



Linda Mohamed

# **From ClickOps to DevOps and Beyond – How IT Evolved**

*What you can expect today*

# Agenda

The history of IT  
Infrastructure

The DevOps  
movement



The benefits of  
IaC

The future of  
automation

*Your speaker today*

# Linda Mohamed



Background in  
Software Development



Specialized in Cloud  
Technologies & AI/ML



Graduated in  
Informatics



Studied Business  
Informatics



**Principal Consultant / Head of AWS @EBCONT  
AWS Community Hero**

*Other than that, I am...*

→ ... in love with juggling

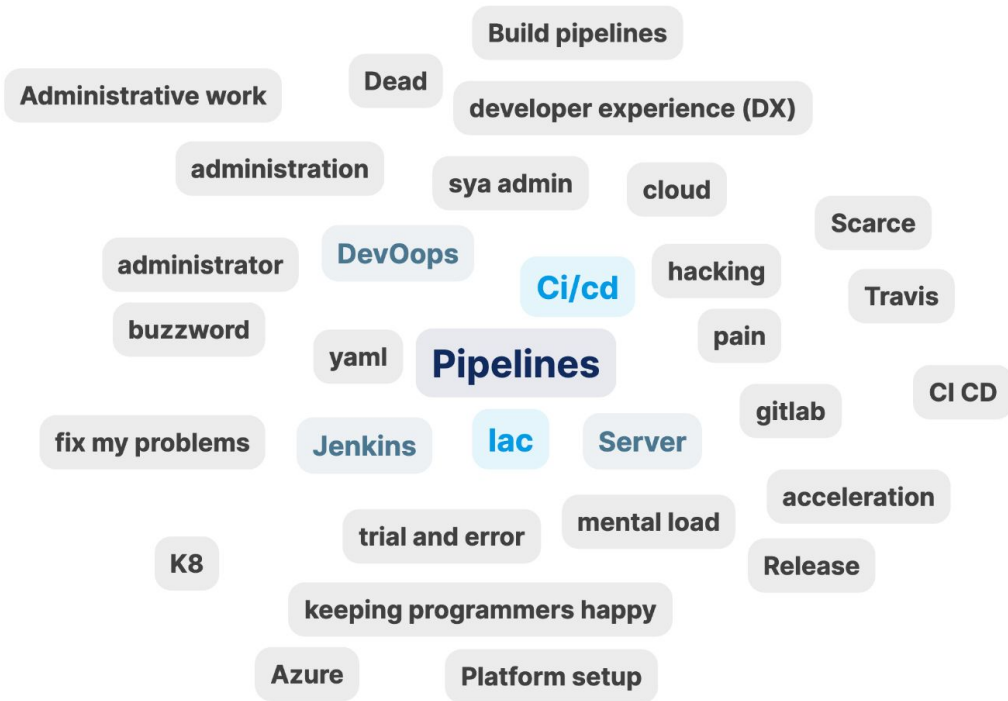
→ ... very impatient

→ ... a process nerd



## What do you think about when you hear the term "DevOps"?

Wordcloud Poll  47 responses  30 participants



# The history of IT Infrastructure

*What happened since the 90s?*



# ~30 years of IT Infrastructure

World's first web server created

1990



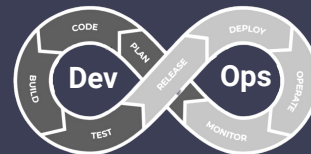
VMWare launched virtualization

1999



AWS launched first cloud services

2006



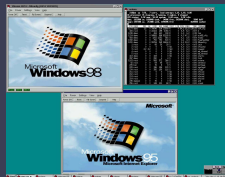
1998

Google started its first server



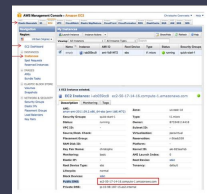
2005

Automation with Puppet started



~2008

The DevOps movement started

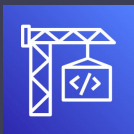
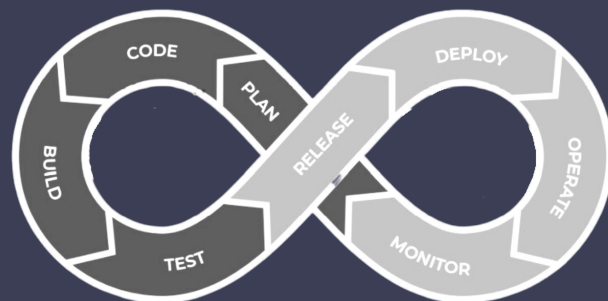


# The DevOps Movement

*What were the key triggers for the DevOps movement?*

# The DevOps movement

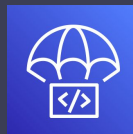
- DevOps promotes **collaboration** for **faster deployment**
- **IaC** reduces **errors** and **enables version control**
- **CI/CD** enables **faster feedback loops**
- **Logging** and **monitoring** helps to **identify issues easier**
- **Automation** and **efficient resource usage** lead to **cost savings** and **scalability**



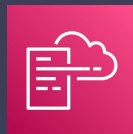
AWS  
CodeBuild



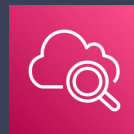
AWS  
CodeCommit



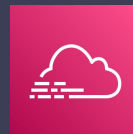
AWS  
CodeDeploy



AWS  
CloudFormation



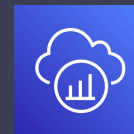
Amazon  
CloudWatch



AWS  
CloudTrail



AWS Config



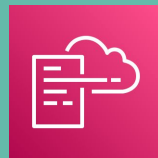
AWS X-Ray



# Infrastructure as Code

# The benefits of IaC

- Consistency and repeatability
- Speed and agility
- Version control
- Collaboration and sharing
- Cost savings
- Scalability



AWS CloudFormation



ANSIBLE



Terraform



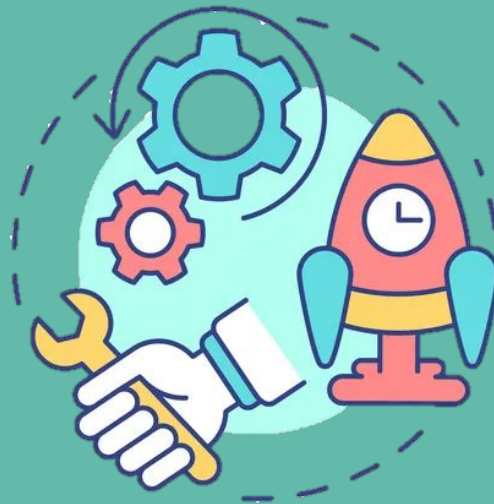
puppet



CHEF™

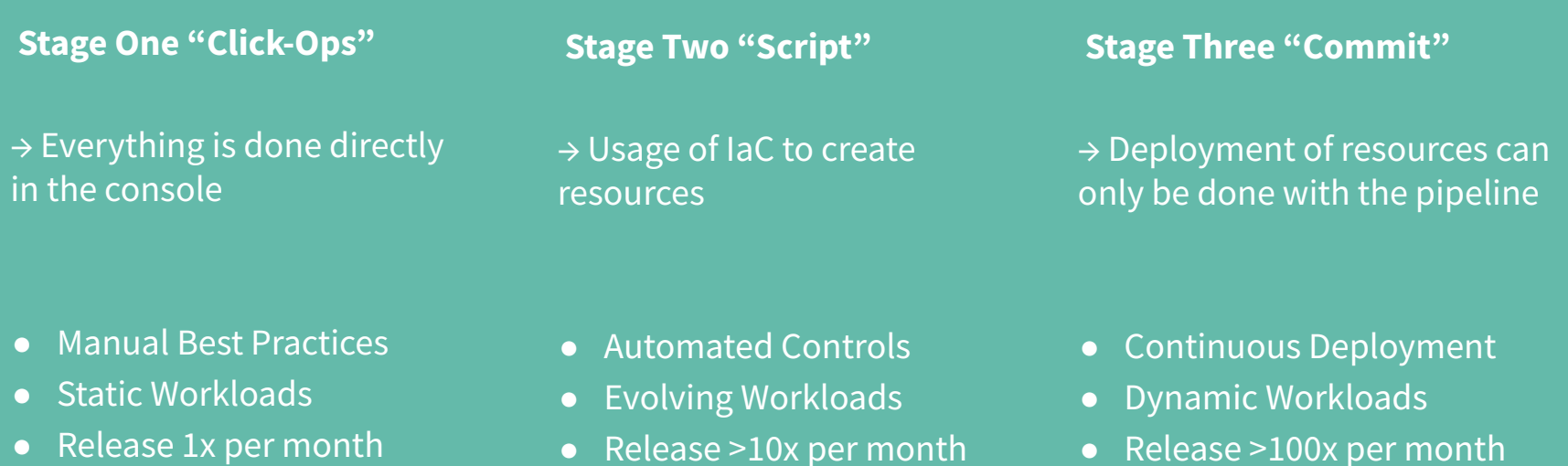
# IaC to improve efficiency

- Reduced human error
- Faster disaster recovery
- Improved scalability
- Increased agility
- Improved testing and validation
- Better compliance



*The maturity phases of automation with IaC in the cloud*

# Stages of automation





What do you think will be the next big thing after DevOps?

Wordcloud Poll 8 responses 8 participants



OpsDev

MLDevSecOps

Platform Engineering 🤔

MLOps

**Platform Engineering**

**AI Admins**

*How could the future of automation look like?*



# The future of automation

- **Budget Actions** to shutdown not needed non production infrastructure
- **Serverless Computing** to completely cut costs of idle servers
- **Artificial Intelligence** to automate resource allocation and capacity planning
- **Cloud Management Platforms** to manage infrastructure across multiple clouds
- **Resilience Hub** to define, validate and track the resilience of your applications on AWS
- **Democratization** of deployments

## Platform Engineering?!

*Your speaker today*

# Linda Mohamed



*Questions?*

← Contact me on LinkedIn!

or email me:

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**Principal Consultant / Head of AWS @EBCONT**  
**AWS Community Hero**