

*CloudnLoud*

Community



TECH PLATFORM

# OUR COMMUNITY

<Open  
Source/>



meet-ups

# ABOUT US



Cloudnloud was started 11 years back with an intention of up-skilling and up-scaling all our members on the technical front with the niche topics around Cloud, DevOps, Data, AI and much more.

Cloudnloud was started by me, a cancer survivor since Jan 2011. I am helping the tech community and Cancer Children for the past 2 decades to loud from their own confidence in the IT industry. Officially registered as Pvt. Ltd. on Jan-2015, to extend help to cancer children from its revenue. Today Cloudnloud is living that dream with 7000+ cancer children survivors.

# OUR TEAM



Right from Solution Architects to Managers, you name it we have it. Our core team consists of like-minded professionals working in unison toward the same goal.

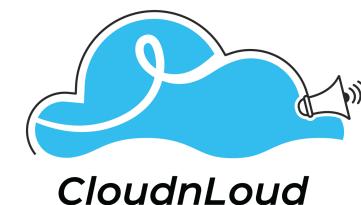
With techno-functional techies we are a strong team with various areas of expertise louding better!!!

# Our Objective

- We want to building a passionated technical community wish to contribute for Childhood cancer.
- We also want a platform for the individuals want to share their knowledge for the benefit of the community.
- Mentoring the technical community members to grow in their career through helping them to present in conference, technical live events and webinars.



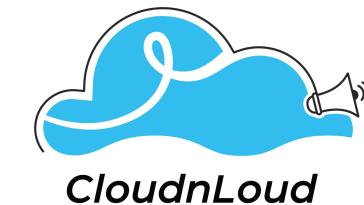
**CHILDHOOD  
CANCER**



Community

# Our Strength

- 4000 + Technology Meetups on Cloud & DevOps delivered across globe.
- Successfully delivered 640 corporate trainings and delivered 2000+ college trainings.
- Given career mentoring & Training to 1lakh + professionals in this 17 years



Community

# Learner's



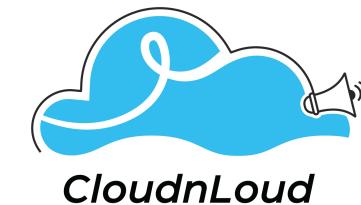
**cloudnloud Tech Community**



**cloudnloud**

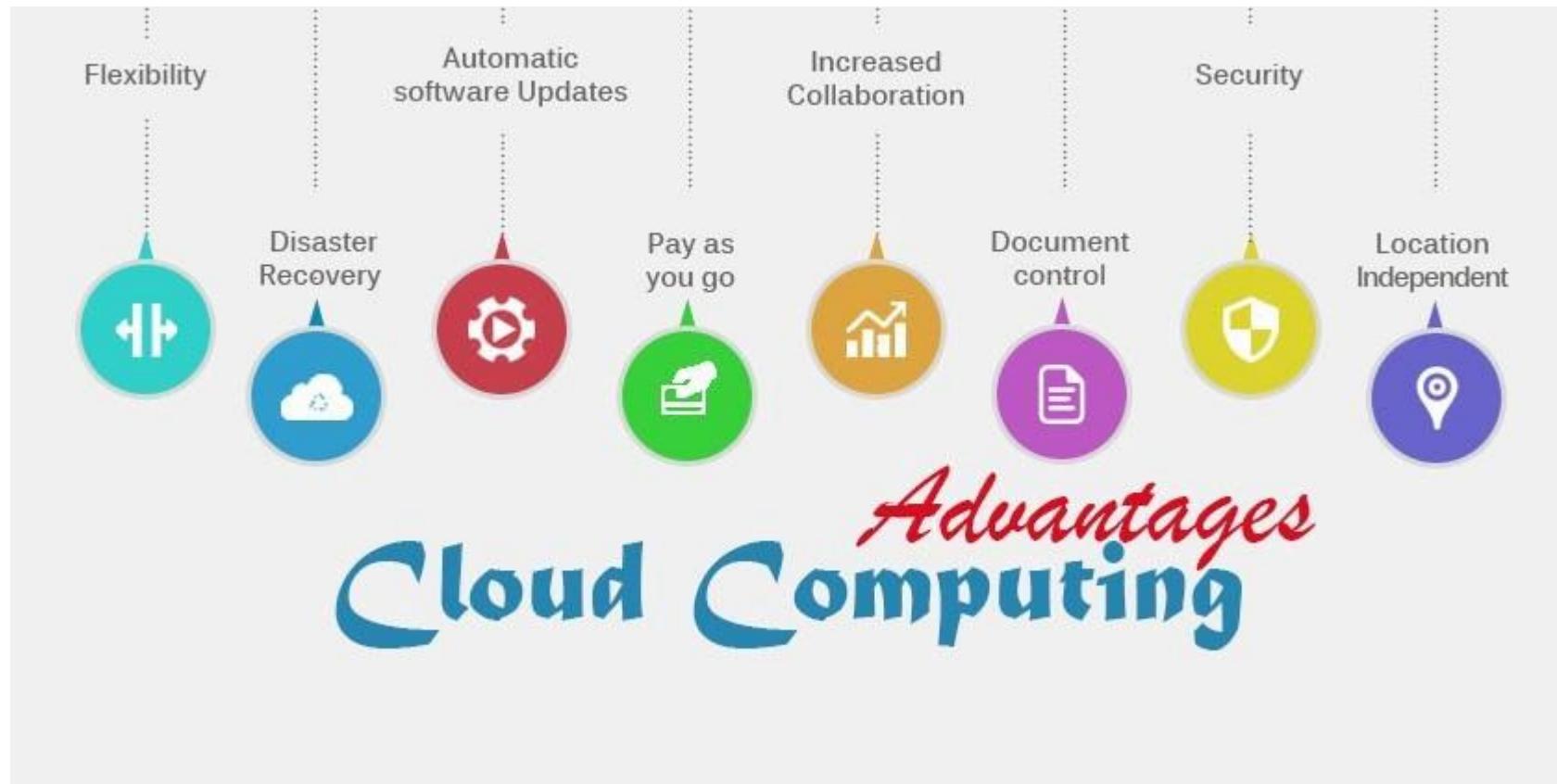


**cloudnloud**



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## 1. What are the advantages of Cloud Computing?



## 2. Describe the different cloud service models?

SaaS	IaaS	PaaS
<b>Why?</b> <ul style="list-style-type: none"><li>• Affordable</li><li>• Easily Accessible</li><li>• Ready to Use</li></ul>	<b>Why?</b> <ul style="list-style-type: none"><li>• Minimizes cost</li><li>• Enhanced Scalability</li><li>• Simple Deployment</li></ul>	<b>Why?</b> <ul style="list-style-type: none"><li>• Minimizes Development Time</li><li>• Supports Multiple Programming Language</li><li>• Enhanced Collaboration</li></ul>
<b>Who?</b> <p>An ideal choice for small-scale businesses</p> <p>Supports seamless communication, transferring of content, and scheduling meetings</p>	<b>Who?</b> <p>Right option if you need control over the hardware infrastructure</p> <p>Gives access to computing resources without the need to invest separately</p>	<b>Who?</b> <p>Suitable for projects that involve multiple developers and vendors</p> <p>It is flexible and delivers the necessary speed in the process</p>



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### 3. What are some of the popularly used cloud computing services?

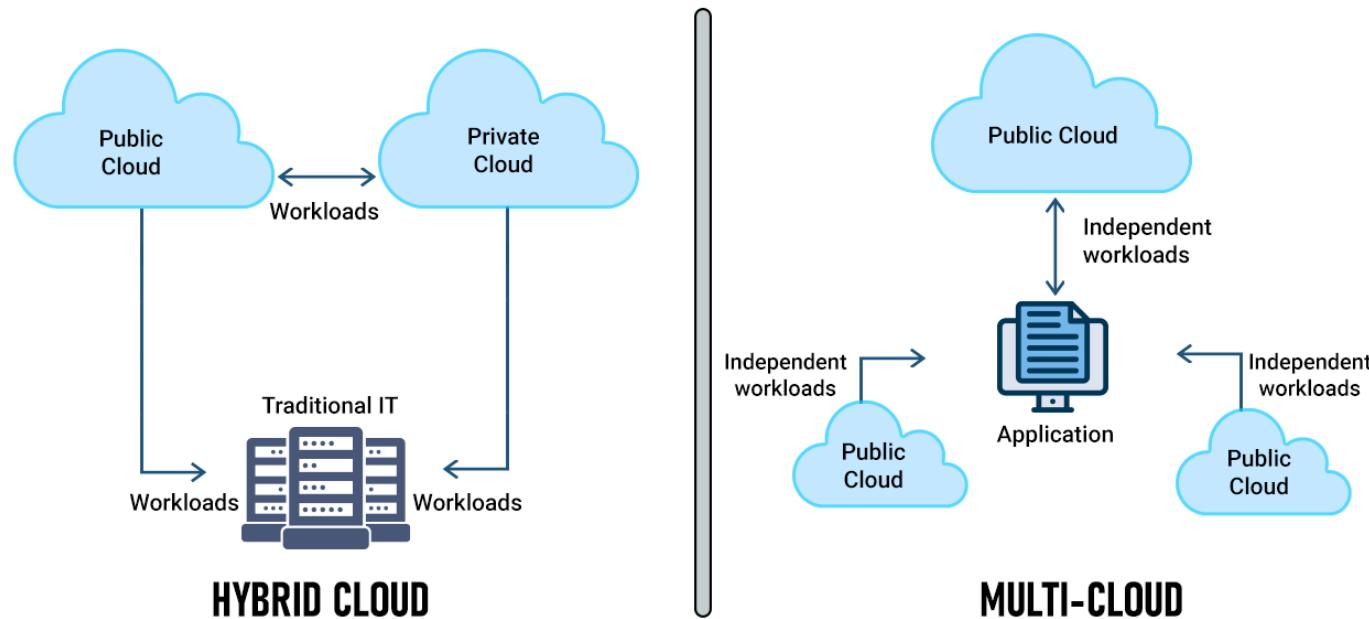
GOOGLE CLOUD SERVICES	MICROSOFT AZURE	AMAZON WEB SERVICES (AWS)	WHAT IT DOES
Google Compute Engine	Azure Virtual Machines	Elastic Compute Cloud (EC2)	Infrastructure as a Service (IaaS)
Google App Engine	Azure Cloud Services	AWS Elastic Beanstalk	Platform as a Service (PaaS)
Google Cloud SQL	Azure SQL Database	Amazon Relational Database Service	Database as a Service (DaaS)
Google Cloud Bigtable	Azure Table Storage	Amazon Dynamo DB	Scalable SQL database services
Google BigQuery	Azure SQL Database	Amazon Redshift	Relational Databases
Google Cloud Functions	Azure Functions	AWS Lambda	Serverless Applications
Google Cloud Datastore	Azure Cosmos DB	Amazon Simple DB	Highly Scalable NoSQL Database Services
Google Storage	Azure Storage	Amazon Simple Storage Service (S3)	Storage of object, blocks and files. Also for cool and cold storage of data.

#### 4. Define Hybrid Cloud

		
<p><b>Public Cloud</b></p> <ul style="list-style-type: none"><li>Services are owned and operated by a third party provider.</li><li>The maintenance is bared by the service provider.</li><li>Pay-as-you-go model. Thus, the setting and operating cost is less.</li><li>Lesser security as the platform is shared.</li><li>Lesser flexibility &amp; control over the cloud environment.</li></ul>	<p><b>Hybrid Cloud</b></p> <ul style="list-style-type: none"><li>Often called as 'the best of both worlds', it combines both public &amp; private cloud.</li><li>Greater flexibility &amp; more deployment options.</li><li>Cloud bursting is also possible.</li><li>Network complexities &amp; compliance issues.</li><li>Can be extremely expensive.</li></ul>	<p><b>Private Cloud</b></p> <ul style="list-style-type: none"><li>Dedicated to a single organization.</li><li>Higher security as the resources are not shared.</li><li>Greater flexibility to control the cloud environment.</li><li>Purchase and maintenance has to be bared by the organization</li><li>Expensive than public cloud.</li></ul>

## 5. What is the difference between the Hybrid Cloud and Hybrid IT?

### HYBRID CLOUD VS. MULTI-CLOUD OPERATIONS

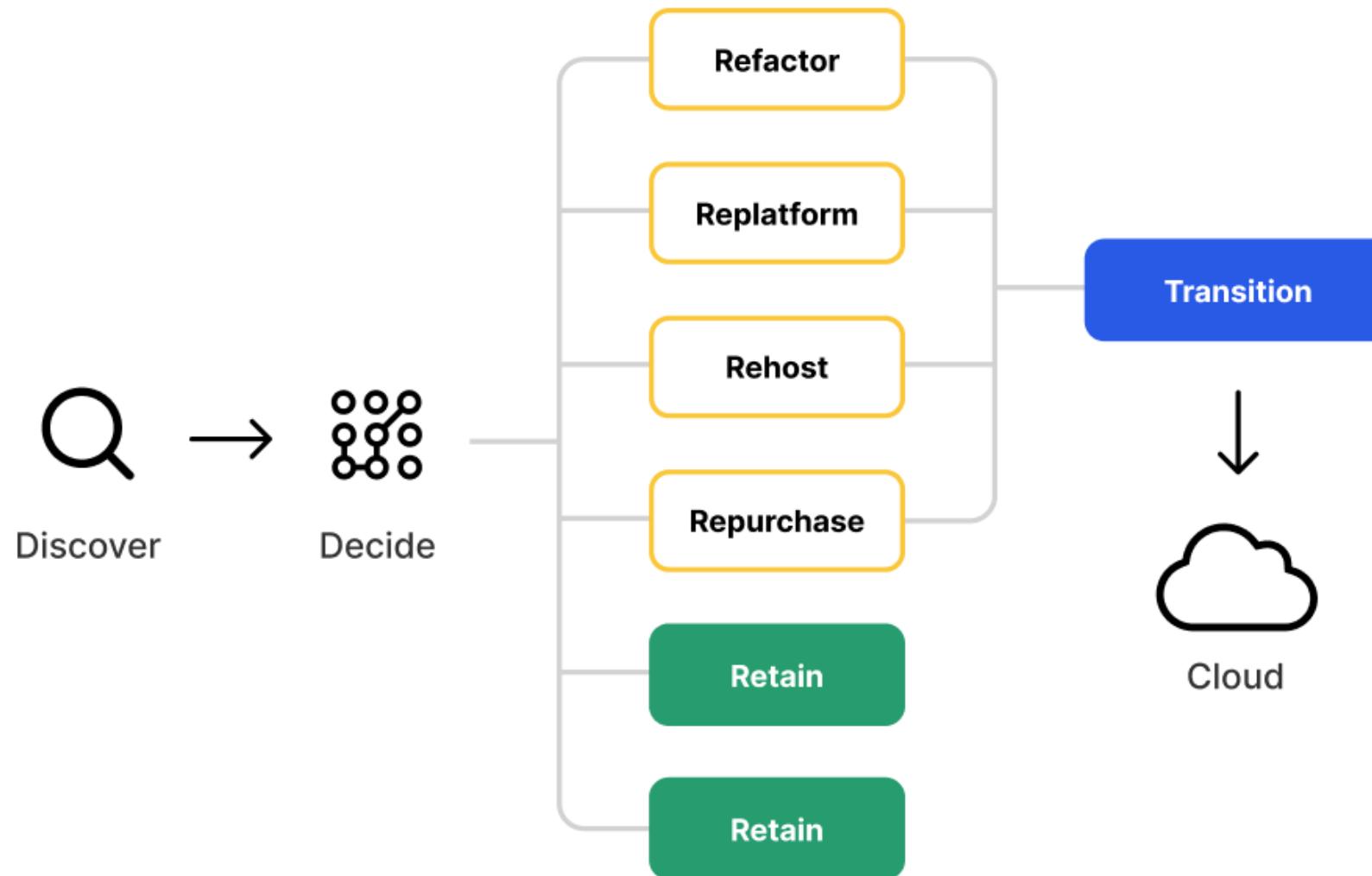


## 6. What is Cloud-Native

# Cloud-Native Architecture Patterns

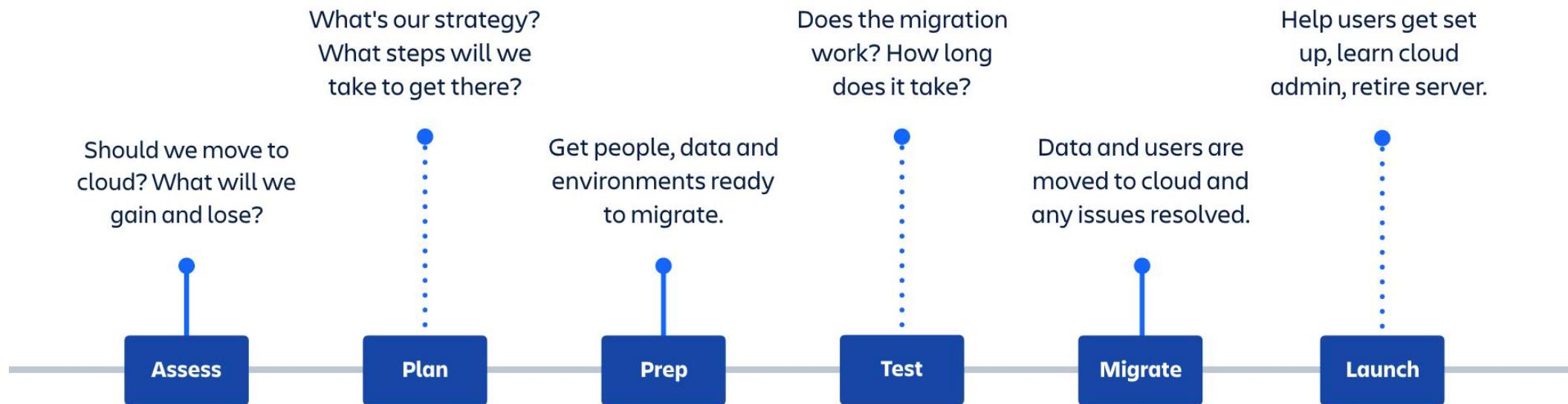


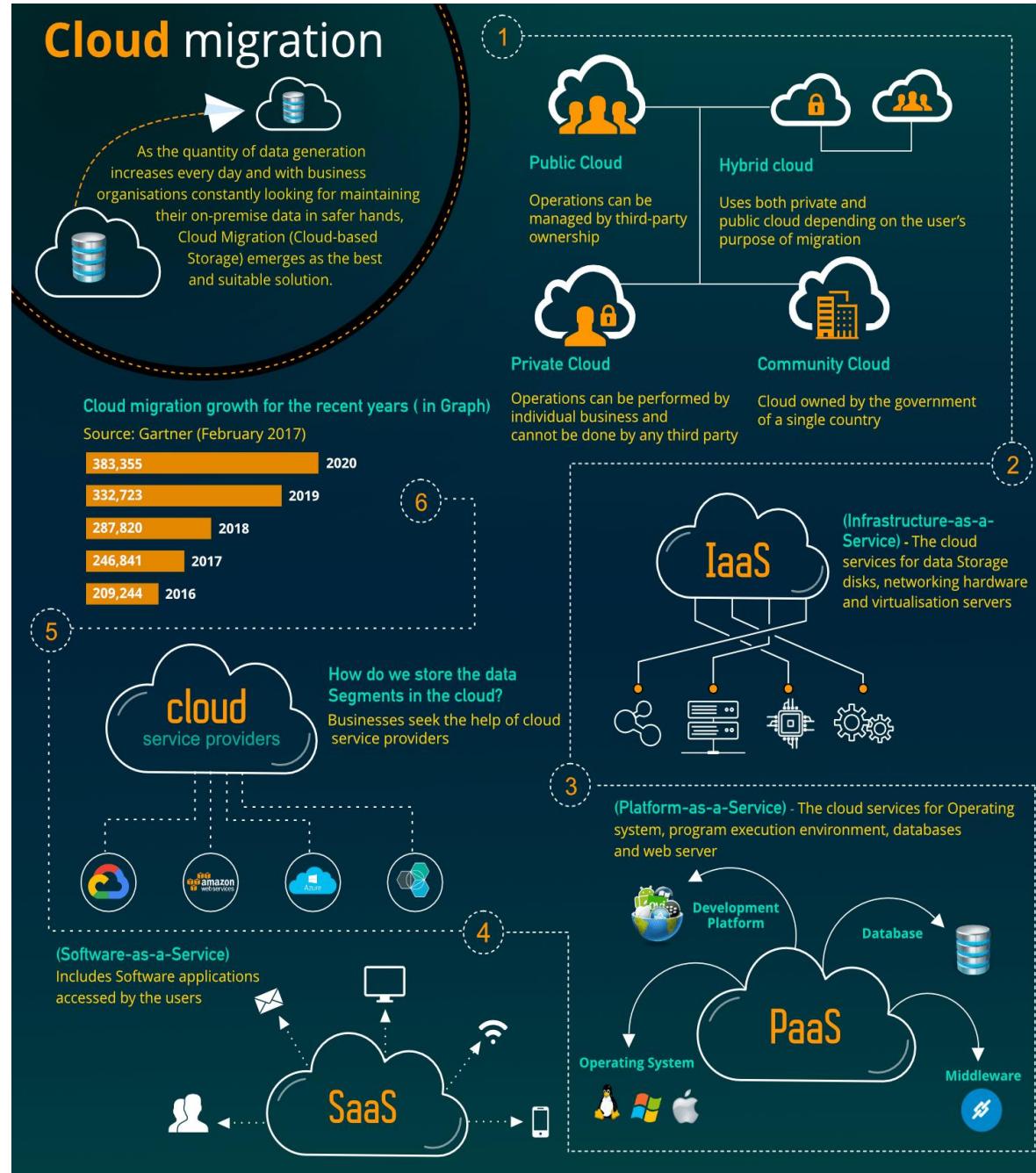
# 7. What is Cloud Migration



# 8. What is Cloud Migration - Phases

## THE PHASES OF MIGRATION





# The benefits of cloud migration

Moving your business to the cloud offers a variety of benefits, which can ultimately make your team more productive and your company more profitable. Here are some of the benefits of migrating your business to the cloud.

## 1. The cloud offers flexibility

Businesses often have fluctuating bandwidth demands, and a business in the cloud, allows you to upscale or downscale your capacity. Upscaling or downscaling can happen easily because cloud capacity draws on remote servers, and flexibility is part and parcel of the service.

Having a high level of agility can give businesses an extra advantage over their competitors as they are able to bring products to market quicker without being hamstrung by IT.

## 2. The cloud keeps data safe in case of a disaster

Adopting cloud can help your business implement an effective and affordable disaster recovery solution. Through the use of tools and services offered by service providers, systems and data can be easily protected and moved in a way that best suits your business in terms of its disaster recovery plans. Some examples include: replication to other clouds entirely (hot, warm and cold standbys), cloud backups with multiple copies, multi tier applications load balanced across multiple clouds.

# The benefits of cloud migration

## 3. The cloud provides automatic updates to infrastructure

A significant benefit of cloud computing is that it provides automatic software and security updates on the underlying infrastructure ensuring security best practices and resiliency in the platforms you choose to host your applications and data on.

Many service providers also offer full managed services to gain the same level of security, stability and resilience to the Operating system and mainstream applications. This gives you more time to focus on your business while keeping your data safe and secure.

## 4. The cloud saves you money on hardware

When you are using the cloud, it decreases the necessity for various hardware such as onsite data storage and servers. These large CAPEX investments happen on a 3-5 year cycle. This means that you will be saving money on hardware that traditionally would have been a necessity for your business. Many cloud providers offer a pay-as-you-go subscription model, which can be helpful for your cash flow.

# The benefits of cloud migration

## 5. The cloud promotes company collaboration and remote work

The cloud allows employees to collaborate on documents that they can share, access and edit at any time, from anywhere. Many businesses were left with no choice, but to introduce remote working [in light of recent events](#), and online collaboration has become an increasingly important part of many business strategies.

Using the cloud means that you can have your employees working from anywhere with an internet connection, and still meaningfully collaborate.

## 6. The cloud provides increased security

Using the cloud means that if a company laptop is lost or stolen you do not lose all of your data as it is backed up to the cloud. Additionally, if you experience load shedding or server downtime using the cloud decreases chances of data being broken or lost.

There are intelligent ways of ensuring that only the individuals that need access to the systems or data have access to them. Thus ensuring your data is always protected.

# The benefits of cloud migration

## 7. The cloud saves time

There are a few ways that using the cloud can save your business time. When you are collaborating on documents, your team can now share documents quickly and receive feedback quickly. Stopping an endless loop of email attachments.

Additionally, if you are using the cloud with a support service, such as Saicom, you will have support with your use of the cloud and the migration, where you can reach out to the service team at any time – no more waiting for the IT guy to show up! [Cloud computing overall saves time and effort.](#)

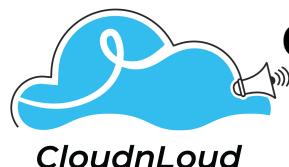
## 8. The cloud gives your business a competitive edge

Moving to the cloud provides a simple and efficient way to become more competitive. Through the cloud your business can have access to enterprise-class technologies regardless of your business size. This allows businesses of all sizes access to the same playing field.

# Cloud migration challenges

During the cloud migration process there can be a few challenges that you will need to be prepared for. These challenges include:

- **Interoperability** – the ability of computer systems or software to exchange and make use of information. You will need to ensure that your computer systems and software are still able to connect and share information correctly using new and old data.
- **Application portability** – the flexibility of an application when used on multiple platforms or when accessed from the internet, desktop or network. You will need to utilize applications and services across various domains, portability allows this.
- **Data integrity and security** – Data security is the protection of data against unauthorized corruption. Data integrity is the accuracy of your data. As you know keeping your data safe and accurate is an increasingly critical requirement .
- **Business continuity** – is the ability of your business to ensure that business operation and core functions are not severely affected by a disaster or some other unplanned event.



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# DevOps Roadmap



Python

## Assessment

*Looking to shift new technology*



*Do you have Google Cloud*



*Create your own lab*



*Post concepts fail many times on real-time use cases*



## Linux Administration

*Build Linux Server & Client Setup in your laptop*

*Learn hands-on and practice many times*

*As an fresher certification is not required in Linux*

## Cloud

*Learn Cloud how to design, How to size, How to automate via DevOps, AWS/Azure Services Administration*

## DevOps Ansible/Terraform

*Ansible DevOps doesn't require any programming knowledge*

*Learn Ansible how to automate server administration tasks, How to secure servers, How to provision cloud, How to automate application.*

*In this stage student can able to say that he can automate legacy (physical or virtual) and Cloud Infrastructure using Ansible.*

## DevOps Tools CI/CD

*DevOps Tools Automation Doesn't require any Programming Knowledge*

*Learn complete Jenkins application automation from Development to Deployment, Clustering, AWS/AZURE automation, Pipeline management.*

*In this stage student can able to say that he can automate complete DevOps cycle*

## Docker / k8s

*In this stage student can able to say that he can manage micro services application infrastructure in container's*

*Everything as a CODE*

**IaC**

## Certification

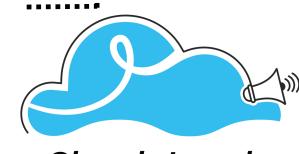
*Do*

- Cloud → AWS (or) Azure
- Automation → Ansible/Terraform
- Pipeline → CI/CD
- Micro Services → Docker / k8s

*Learn all the used cases with Hands-on*

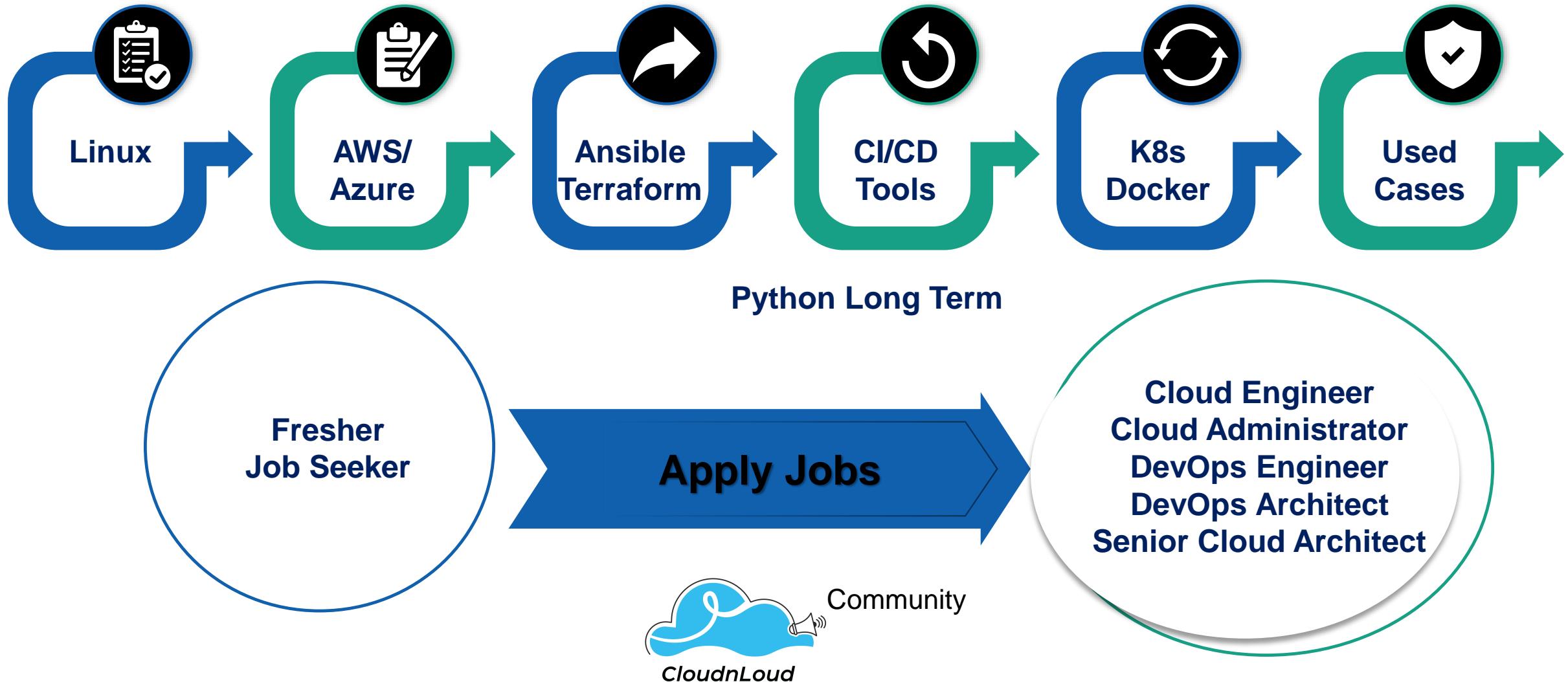
*Now you are up to the Job market expectation in the demand pool.*

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# Job Path?



# Cloud Engineer ?



# Cloud architect skills at a glance



# SOLUTION ARCHITECT ROLE

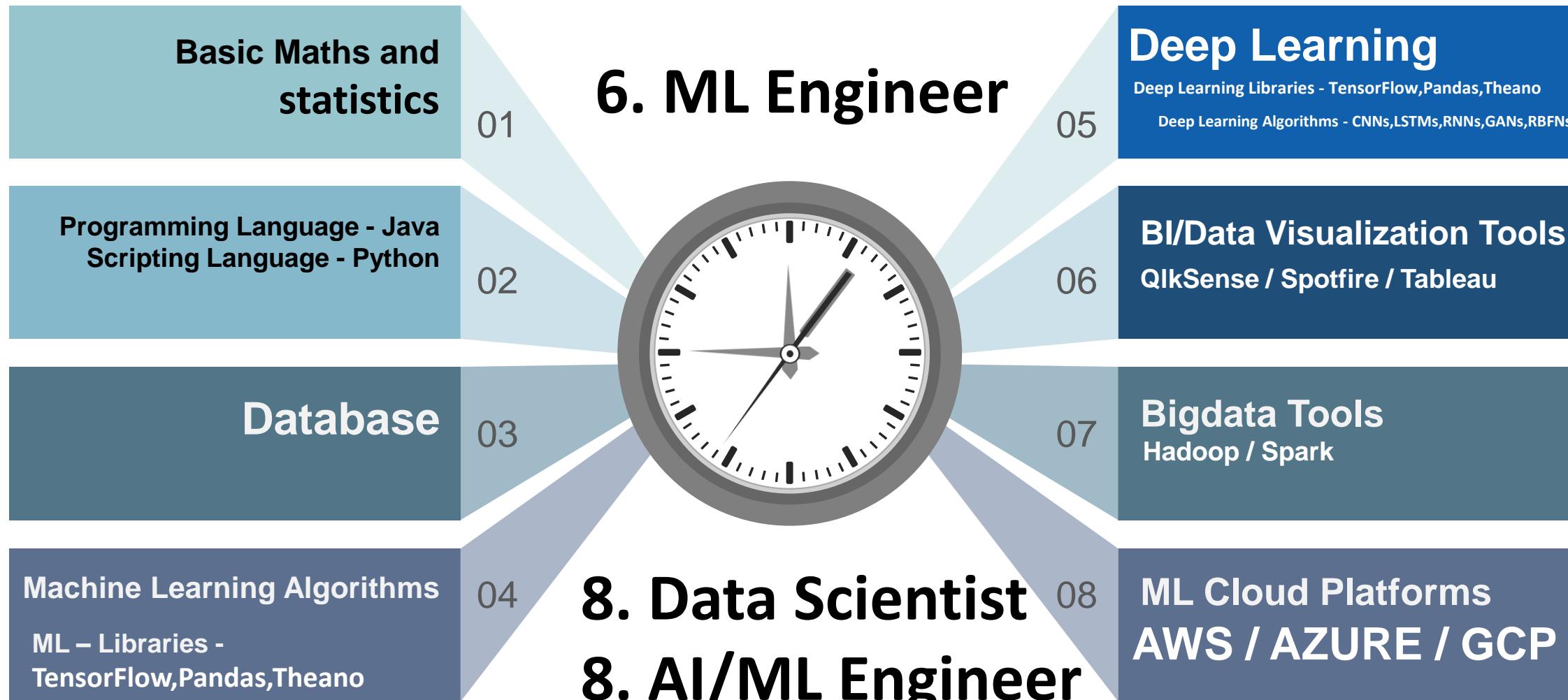
Responsibilities	<ul style="list-style-type: none"><li>✓ Analyzing technology environment</li><li>✓ Analyzing enterprise specifics</li><li>✓ Analyzing requirements</li><li>✓ Setting collaboration network</li><li>✓ Creating solution prototype</li><li>✓ Participating in technology selection</li><li>✓ Solution development control</li><li>✓ Project management support</li></ul>
Experience	<ul style="list-style-type: none"><li>✓ 8+ years in software engineering</li><li>✓ IT infrastructure and cloud development</li><li>✓ Engineering &amp; software architecture design</li><li>✓ Business analysis</li><li>✓ DevOps</li><li>✓ Project &amp; product management</li></ul>
Soft skills	<ul style="list-style-type: none"><li>✓ Excellent communication skills</li><li>✓ Analytical mindset</li><li>✓ Project &amp; resource management aptitude</li><li>✓ Collaborative work</li><li>✓ Persuasion &amp; negotiation skills</li></ul>

# Architecture Review Template - Topics

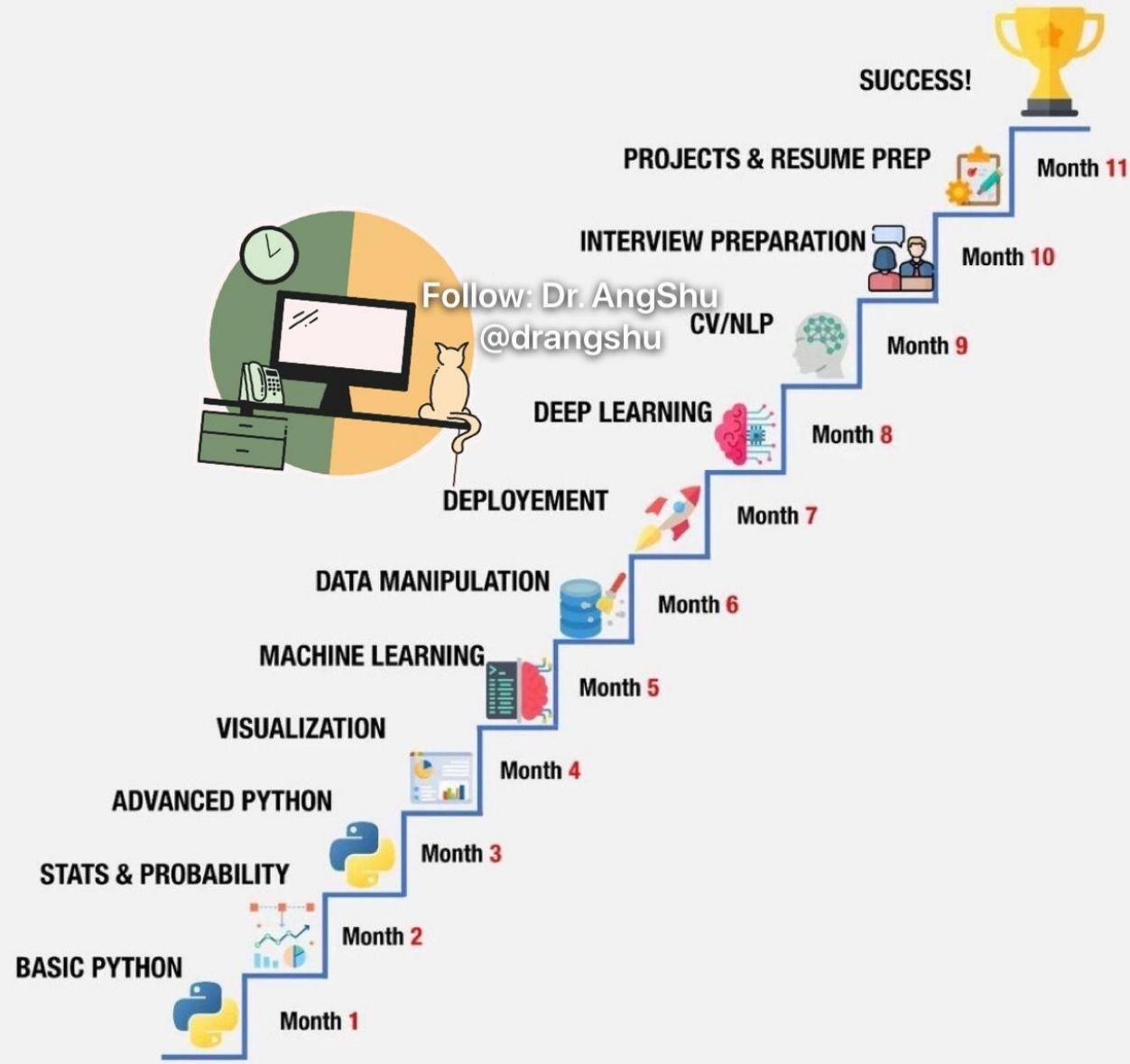
- 1: Problem Statement
- 2: Business case
- 3: Current System architecture
- 4: Proposed solution
- 5: In Proposed solution – What are the new Services and Why those Services ? [List each service and what is the purpose ?]
- 6: Proposed Architecture
- 7: Advantages of Proposed architecture
- 8: Conclusion
- 9: Q&A

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/containers/aks-microservices/aks-microservices>

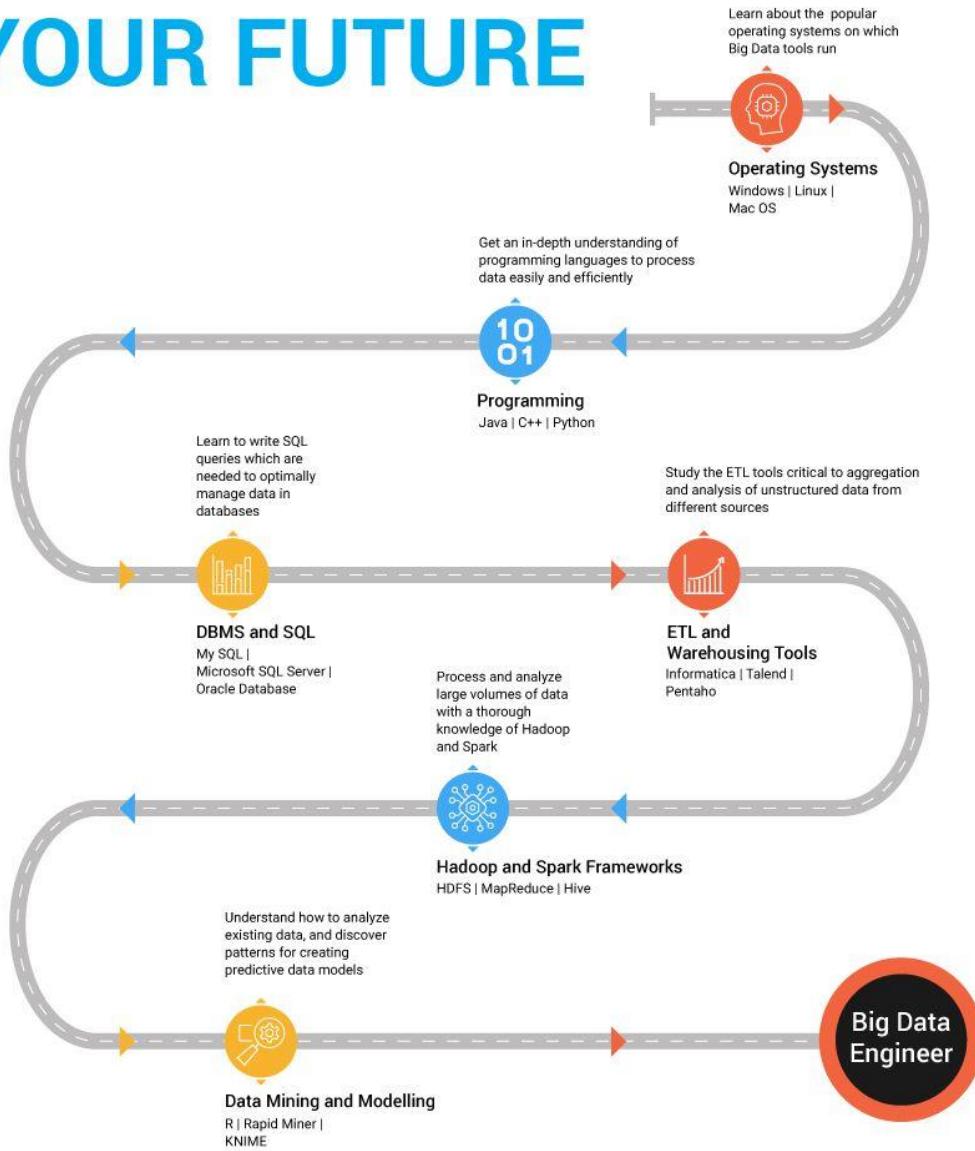
# Data – ML – AI → RoadMap ?



# DATA SCIENCE ROADMAP



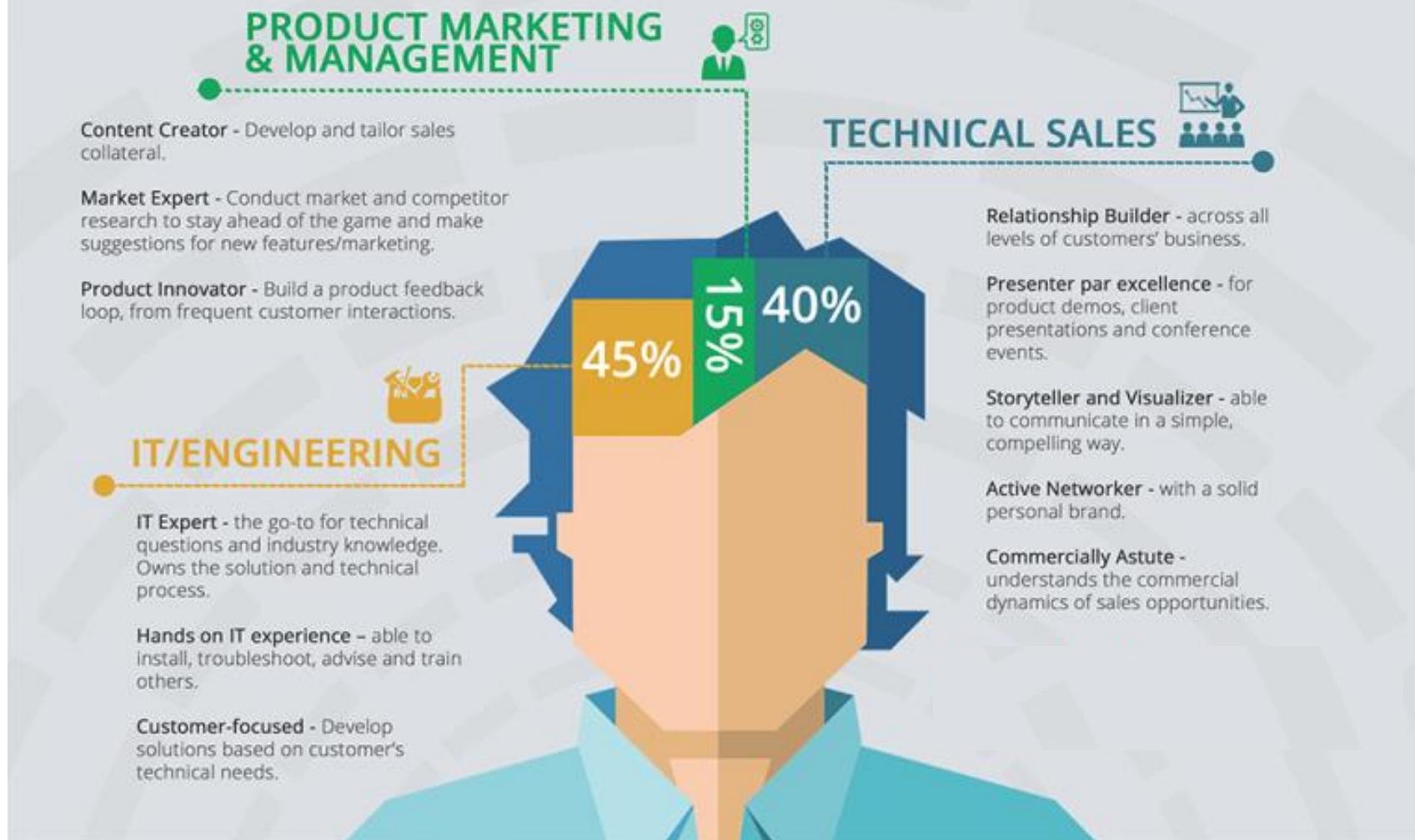
# MAP TO YOUR FUTURE

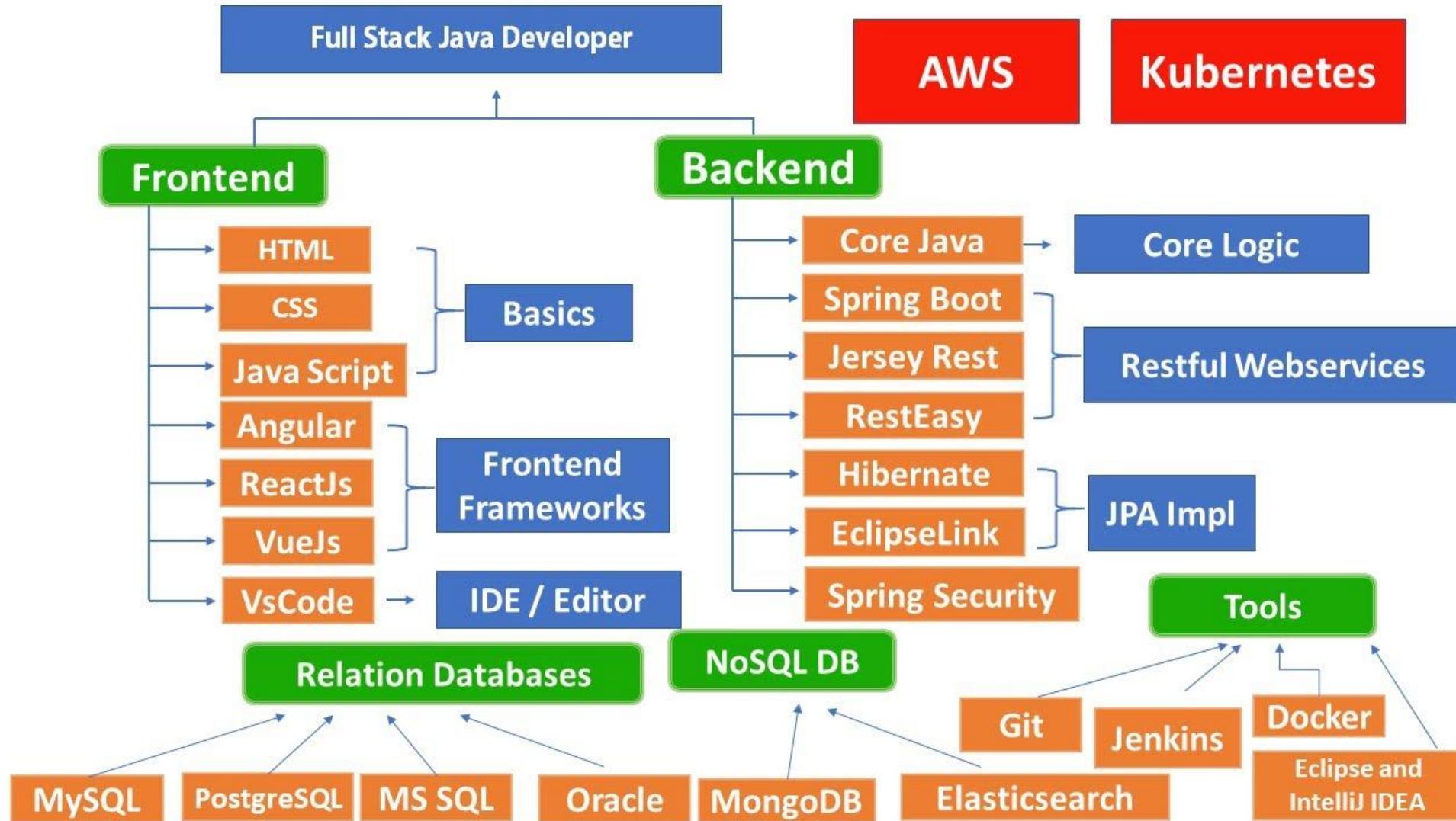


# How to become a Data Architect: Skills needed



# INSIDE THE MIND OF A PRE-SALES ENGINEER





# Full Stack Developer

## FRONT END

HTML

HTML5

Java Script

J Query

CSS3

## BACKEND

Ruby on Rails

PHP

Angular2

Node.js

.Net

## DATABASE

MySQL

MongoDB

CouchDB

MS SQL

## VERSION CONTROL

GIT

Grunt

Xdebug

Subversion

## PROJECT MGMT TOOLS

Basecamp

Jira

Trello

Redmine

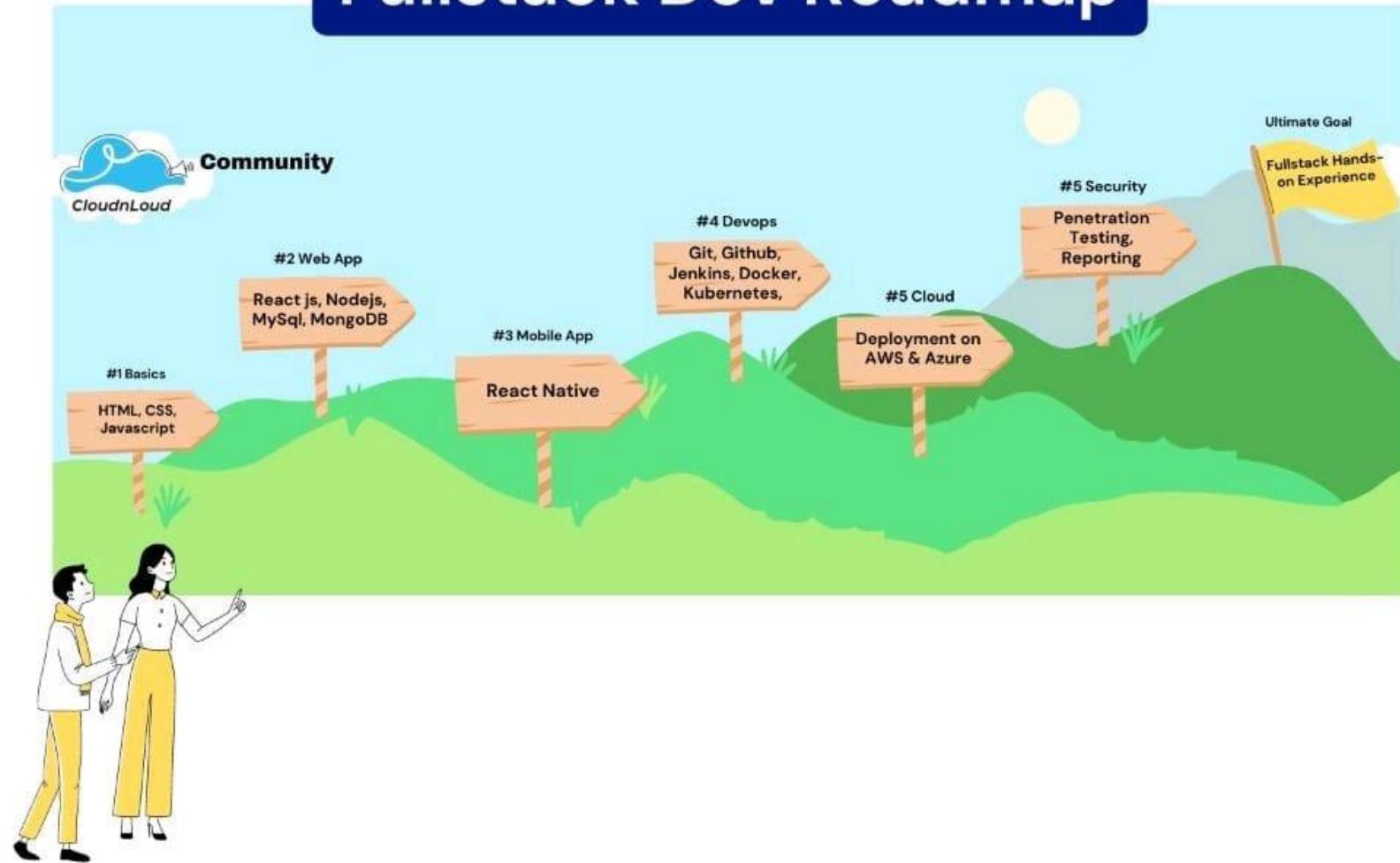
Teamwork



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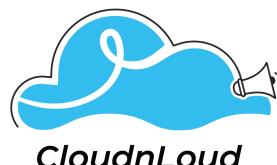
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# Fullstack Dev Roadmap



# Testing

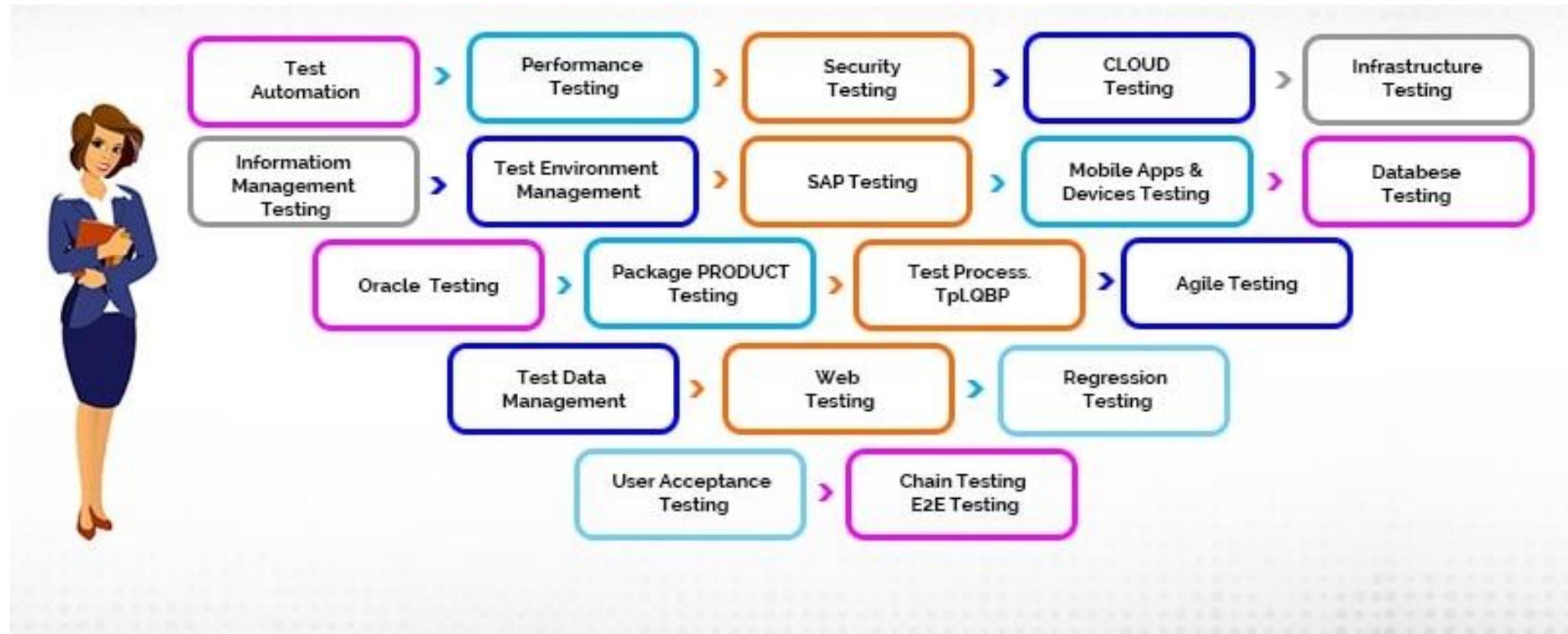
## Software Tester Career Path



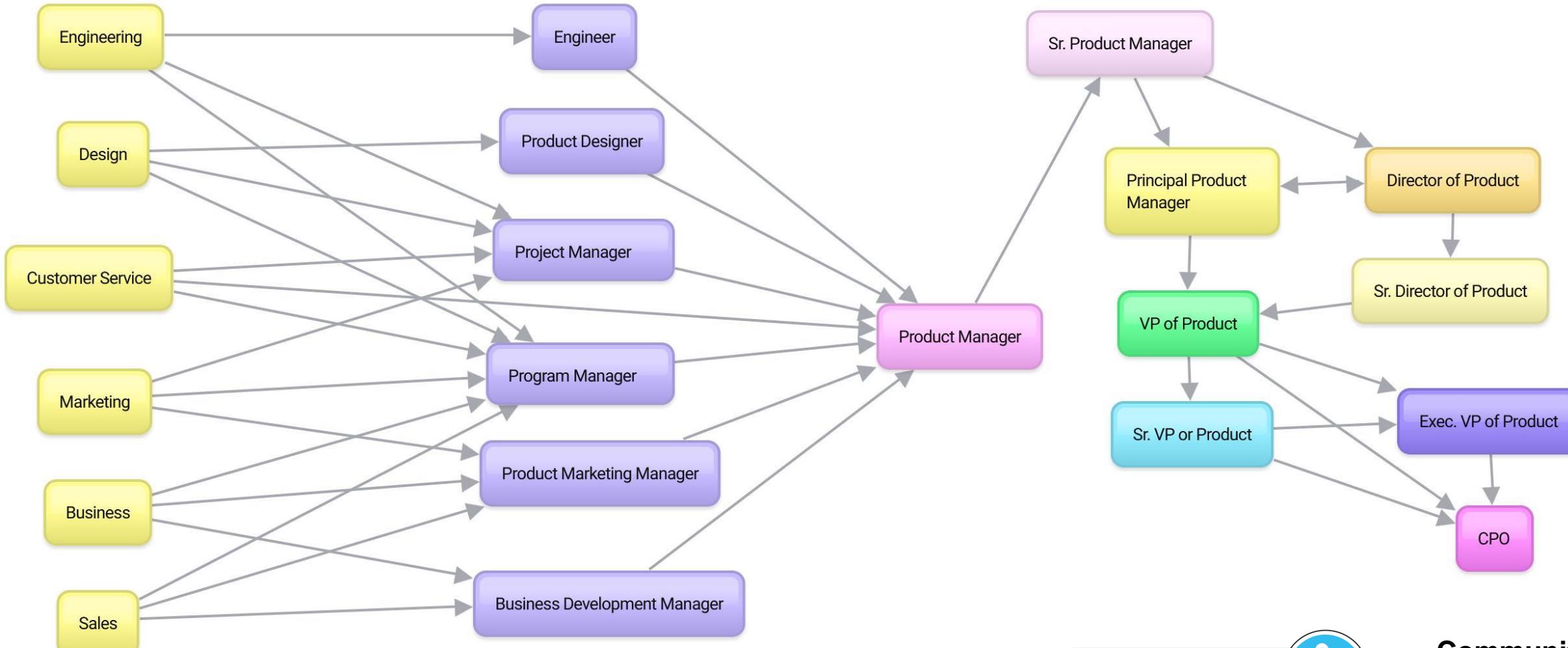
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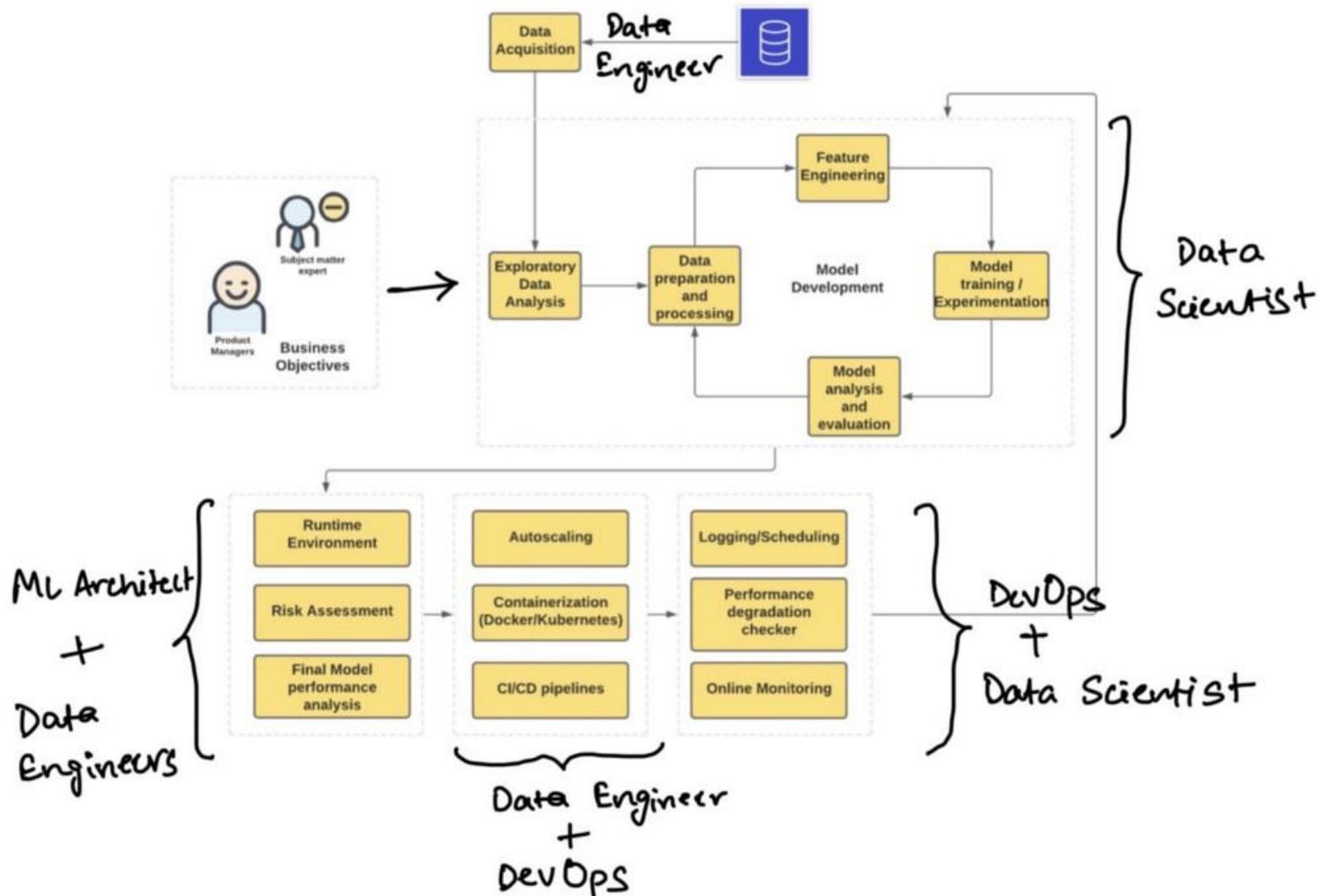
# Testing



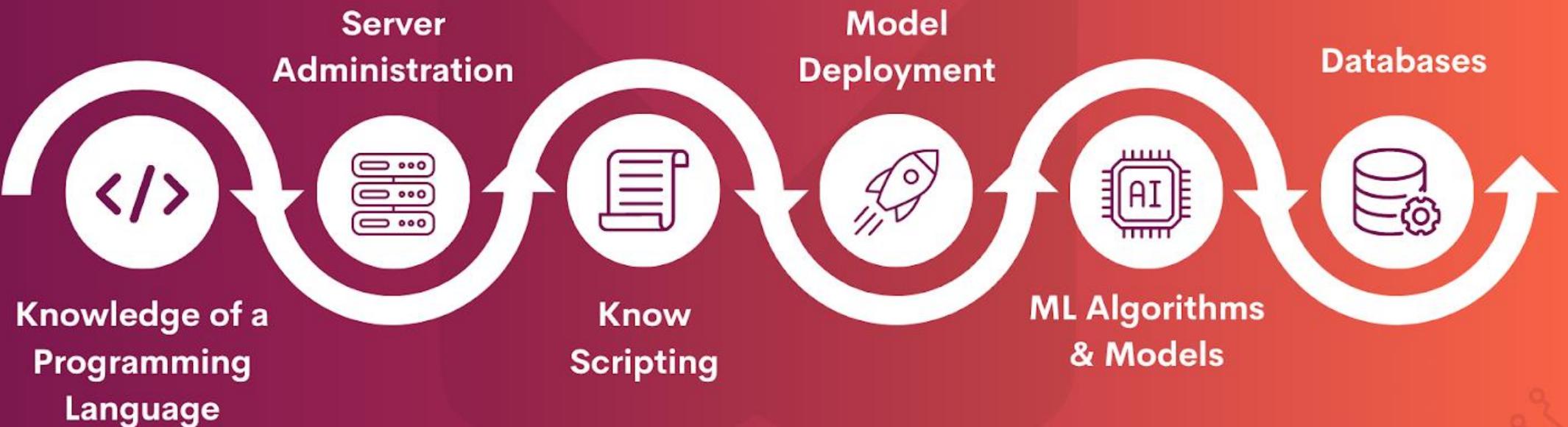
## Product Manager Common Career Paths - Road to PM and Beyond



# ML Engineering & Operations

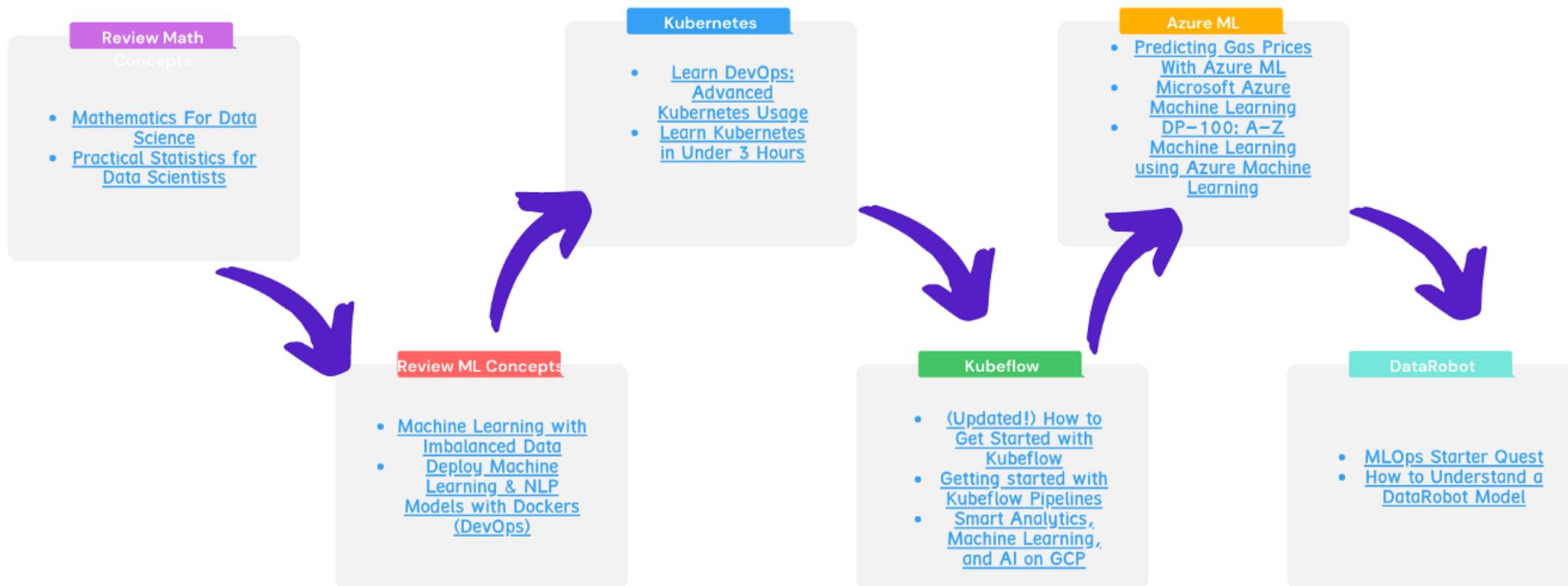


# Prerequisites of becoming an MLOps Engineer



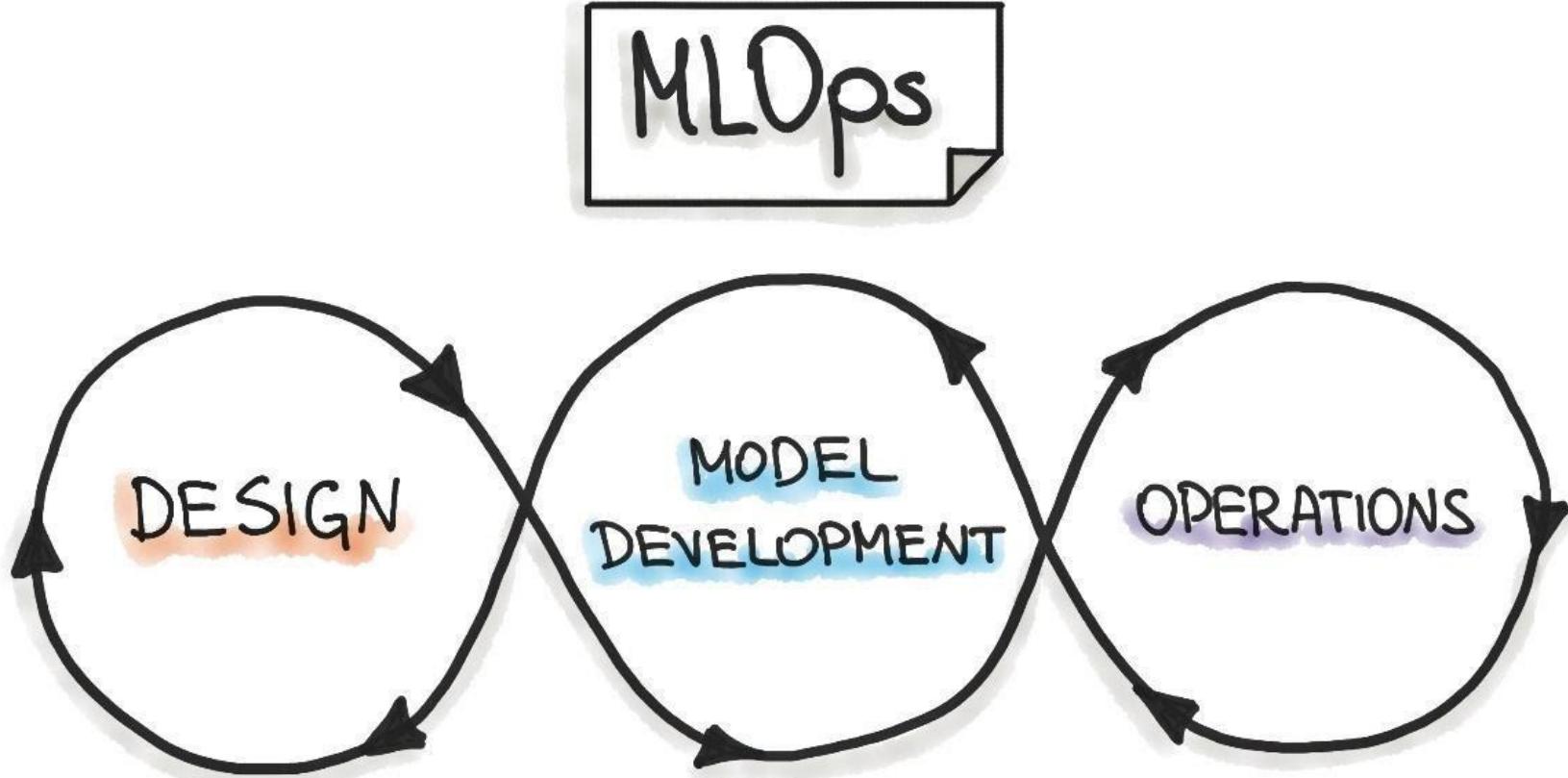
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log/roadmap-to-become-a-  
successful-mlops-engineer/](https://www.workfall.com/learning/blog/roadmap-to-become-a-successful-mlops-engineer/)

# MLOps Learning Plan



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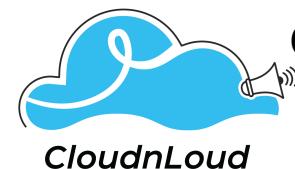
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- Requirements Engineering
- ML Use-Cases Priorization
- Data Availability Check

- Data Engineering
- ML Model Engineering
- Model Testing & Validation

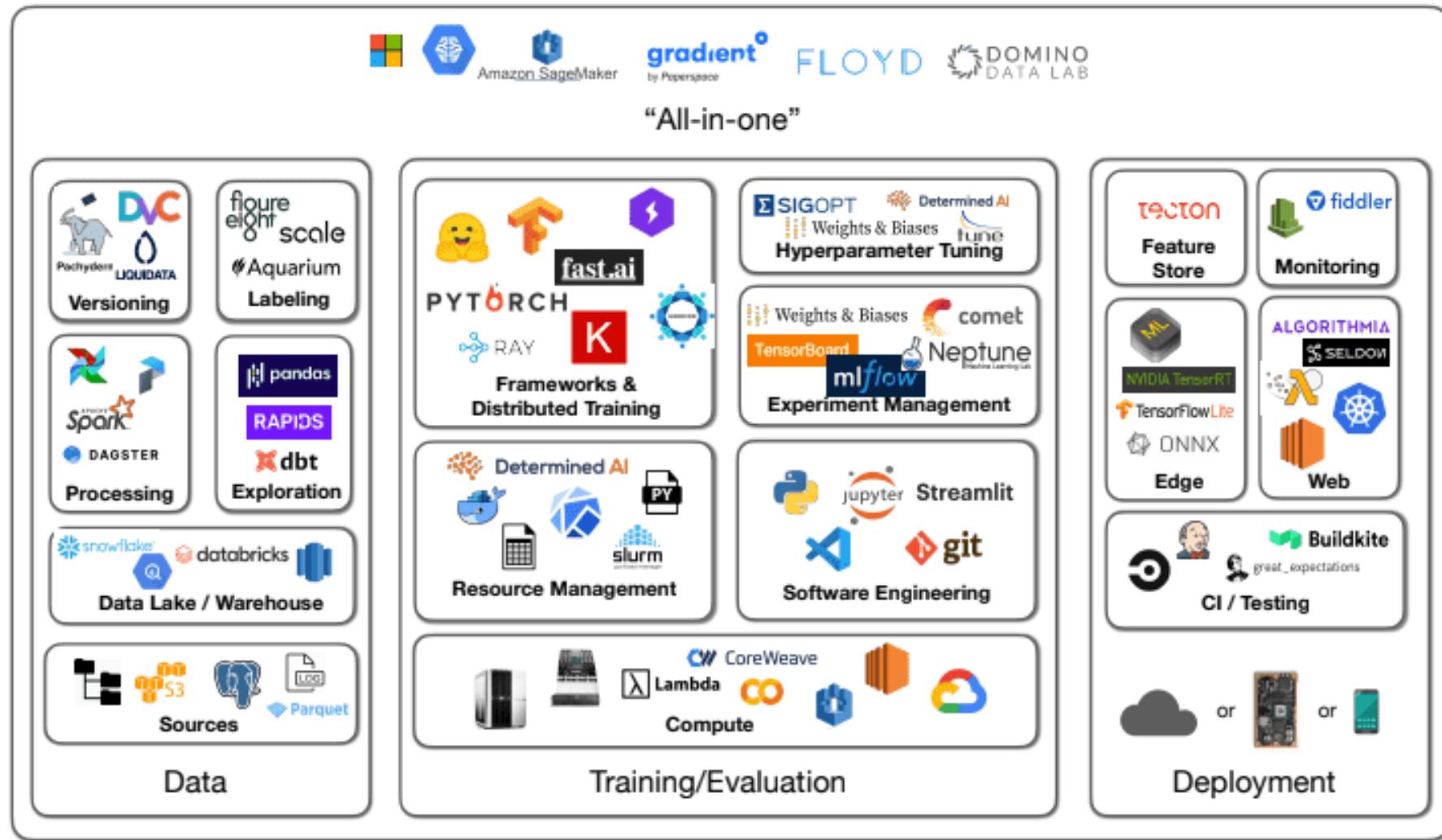
- ML Model Deployment
- CI/CD Pipelines
- Monitoring & Triggering



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# MLOPS Skills



# MLOps Engineer Skills

As mentioned above, an MLOps engineer needs to have an understanding of machine learning and software development. Here are some of the technical skills required to become an MLOps engineer:

- Ability to design and implement cloud solutions (AWS, Azure, or GCP)
- Experience with Docker and Kubernetes
- Ability to build MLOps pipelines
- Good understanding of Linux
- Knowledge of frameworks such as [Keras](#), [PyTorch](#), [Tensorflow](#)
- Experience with software development
- Ability to understand tools used by data scientists
- Experience in using popular MLOps frameworks like Kubeflow, MLFlow, and DataRobot

Here are some non-technical skills required to become an MLOps engineer:

- Strong communication skills—â€šyou need to be able to communicate with the data science team to understand the frameworks and types of models built
- Teamwork—â€šAs an MLOps engineer, your team would have people from many different backgrounds. Some of them might have more data science knowledge, while some might come from a software development background with little machine learning knowledge. You need to work with individuals with diverse skillsets and play on their strengths to develop a scalable application.

# Storage Experience

## Storage

- AWS/Azure/GCP/On-premise storage
- Iternity storage
- AWS FSx file system
  - FSx for Netapp
  - FSx for OpenZFS
  - FSx for Windows file server
  - FSx for Lustre

• AWS S3

• AWS EBS

• AWS gateway

## Data protection

• AWS/Azure/GCP/Data protection

• AWS backup

- Cloud native backup
- Hybrid data protection

• AWS Market place thirdparty dataprotection

- Commvault
- Netbackup

## Data migration

• Double take migration

• Storage X file migration

• Komprise file migration

• AWS snowball

• AWS Snowmobile

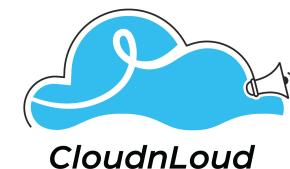
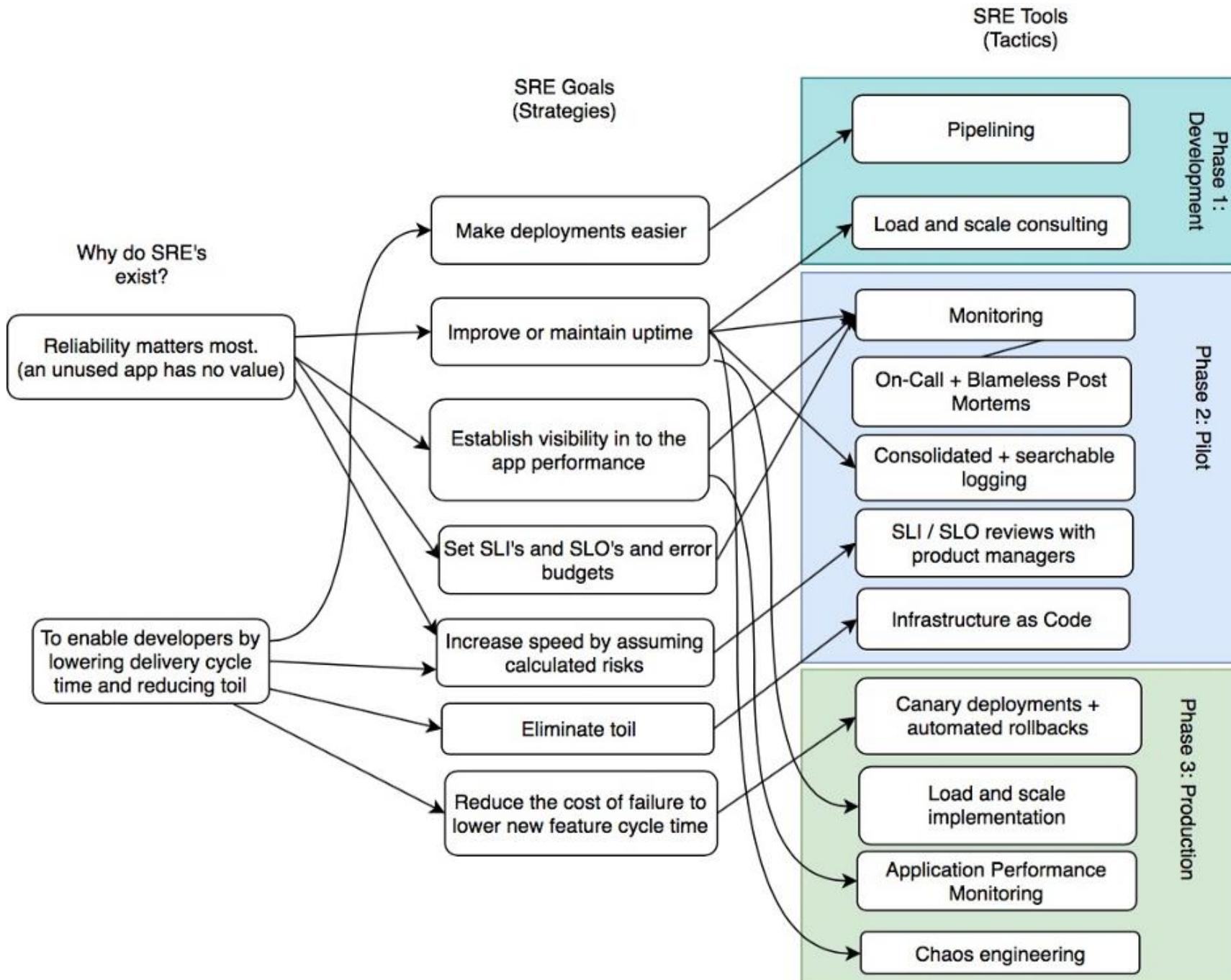
• AWS Kinesis Firehose

• AWS Migration Hub

<https://docs.microsoft.com/en-us/azure/architecture/guide/storage/storage-start-here>

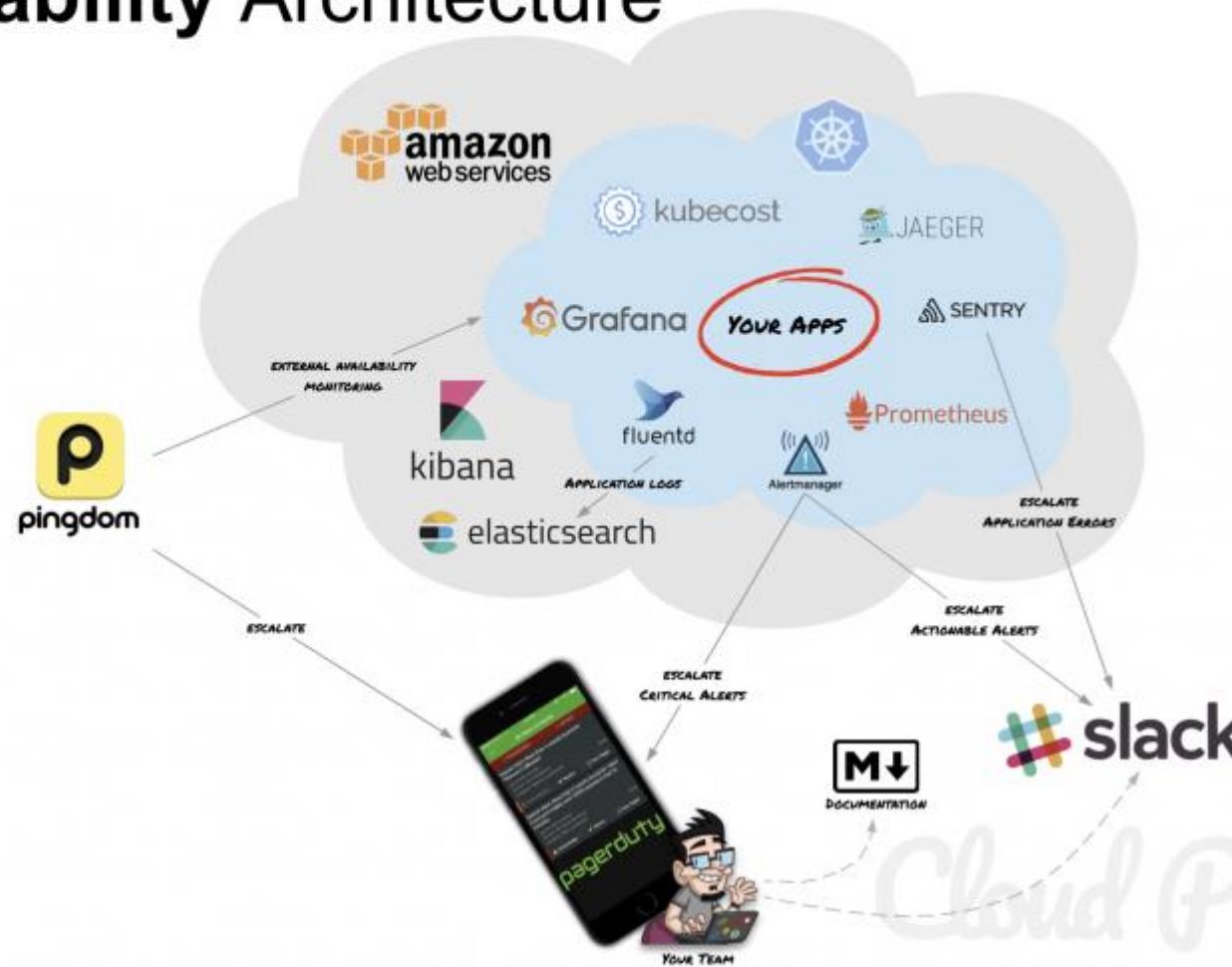
<https://aws.amazon.com/blogs/training-and-certification/earn-new-badges-by-building-your-cloud-storage-knowledge/>

# SRE



# Our Site Reliability Architecture

- ✓ Capacity Planning
- ✓ Cost Visibility
- ✓ Application Telemetry
- ✓ Exception Tracking
- ✓ Distributed Tracing
- ✓ Log Search
- ✓ Actionable Alerts
- ✓ Runbooks
- ✓ Slack Integration



SRE

# Our Contact Details



## Address:

*Online*



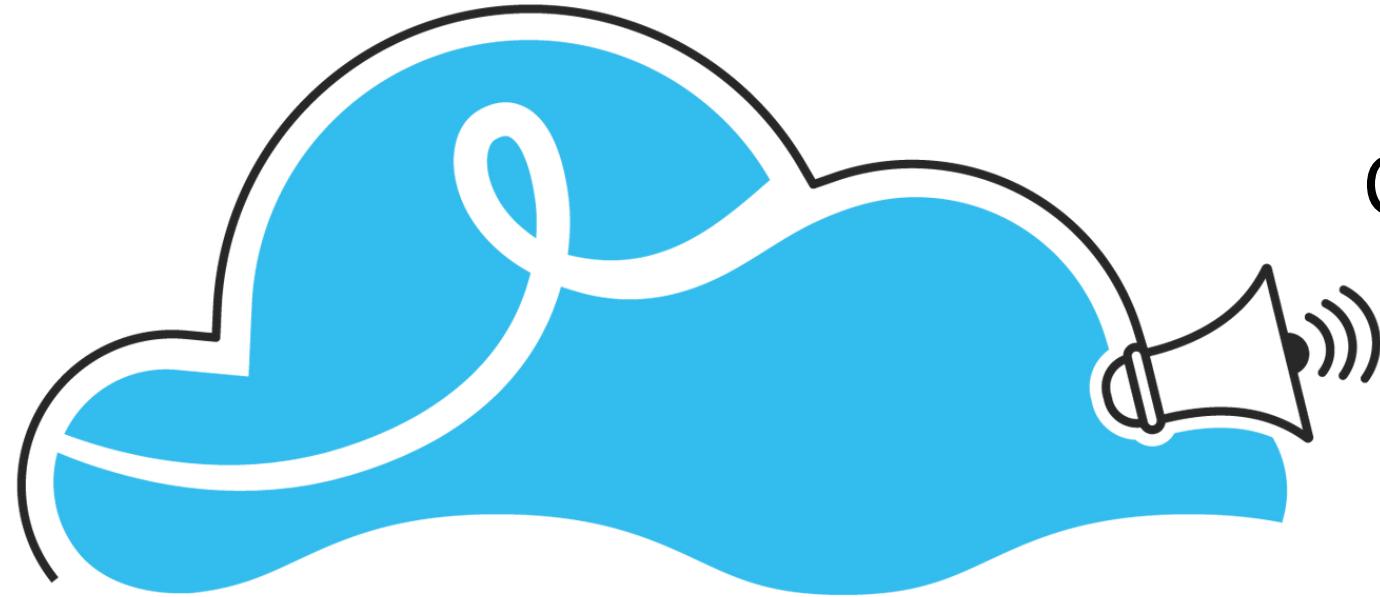
## WhatsApp Only Number:

+91 8939984529



## Email Address:

*info @cloudnloud.com*



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