more current and accurate data
- Speed up reporting times

Barriers and Concerns
- Actually finding your data
- Security and governance
- The size and cost of a cloud data initiative
- Disruption to your business
- Knowledge of the cloud
- Vendor lock-in for your current data stack

Getting to the next stage
- Have defined goals and desired business outcomes from a cloud implementation
- Compare cloud architecture. Hybrid? One cloud? Multi-cloud?
- Research various cloud vendors
- Research various cloud data warehouses
- Run proofs of concept.
- Sambe Consulting can help you plan to get to the next stage

Timeline
Have a cloud presence in 3 months – 1 year

Phase two: Cloud Data Migration

2

At this stage, you have made up your mind and you are committed to moving over to cloud. You may already have chosen a cloud service provider and probably a cloud data warehouse. But there is still one question, where is your data currently? The next big milestone is actually loading your data into the cloud. Sambe Consulting can help you to tally up your data sources, connect to them, and move that data in an efficient, but considered, manner. If you are thinking about analytics, we can also set up and design the infrastructure you'll need to run business intelligence in the cloud.

Questions to Consider
- What is your amount of data sources?
- How will your data be transferred to the cloud?
- Do you want all your company data in the cloud?
- What must happen to your data once it is in the cloud?
- Do you need both a cloud data warehouse and a data lake?
- Do you know the difference between a data warehouse and data lake?
- If you want to do analytics, what's your plan for data transformation?
- Do you have any data security requirements?

Main Drivers
- Doing business faster
- Making better, more insightful decisions
- Modernising your business
- Speeding up reporting
- Improving business analytics
- Centralising your data
- Setting up a scalable infrastructure
- Building a future-proof platform for your analytics

Barriers and Concerns
- Need training - Employees have on-premises data skills but need cloud data skills
- The size and agility of your business
- The complexity of your migration
- Using old technology that may be holding you back
- The cost of your current infrastructure
- Managing your data during the transition from on-premises to cloud

Get to the next stage
- Identify the data sources that need to migrate or replicate in the cloud
- Identify use cases that have the most business value
- Create a plan for migration
- Determine whether you need a pipeline or a transformation tool
- Choose ELT and Analytics vendors that are built for the cloud
- Do proofs of concept for tools you are considering
- Start small, achieve success, then expand

Timeline
Want to move data into the cloud as soon as possible but need to do it in a considered way. Need to show ROI and value as soon as possible to gain wider support.

Phase three: Cloud Data Maturity

3

You are a relatively old hand at working with data in the cloud. Your goal now is to move faster and do more. You have an established cloud data warehouse and are probably already doing cloud based business intelligence and analytics. You most likely have some sort of ETL process, but is it keeping up with the rest of your technology stack? You might be using a traditional ETL product that has been retrofitted for the cloud. Or you may be using a pipeline tool, but are spending a lot of time hand-coding transformations.

Questions to Consider
- Are you getting the right kind of insight to make informed business decisions?
- Do you have data sources that you are not able to leverage?
- What does data transformation look like in your business?
- How much time is spent on hand-coding to prepare data for analytics?
- What can you automate?
- What should you leave?

Main Drivers
- Getting more, better usable data
- Speed to insight
- Using technology that takes advantage of the speed and power of the cloud
- Compatibility with other products in the technology stack

Barriers and Concerns
- After loading data, there is no way to transform it
- ETL technology is designed for an on-premises data warehouse
- Lack of automation features
- Hand-coding is too time-consuming and costly
- Lack of time for experimental data analytics

Getting to the next stage
- Look at hardening infrastructure with safeguards for:
  - High availability
  - Disaster recovery
  - Git integration
  - Versioning

Timeline
Achieve faster time to insight and speed up ETL processes within 3-6 months

Phase four: Cloud Data Leader

4

You aren't just a cloud data veteran; you are leading the pack. How far can you go? Your organisation is data-driven from the ground up, with data science and analytics informing decisions in many parts of your business. You are regularly transforming data for Business Intelligence and analytics in the cloud. You may be experimenting with advanced analytics such as Machine Learning (ML) and Artificial Intelligence (AI). "Data-as-an-asset" is a driver for your business and product development. Data may even be your product. How do you stay at the forefront of data innovation?

Questions to Consider
- How to feature engineering for AI/ML models?
- How to load and transform more data for advanced analytics?
- How to enable data self-service across your business?
- How to ensure proper security and governance for widespread data access?

Main Drivers
- A 360-degree view of your customer, informed by as much data as possible
- Prescriptive or predictive analytics (next best action, lookalike modelling)
- Access to analytics-ready data for everyone in the business who needs it
- Product innovation/ data as the product

Barriers and Concerns
- Scalability
- Enough data for AI or ML
- Lack of governance/ security policies and data stewardship
- IT resistance to democratising access to data
- The learning curve and skills for advanced analytics

Get to the next stage
- Get educated on data best practices for ML
- Ensure that you have the right data and data sets for advanced analytics
- Ensure widespread data literacy across your organisation
- Get agreement and buy-in between IT and the business on what's needed for data self-service
- Put proper governance in place for data security and access
- Ensure that you have the right tools for the right roles

Timeline
Substantial innovation of business operations and outcomes within a year

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