Observability to Better Apps

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IO

Is your application working
for your users?

Are you sure?

Define “working”.

UP != “online”

UP == useful

Uptime?

What if your app is always “up”?

Your code always does what you write it to do.

Does it do what you WANT it to do?

If it “works” matters.

What your app is doing matters.

What your users are doing matters.

Knowing if your app works is... ops?

How to draw an owl

1.

2.

1. Draw some circles

2. Draw the rest of the [redacted] owl

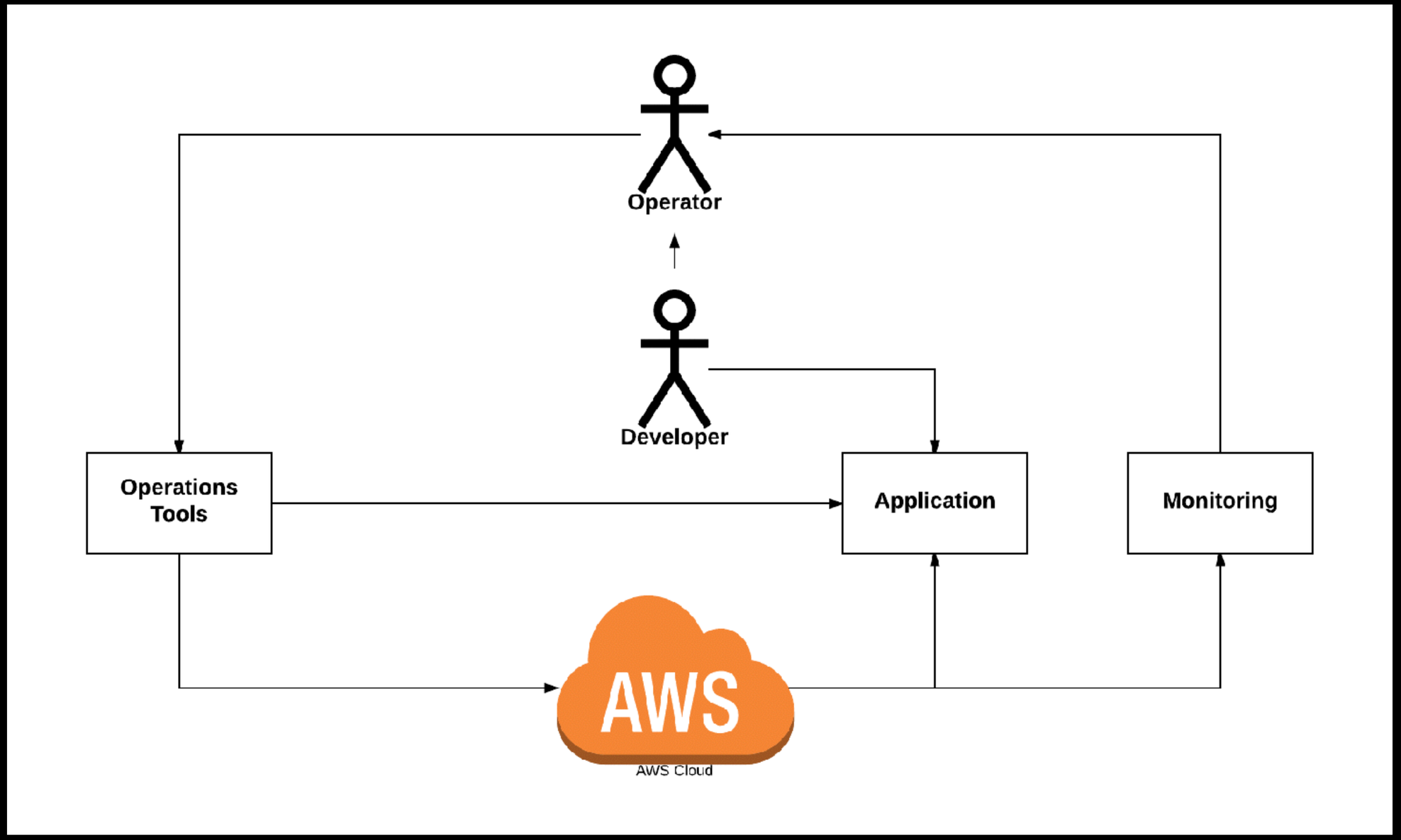
Serverless Culture

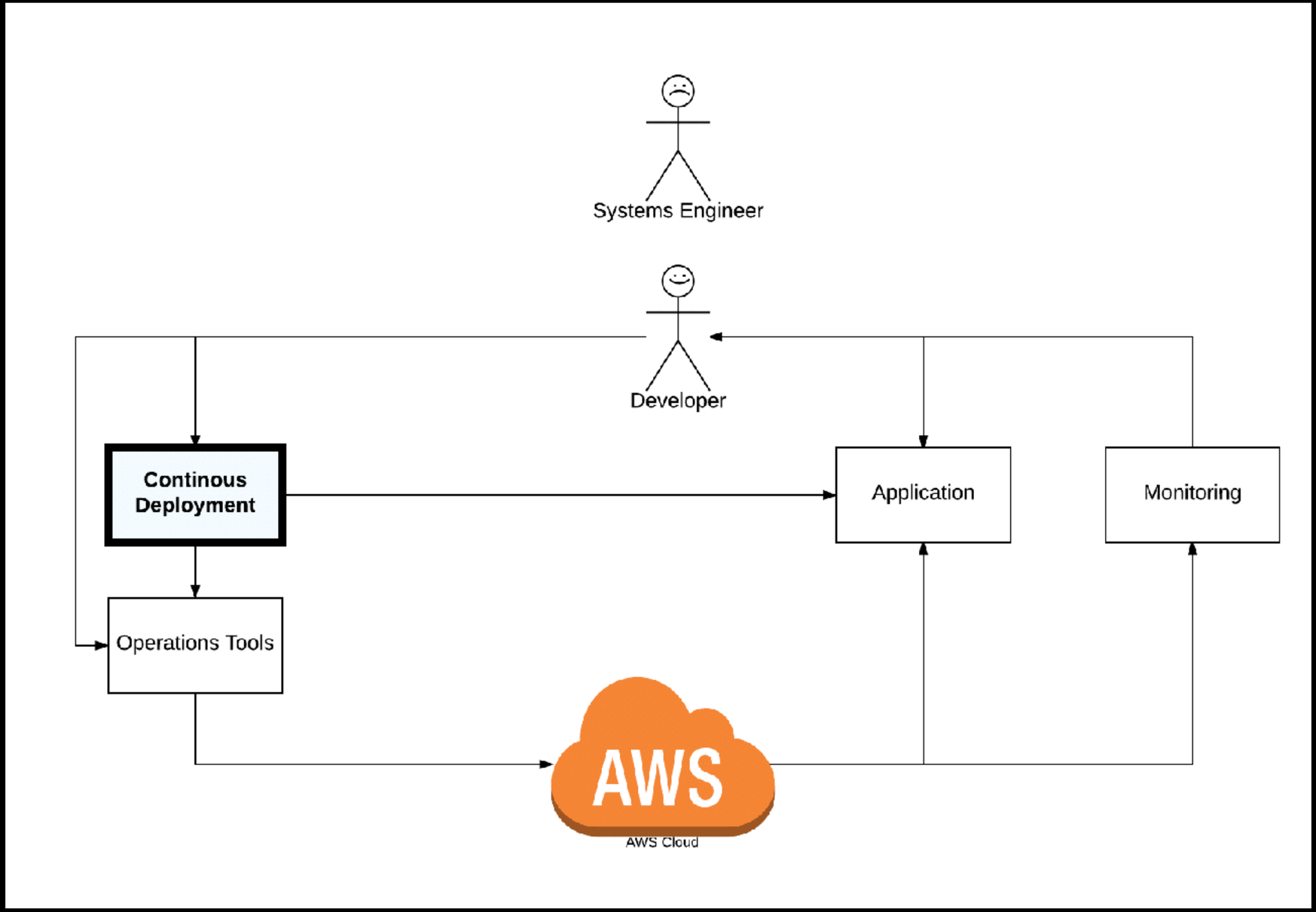
Don't build, when you can buy.

Build as little as necessary.

Build with the minimum operational complexity.

Maybe all you need are some circles


Operator
Developer
Operations Tools
Application
Monitoring
AWS
AWS Cloud


Systems Engineer
Developer
Continous Deployment
Application
Monitoring
Operations Tools
AWS
AWS Cloud

DEPLOYMENT

ANSIBLE

CHEF

puppet

AWS OpsWorks

AWS CloudFormation

circleci

AWS Code Pipeline

LOGS & METRICS

AWS Cloudwatch

DATADOG

solarwinds papertrail

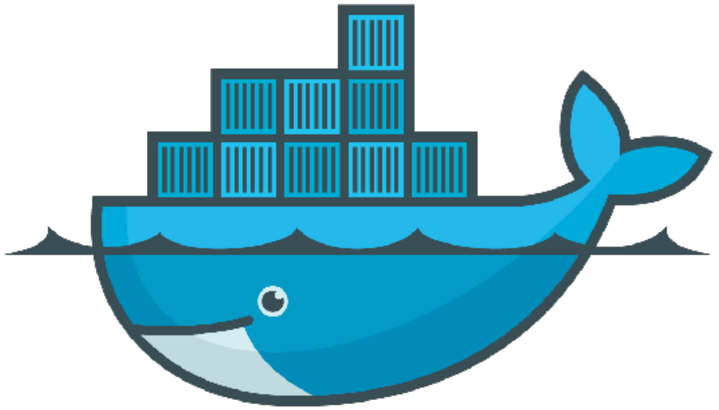
APP

AppDynamics

dynatrace

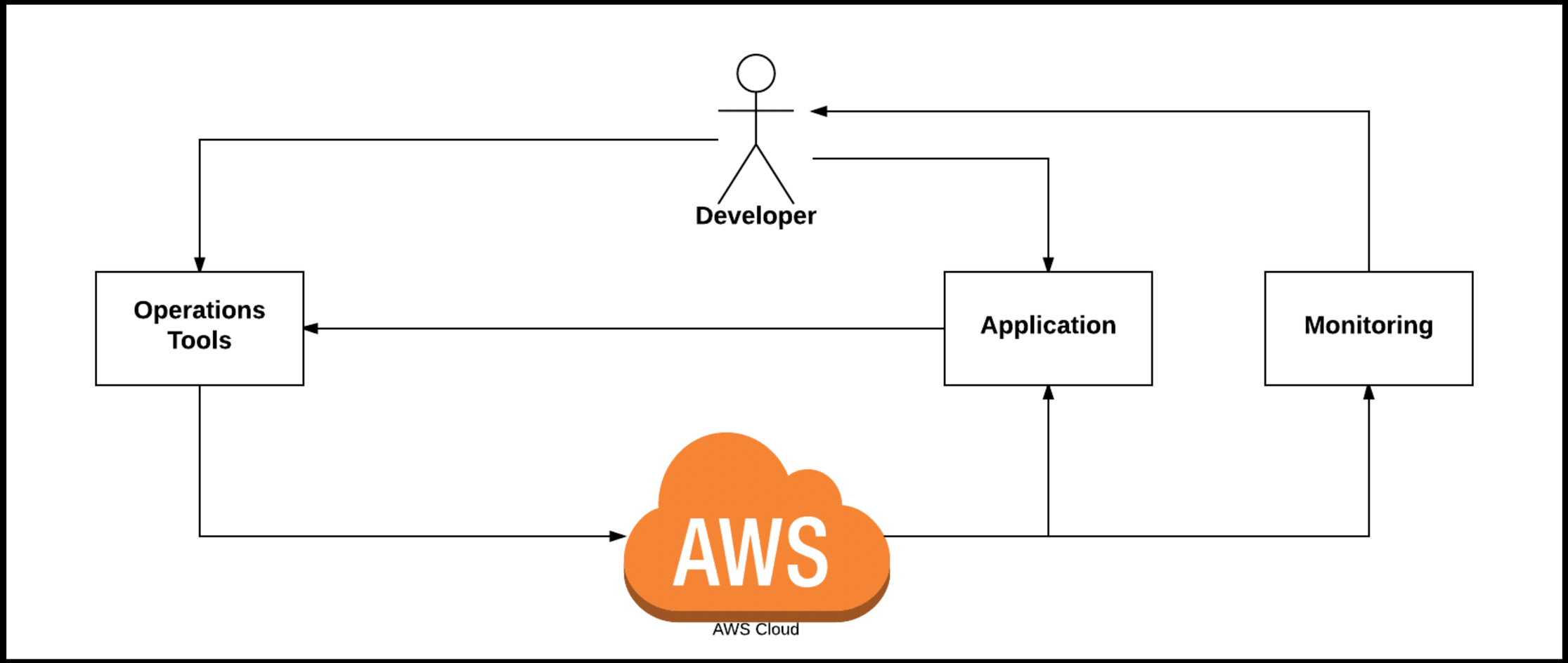
New Relic.

DATADOG



docker

kubernetes


Developer
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Application
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DEPLOYMENT

kubernetes

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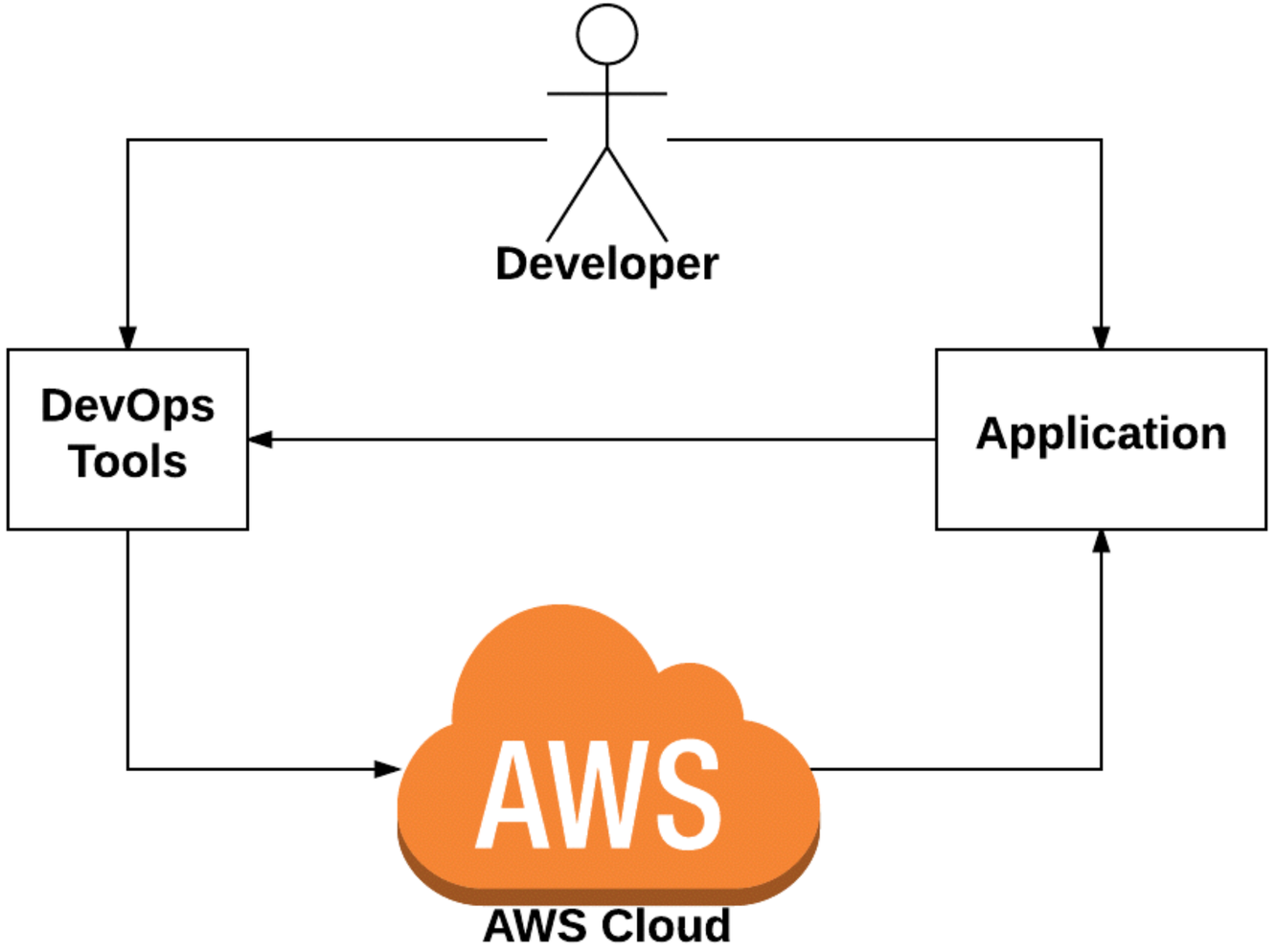
Developer
DevOps Tools
Application
AWS
AWS Cloud

DEPLOYMENT

serverless

AWS CHALICE (PYTHON)

SPARTA

ZAPPA

circleci

AWS Code Pipeline

LOGS & METRICS

AWS Cloudwatch

IOpipe

DATADOG

APP

IOpipe

The traditional story
is centered on
deployment & uptime.

What value do you provide to your business?

What do you *cost* your business?

What do you *SAVE* your business?

Are you pleasing your users?

How do you enable your data scientists?

Key Performance Metrics (KPIs)
are critical.

Data-driven development

=

Agile

How?

Your stateless app has stateful artifacts.

You want to know about
your stateless application's state.

You have databases...

You have users?

What percentage of database writes
for this customer took over 5ms? 10ms? 100ms?

Which HTTP request stored this file on S3?

... this database record?

How do you track this state?

Which user encountered this error?

What was the chain of API calls made by this user?

How many users of your Alexa skill thanked you?

How many cursed you?

Application metrics > Infrastructure metrics

IO|

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