



Sztuczna Inteligencja i Serverless

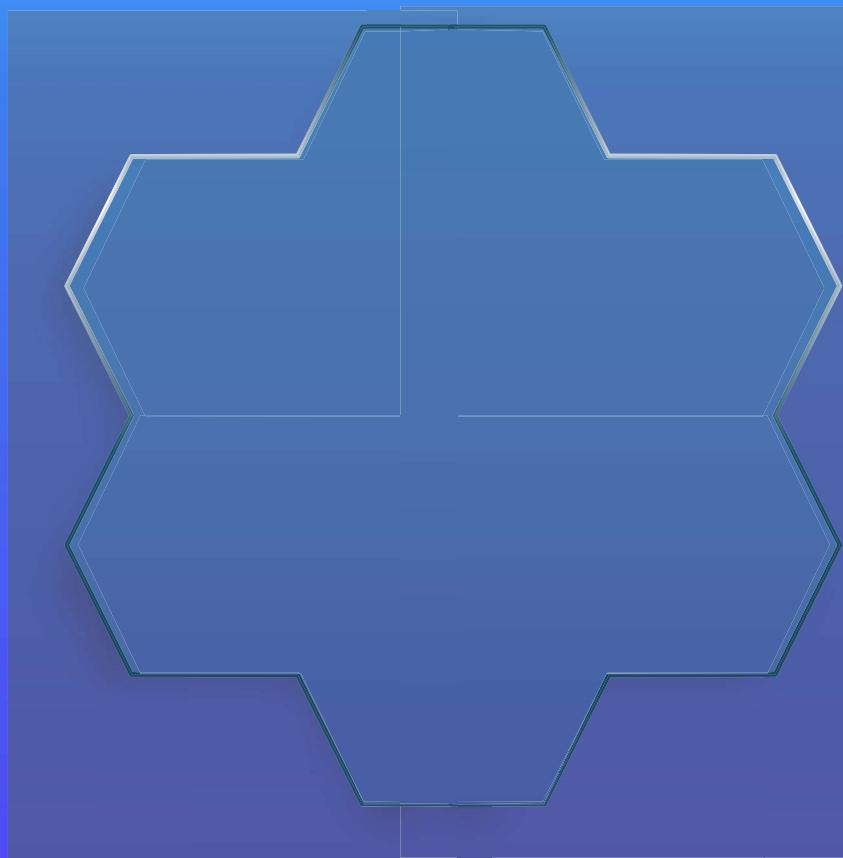
Czyli jak budować nowoczesne aplikacje
w świecie chmury 2.0

Tomasz Stachlewski

AWS Senior Solutions Architect
stachlew@amazon.com



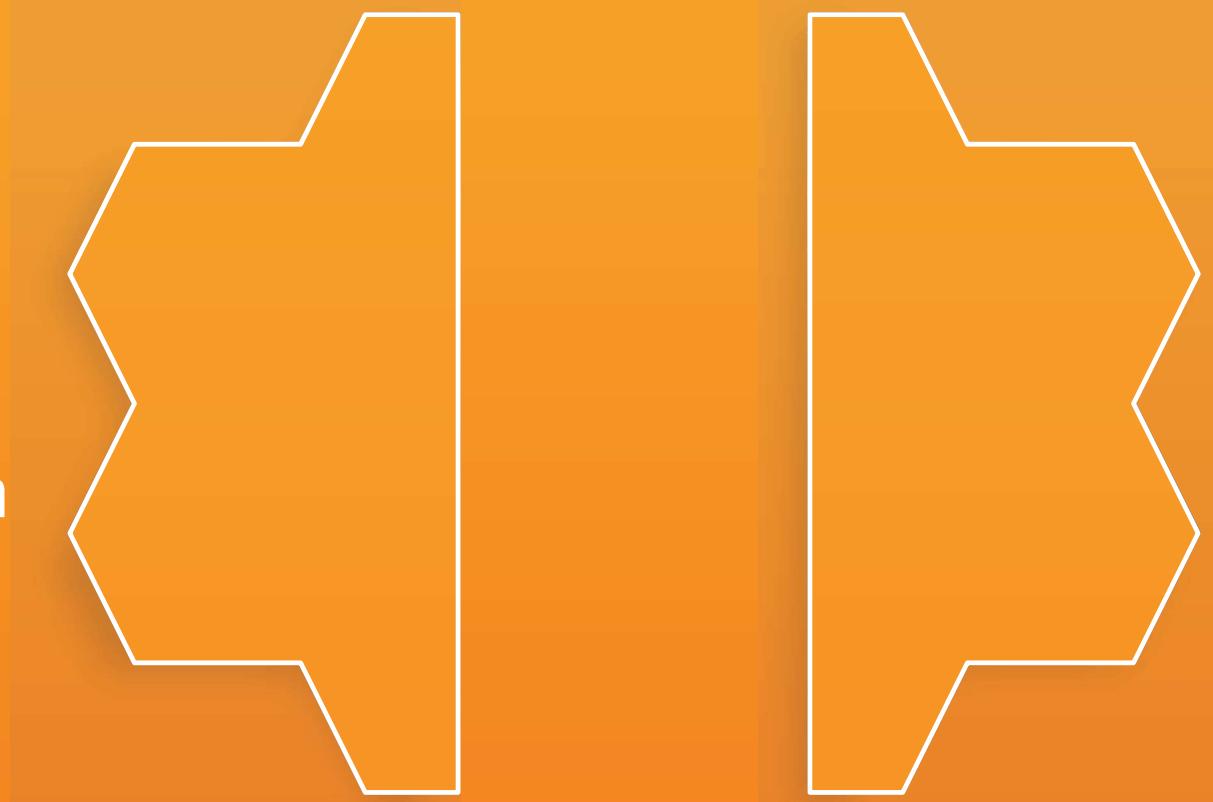
Systemy monolityncze



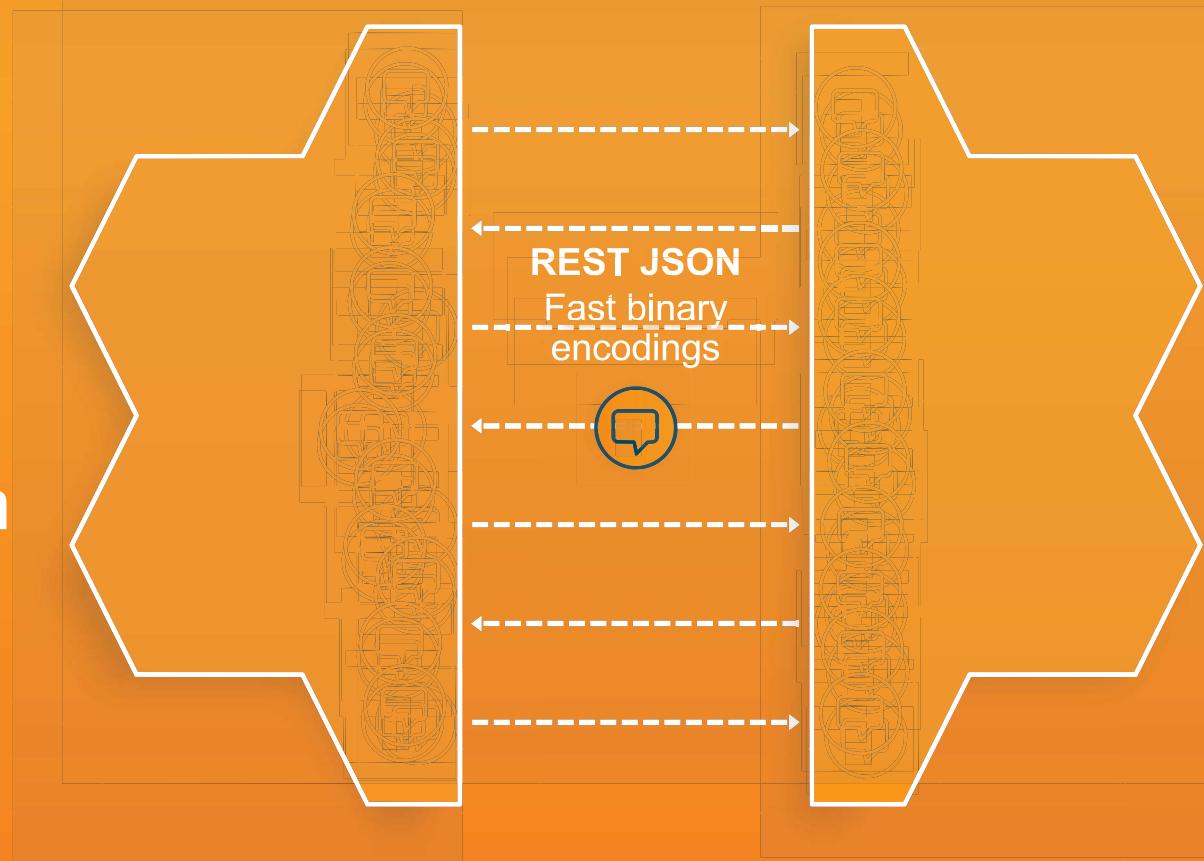
Rozbicie systemów monolitycznych



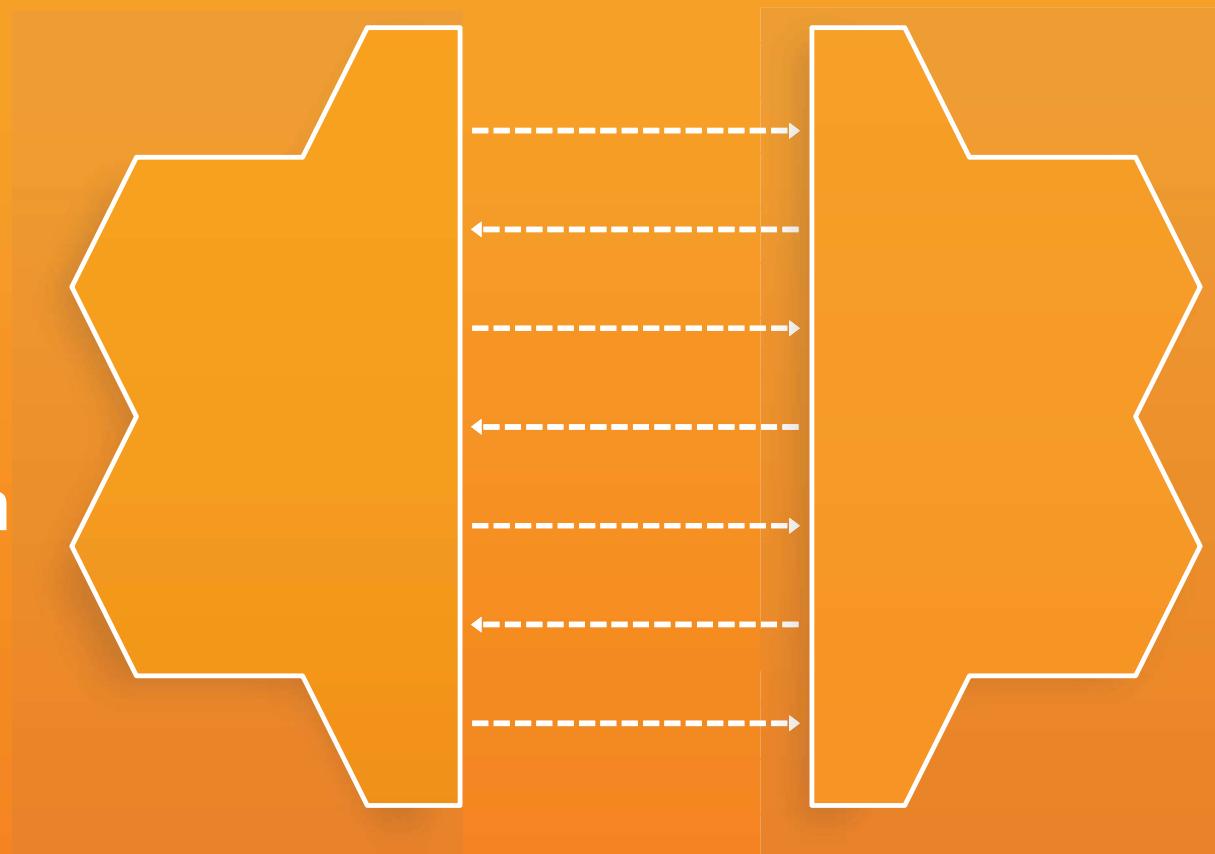
Rozbicie systemów monolitycznych

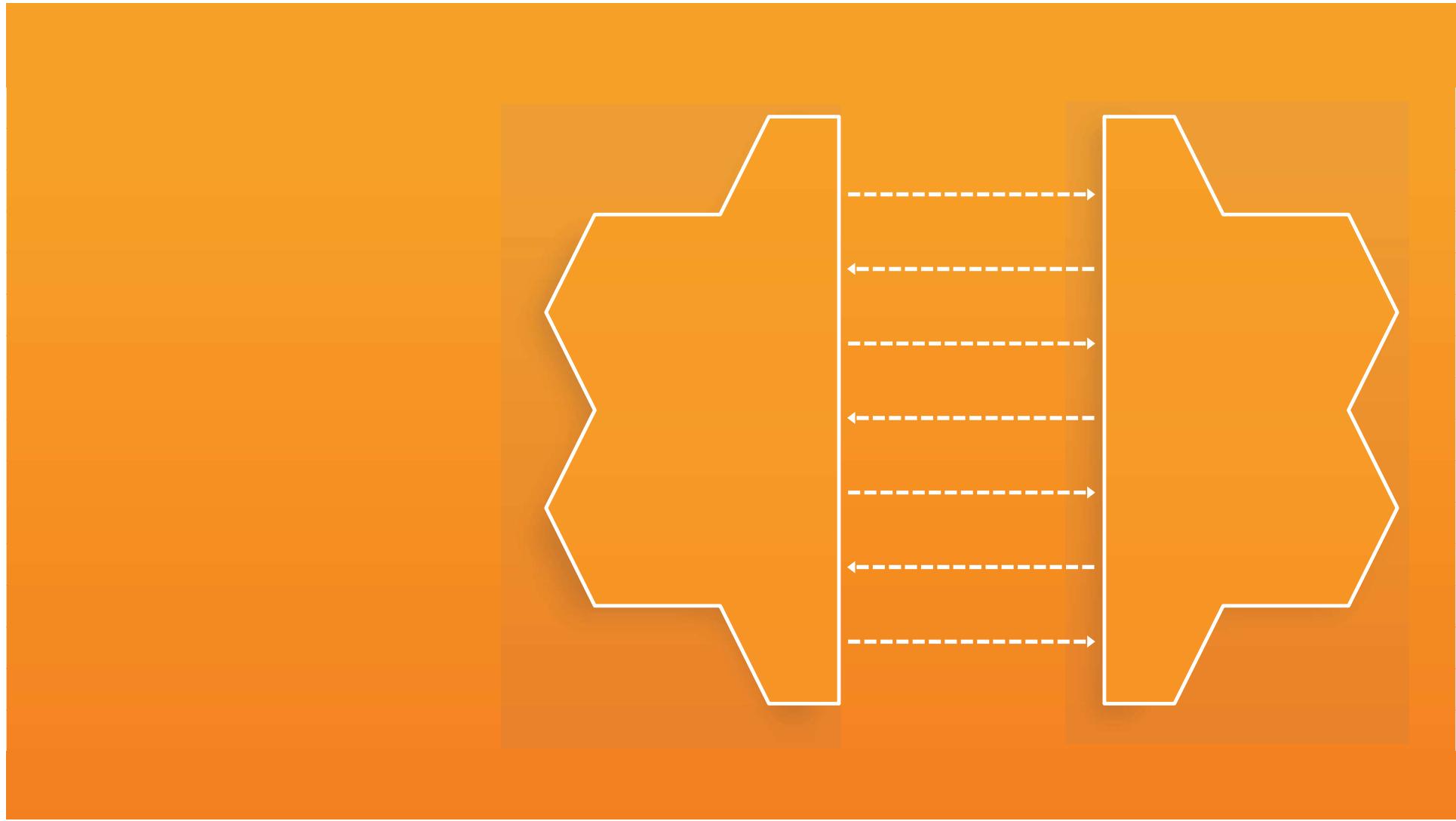


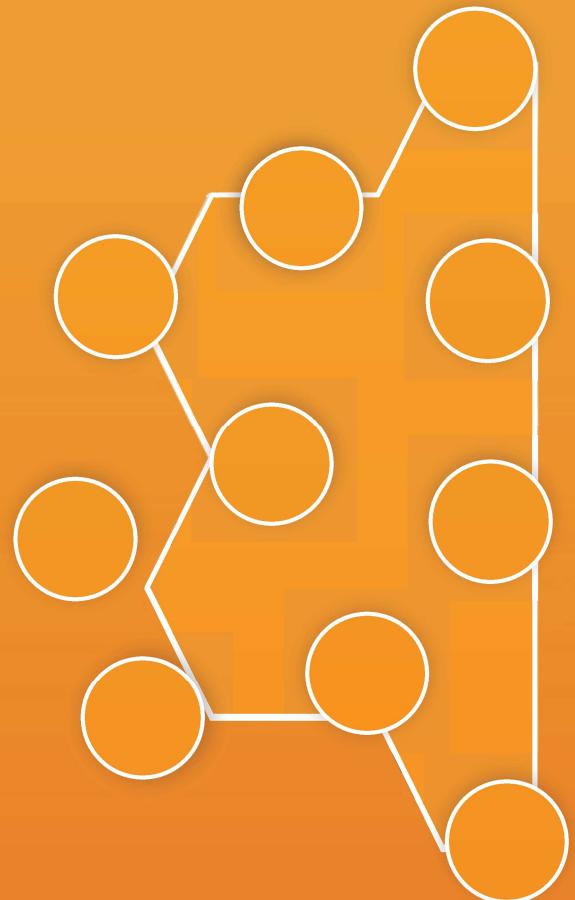
Rozbicie systemów monolitycznych

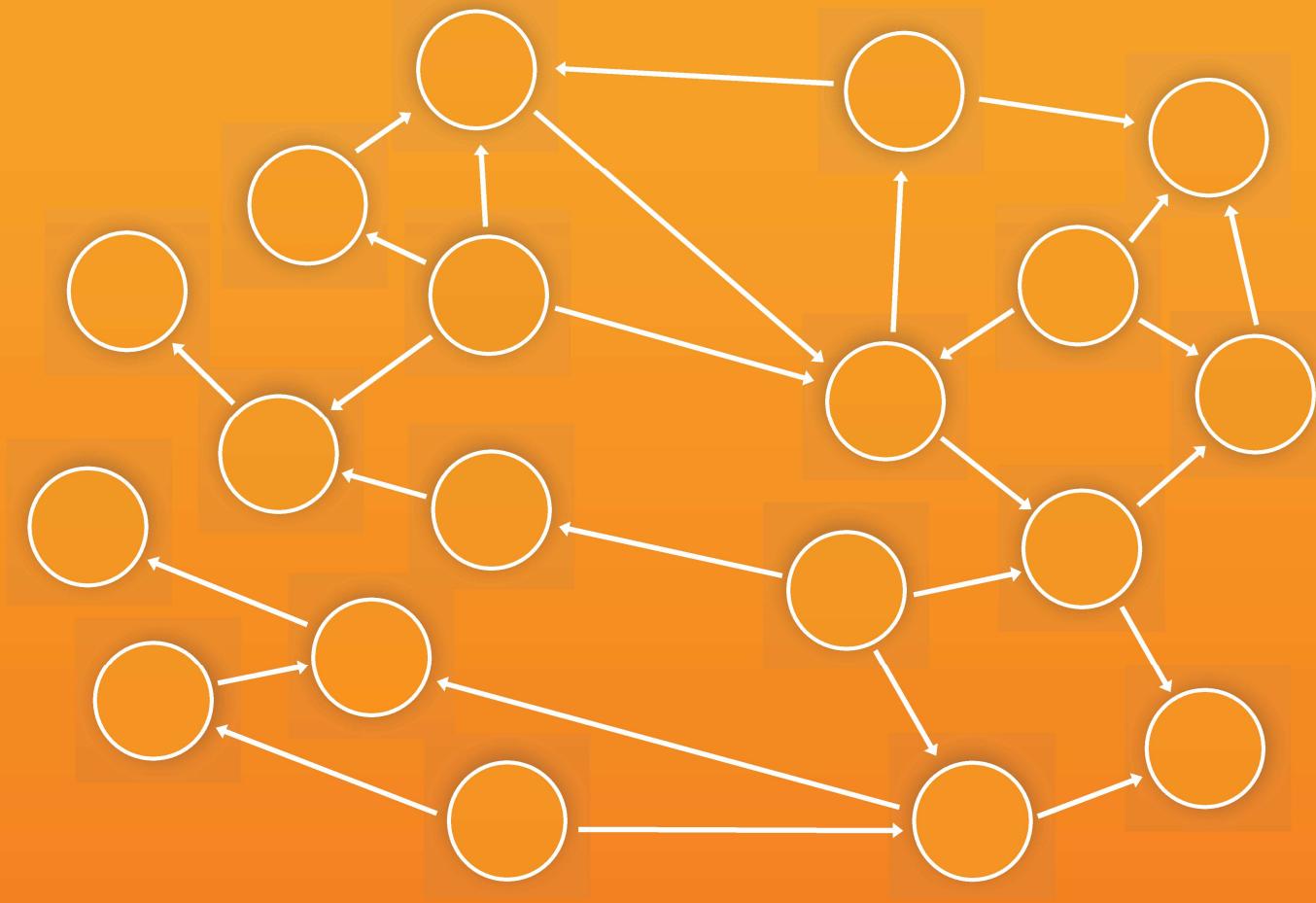


Rozbicie systemów monolitycznych

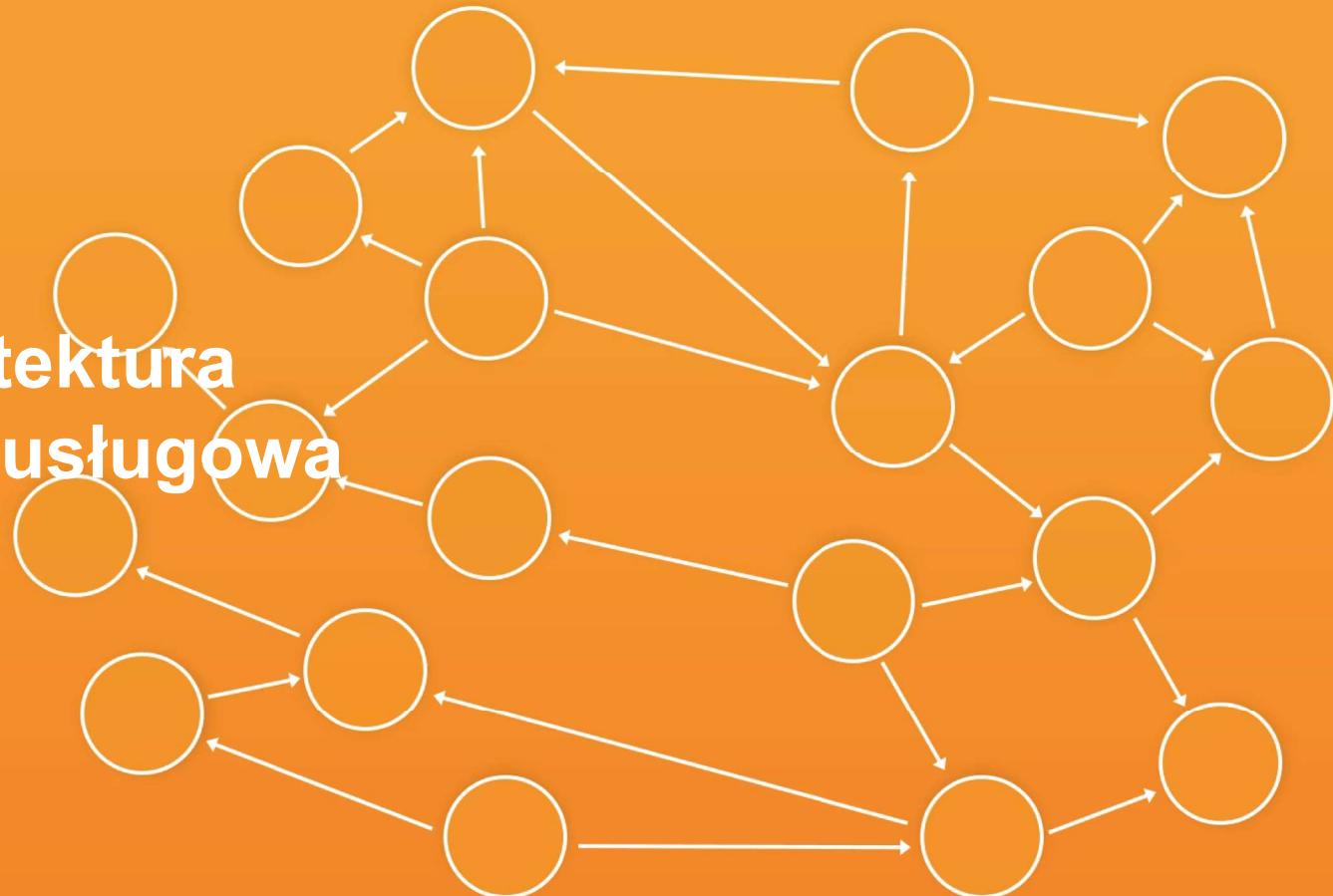


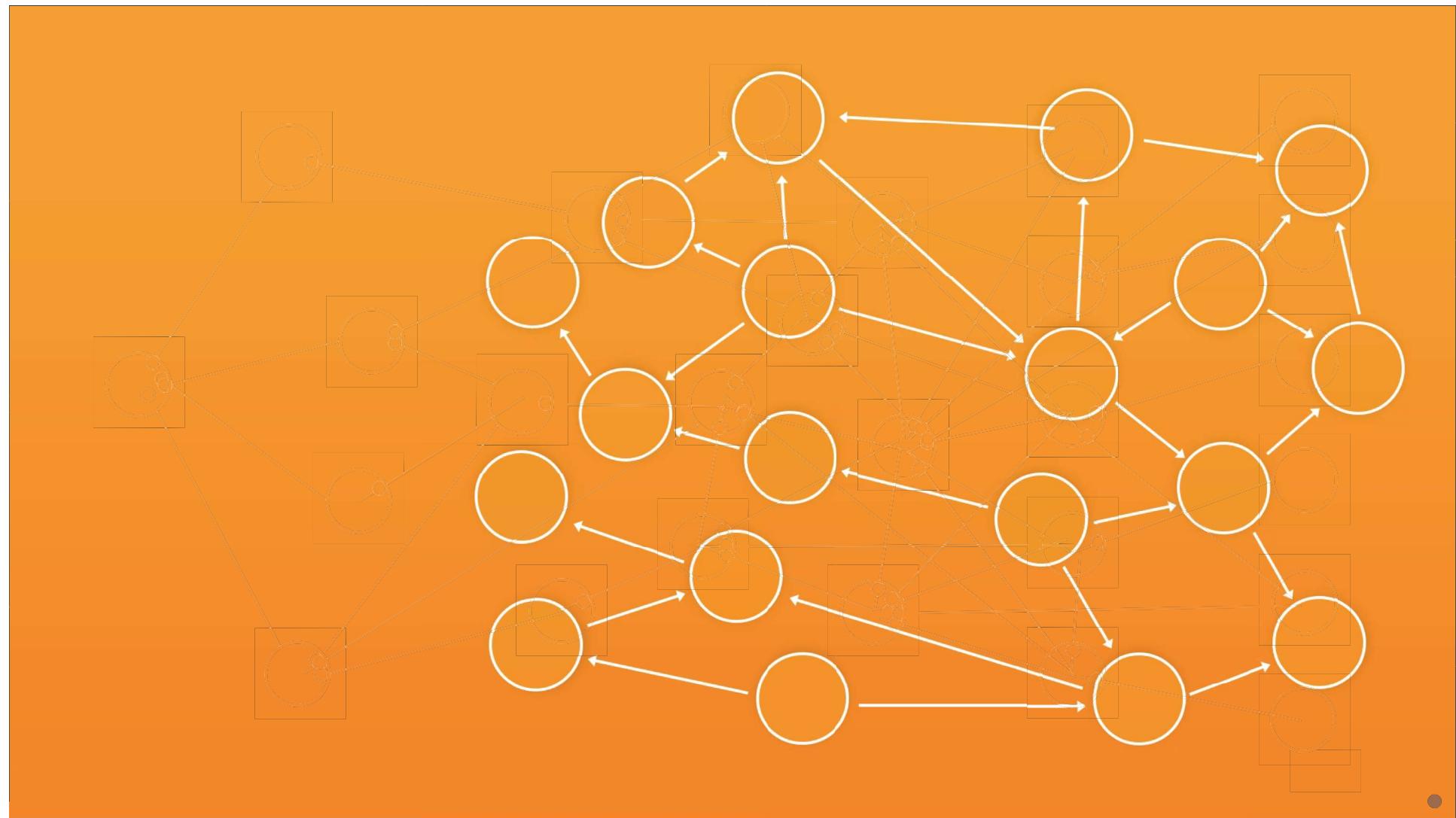




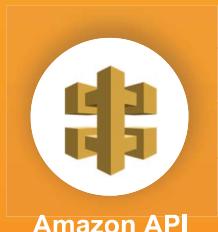


Architektura mikrousługowa





**Mikrousługi
stają się
funkcjami**



Amazon API
Gateway



Amazon
SQS



Amazon
DynamoDB



Amazon S3



Amazon SNS



Amazon
Kinesis

Mikrousługi stają się funkcjami



Mikrousługi stają się funkcjami



Mikrousługi stają się funkcjami



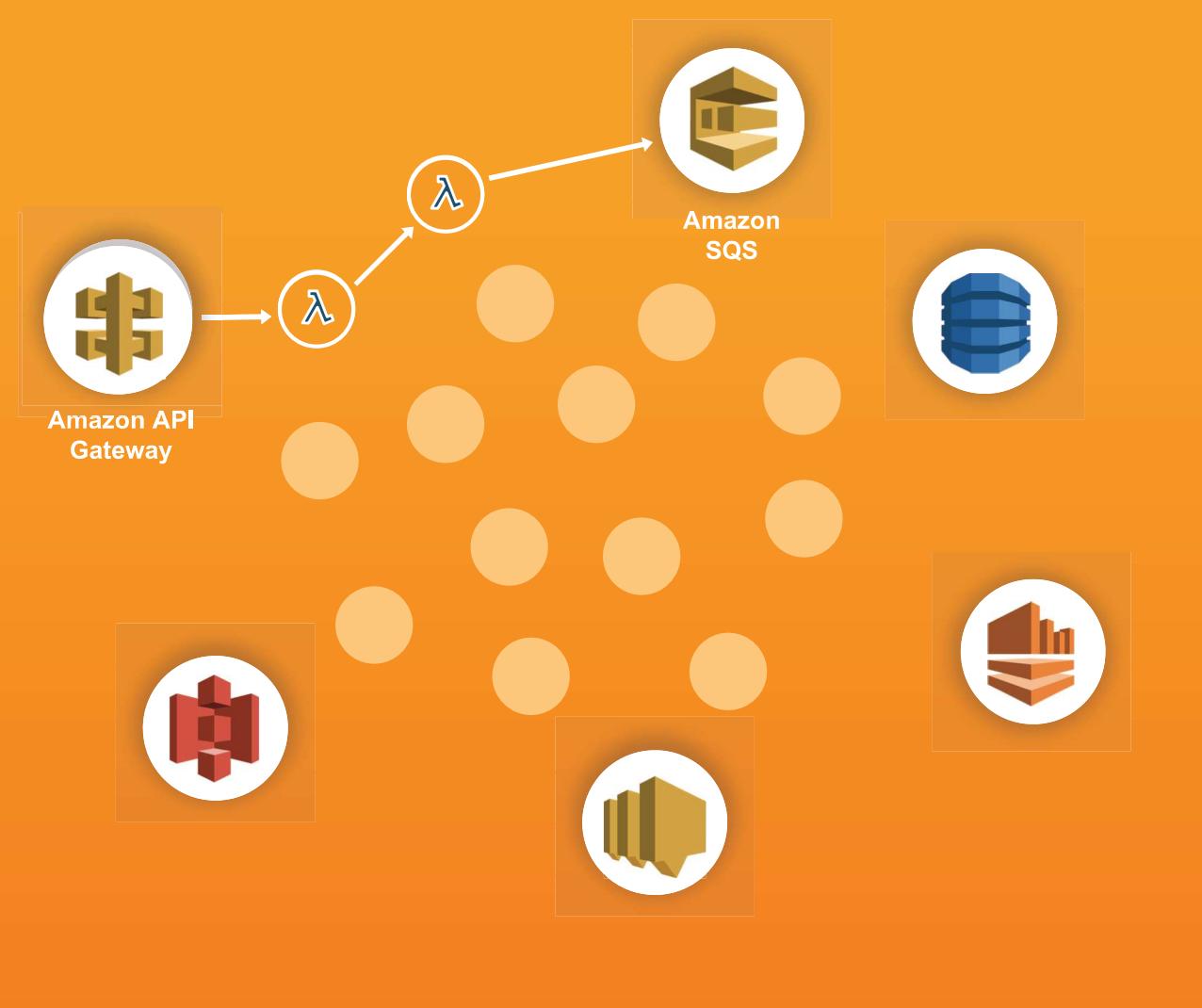
Mikrousługi stają się funkcjami



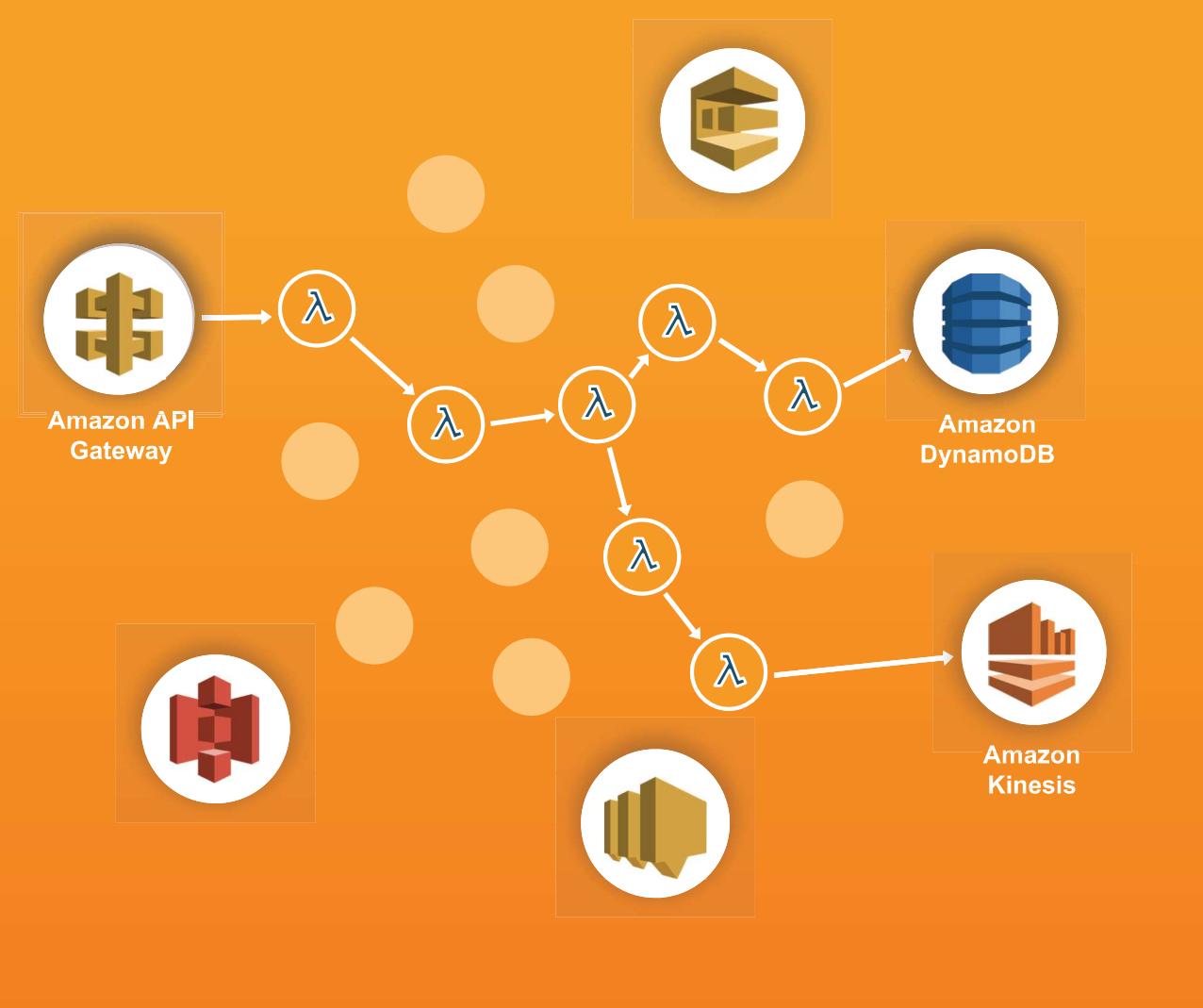
Mikrousługi
stają się
funkcjami



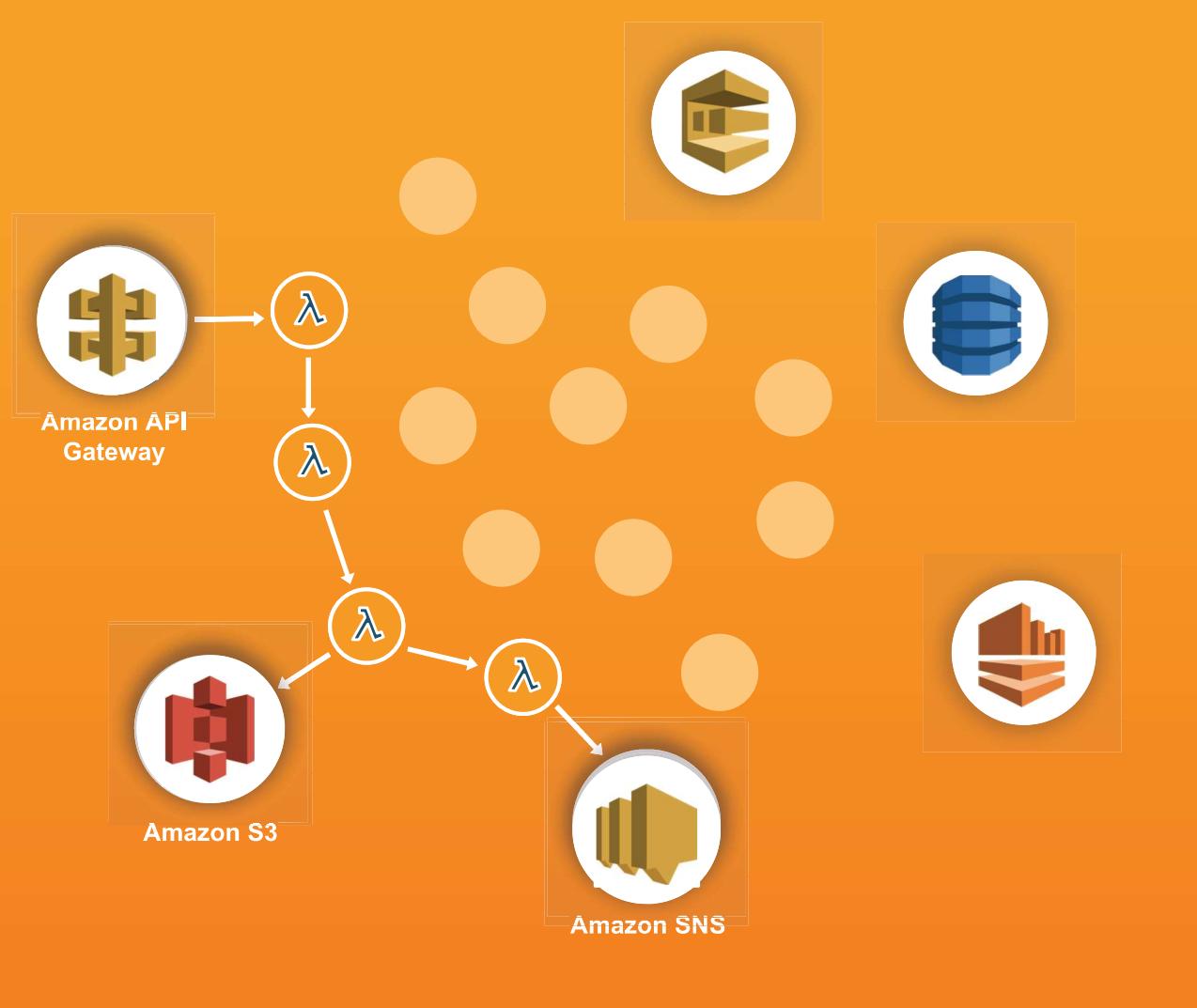
Mikrousługi
stają się
funkcjami



Mikrousługi
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Mikrousługi stają się funkcjami



**Mikrousługi
stają się
funkcjami**



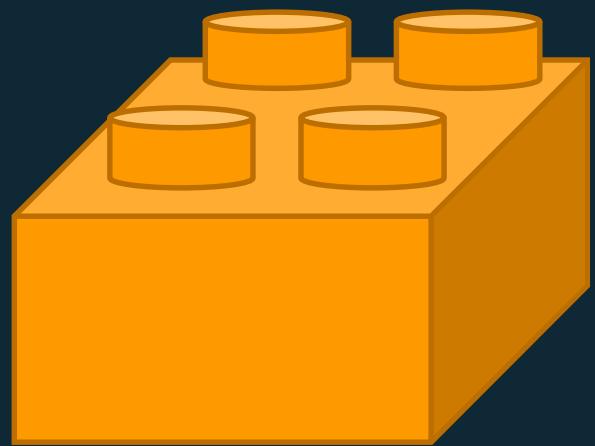
Zróbmy krok wstecz...

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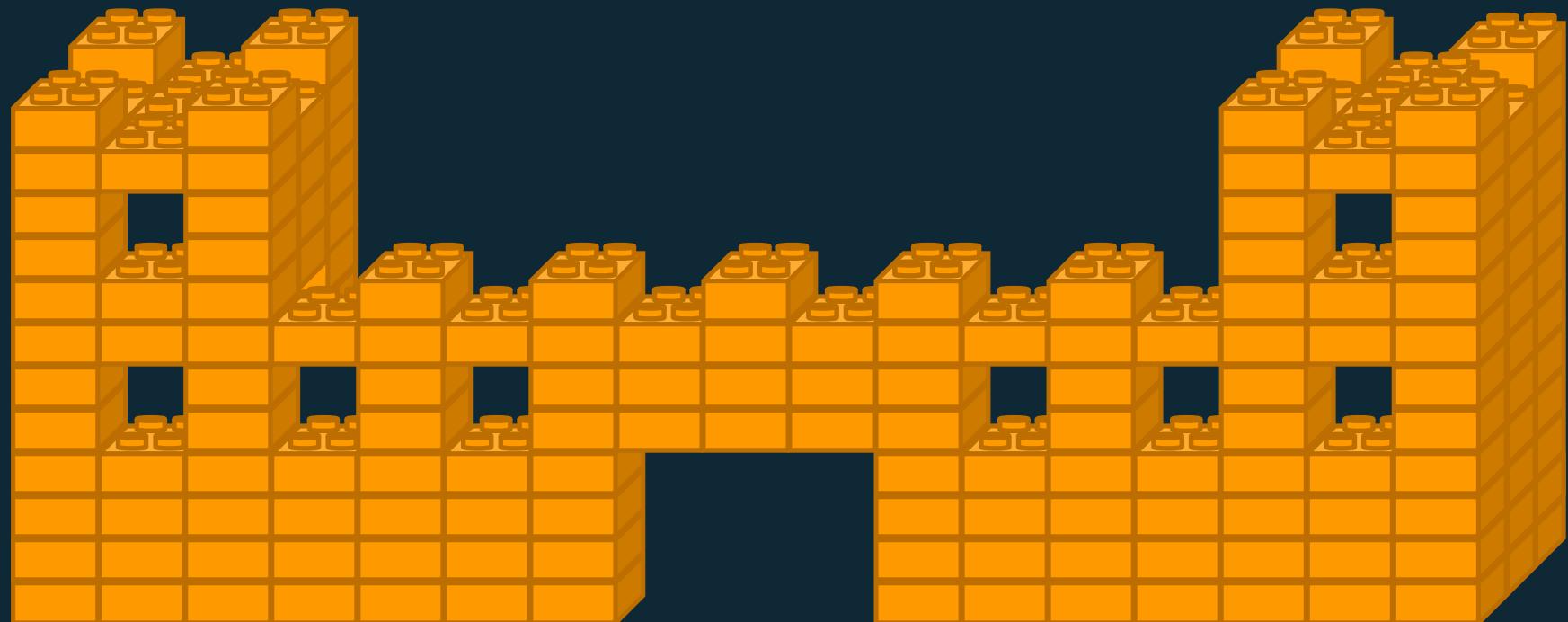
= Server

CASTLE

(aka App)

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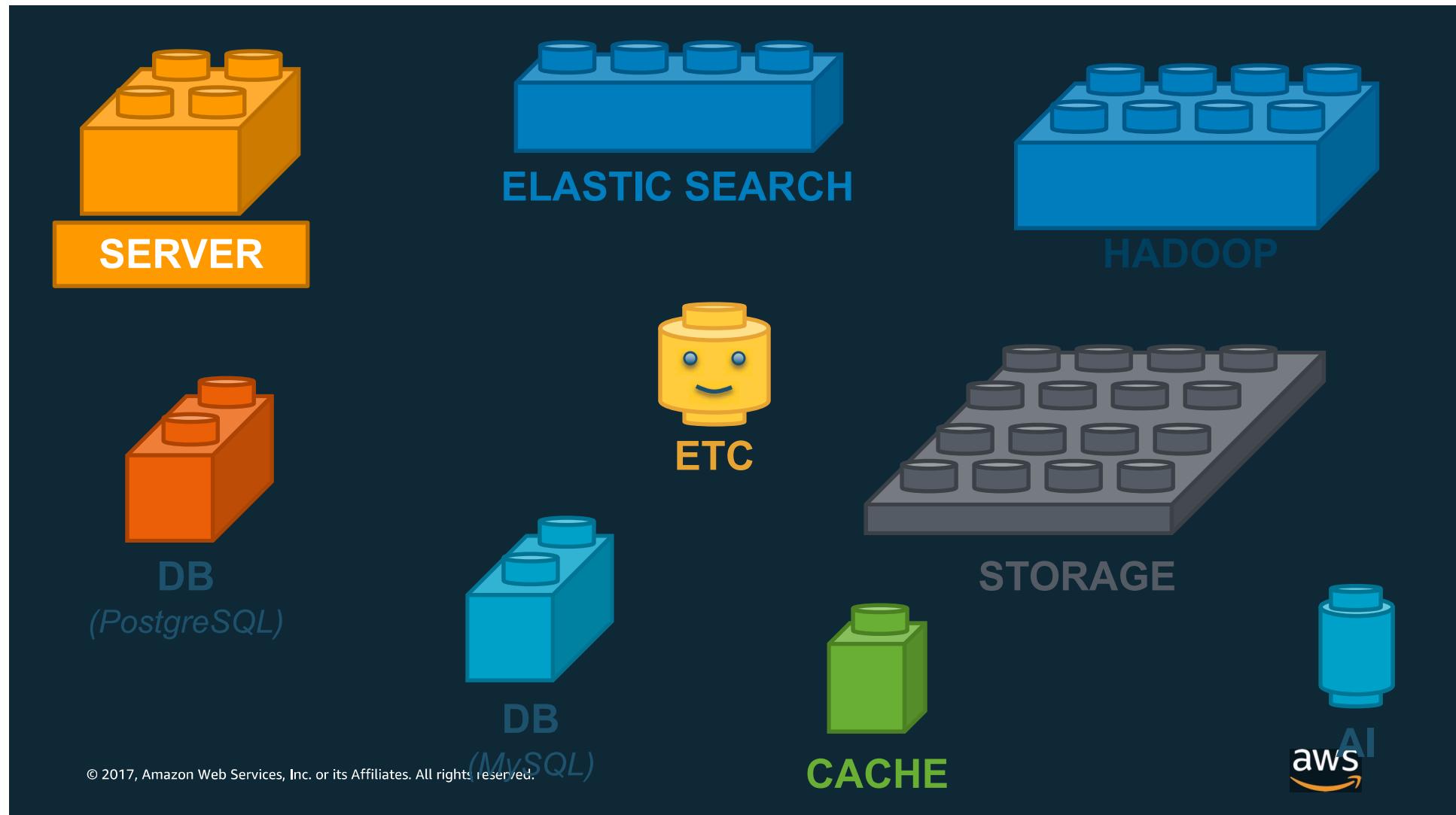


CASTLE

(aka App)

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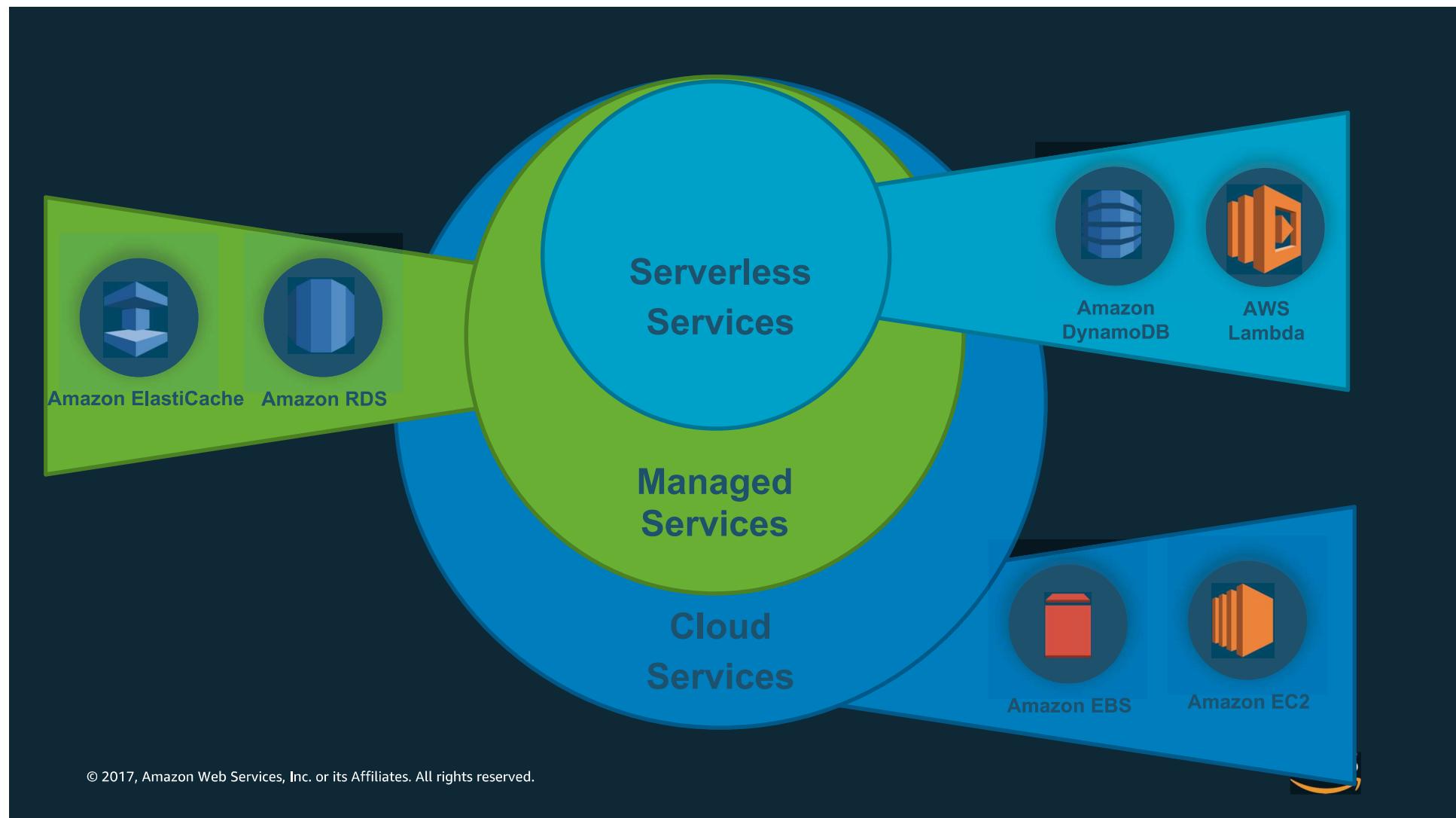






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aws



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What size servers are right
for my budget?

How many servers do I
need?

How many servers should I
budget for?

When should I decide to
scale out my servers?

How will I keep my server OS
patched?

How will new code be deployed
to my servers?

I need to administrate it.

How to stop paying for it when it
won't be needed anymore...



DEVELOPMENT

BORING
STUFF

EVEN MORE
BORING STUFF

No Server is Easier to Manage Than “No Server”

Werner Vogels, Amazon CTO



Lambda

=

Microservice without servers

Lambda Function



Lambda
function

```
var AWS = require('aws-sdk');
var s3 = new AWS.S3();

exports.handler = function(event, context) {
    var params = {
        Bucket: '[input bucket name here]'
        Key: '[insert keyname here]'
        Body: '[object body]'
    };
    s3.putObject(params)
    console.log('Object inserter')
};
```

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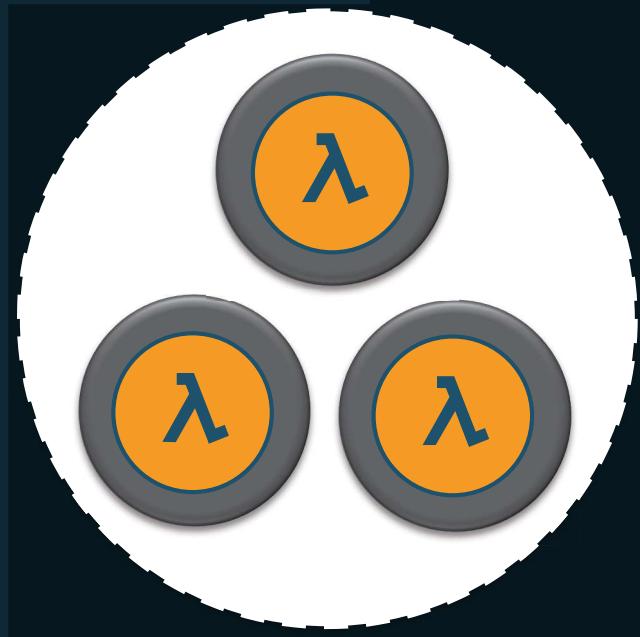
I reguła serverless

Don't manage infrastructure

II reguła serverless

**It needs to be Highly Available
out of the box!**

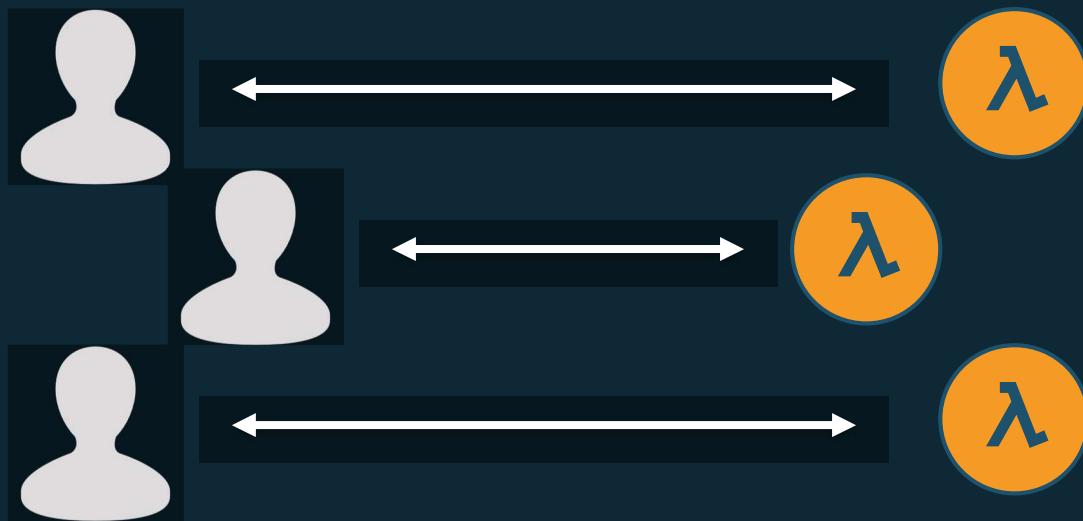
High Availability



III reguła serverless

It needs to scale automatically

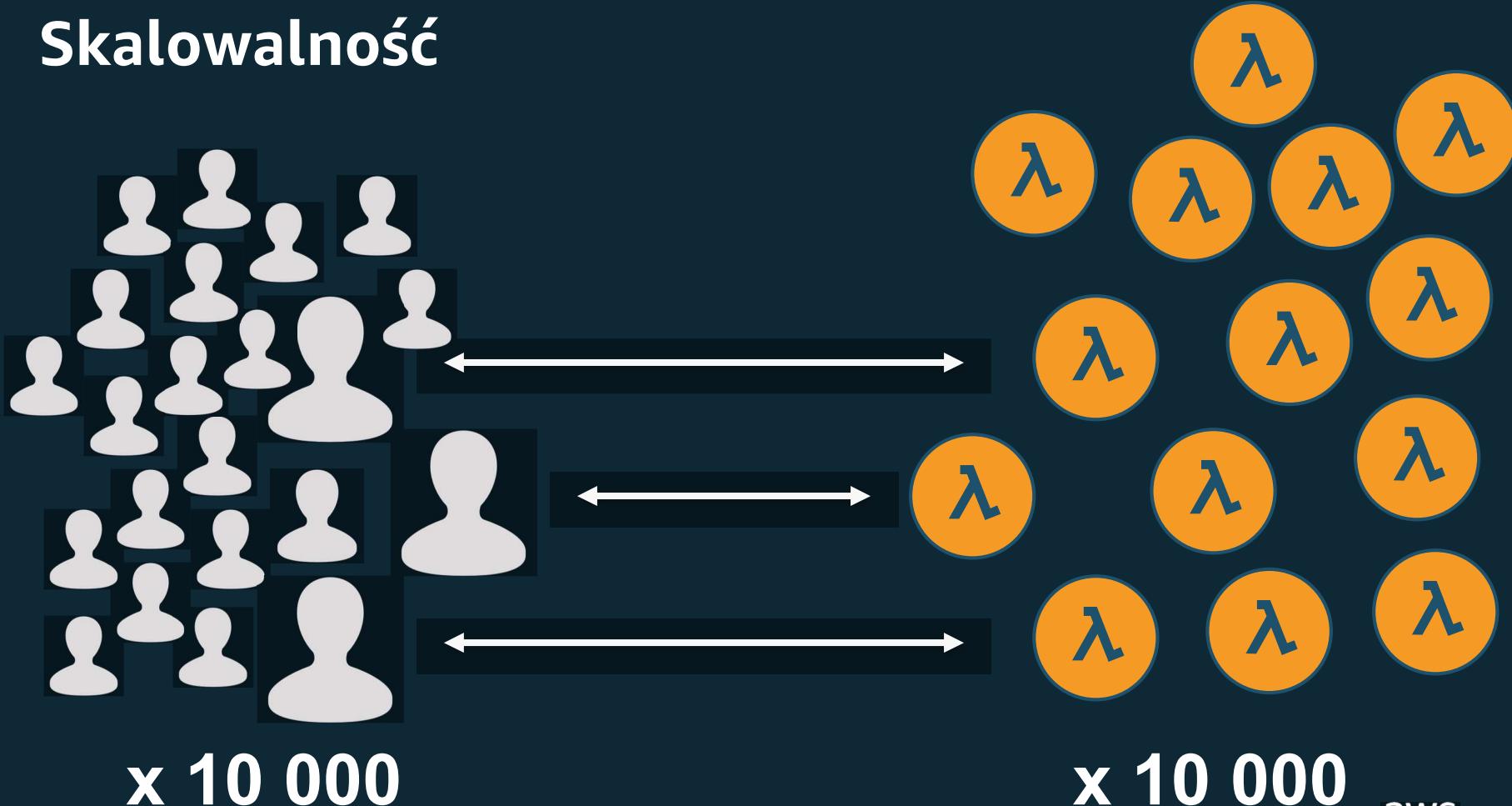
Skalowalność



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Skalowalność



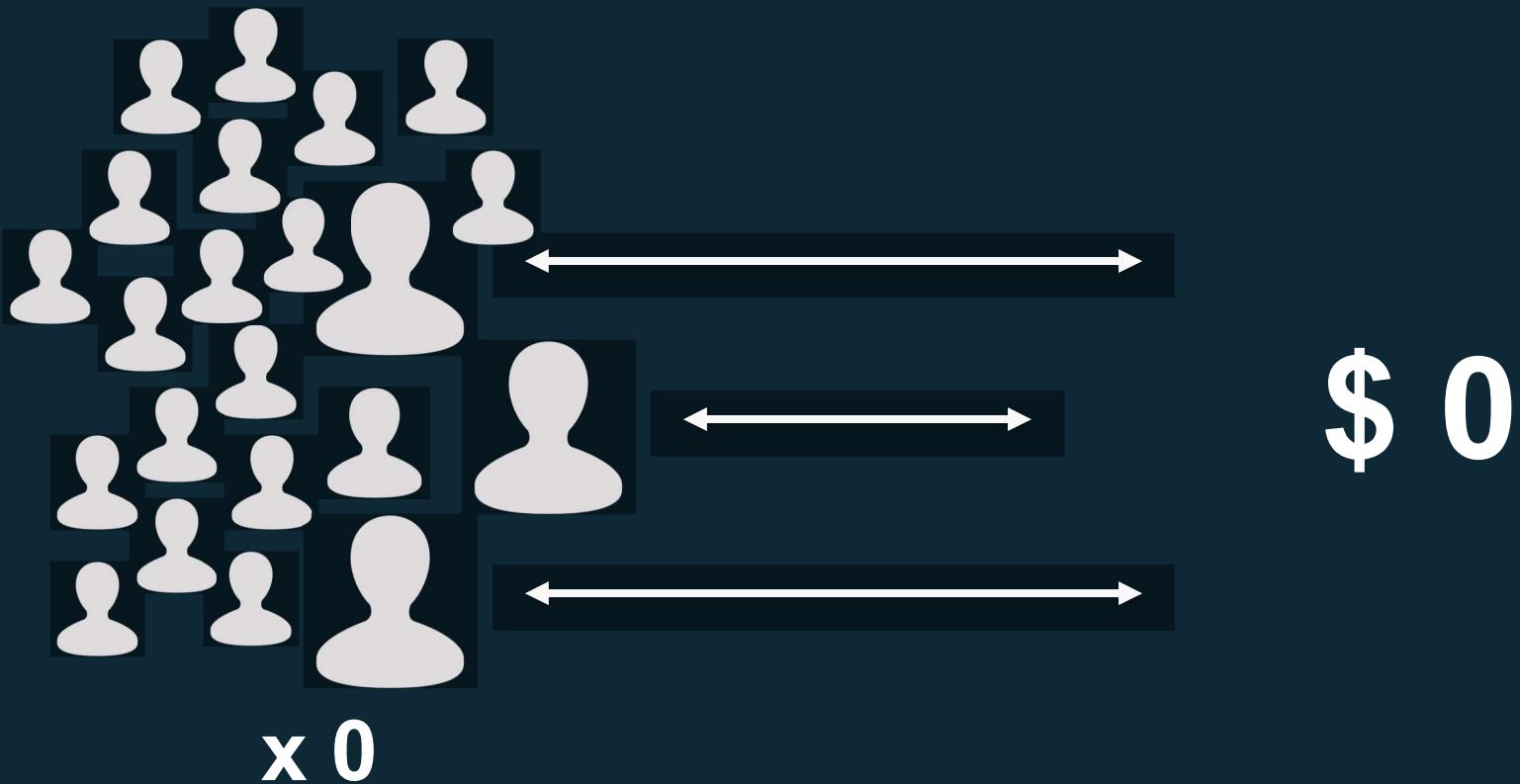
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IV reguła serverless

We don't want to pay for idle time!

Scalability

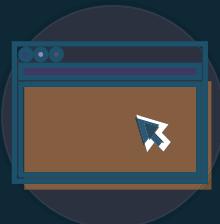


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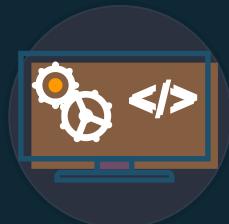
Ok.... so where to use it?

Gdzie użyć?



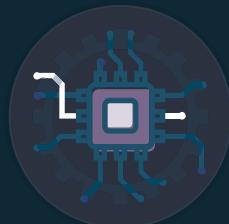
Web Applications

- Static websites
- Complex web apps
- Packages for Flask and Express



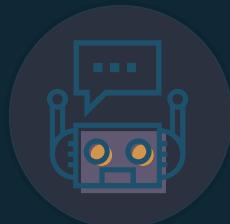
Backends

- Apps & services
- Mobile
- IoT



Data Processing

- Real time
- MapReduce
- Batch



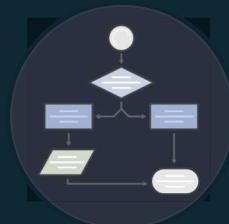
Chatbots

- Powering chatbot logic



Alexa

- Powering voice-enabled apps
- Alexa Skills Kit



IT Automation

- Policy engines
- Extending AWS services
- Infrastructure management



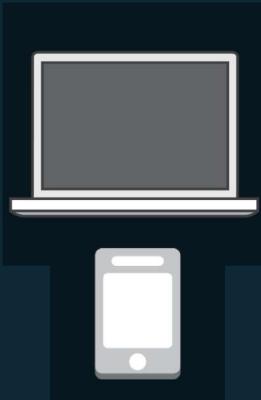
Serverless to nie tylko funkcje...

IaaS, PaaS, SaaS

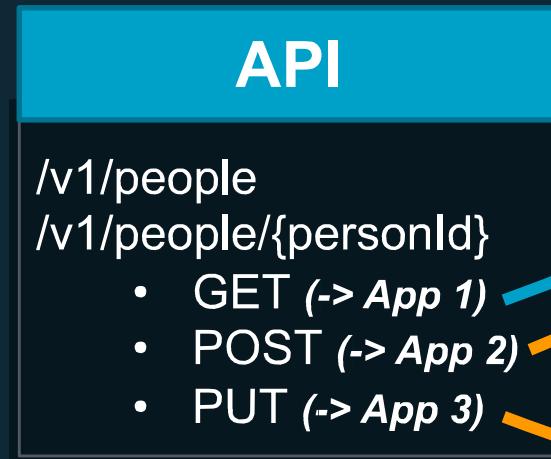
FaaS = Function as a Service



Tworzenie usługi REST



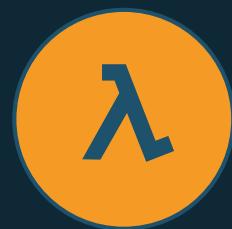
[http://mypage.com/...](http://mypage.com/)



App 1

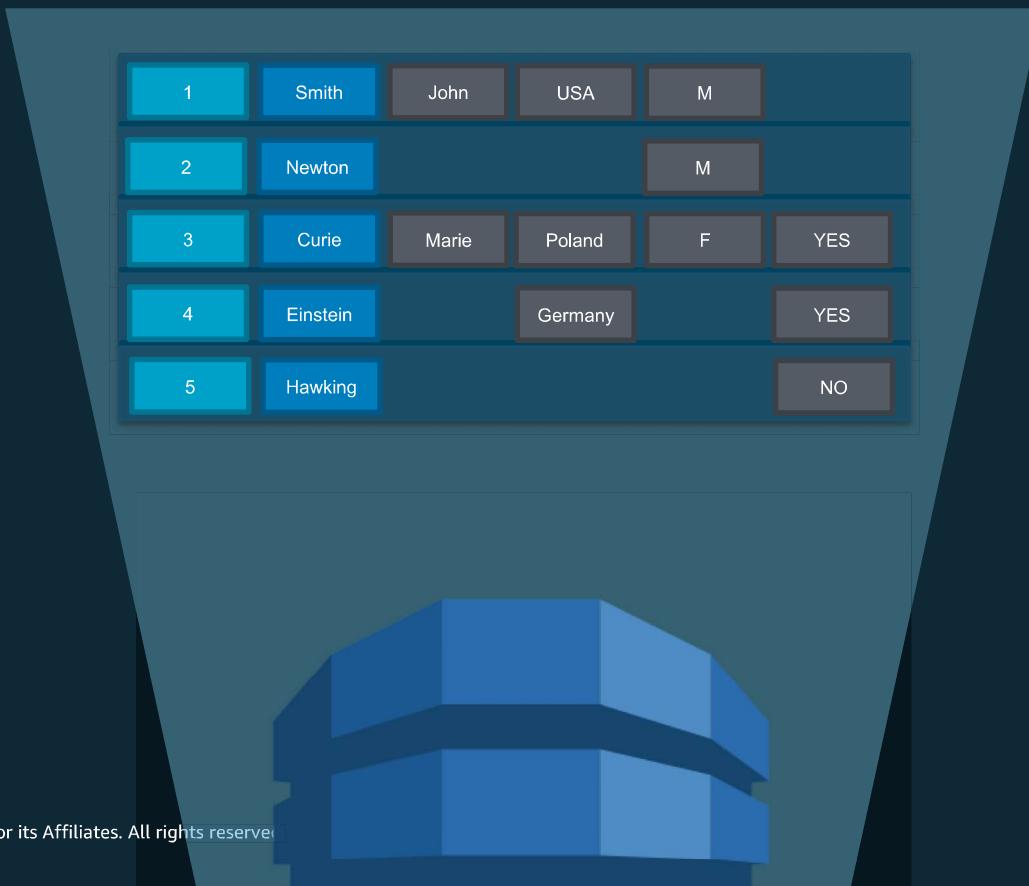


App 2



App 3

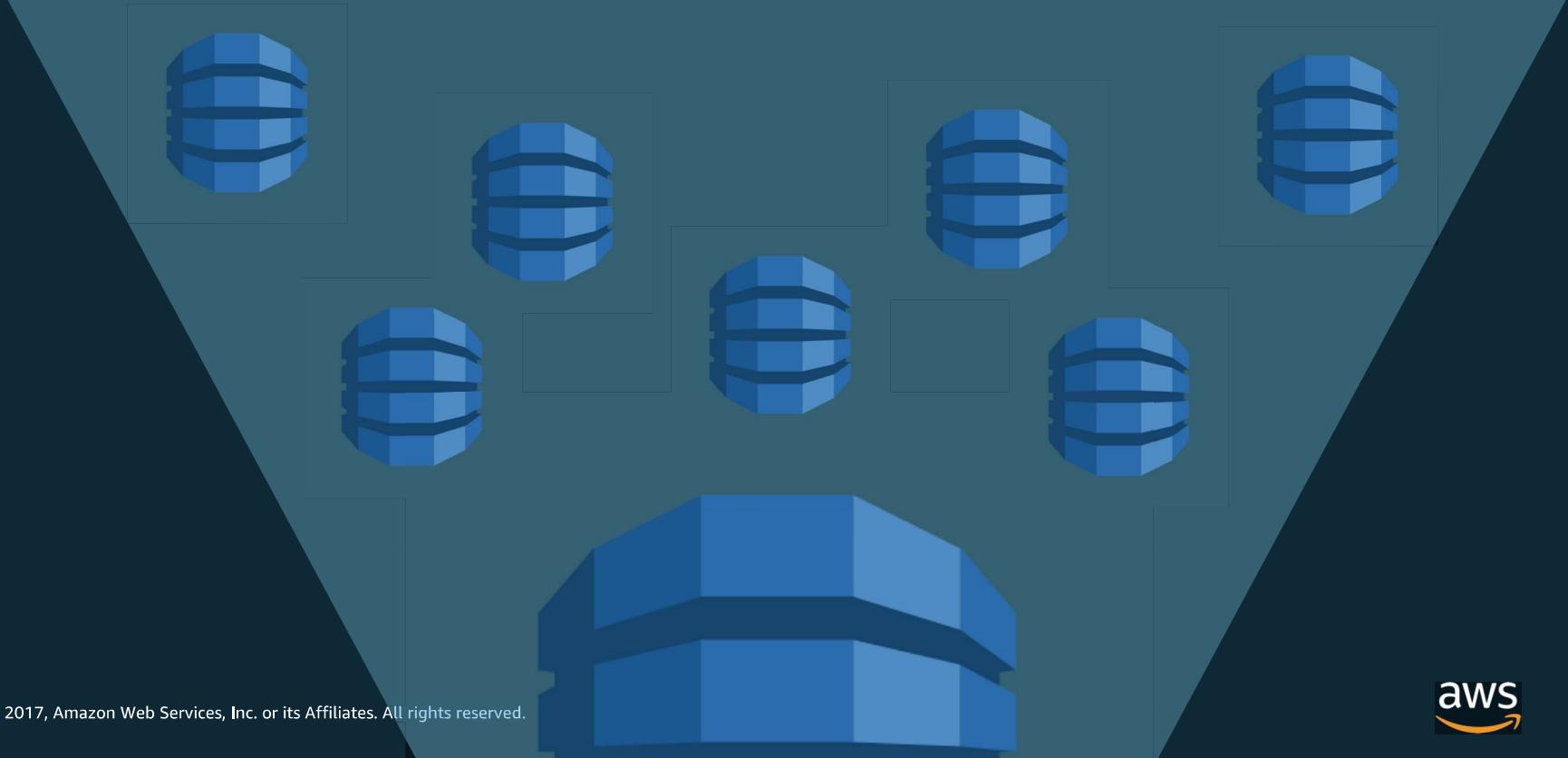
DynamoDB – Baza NoSQL



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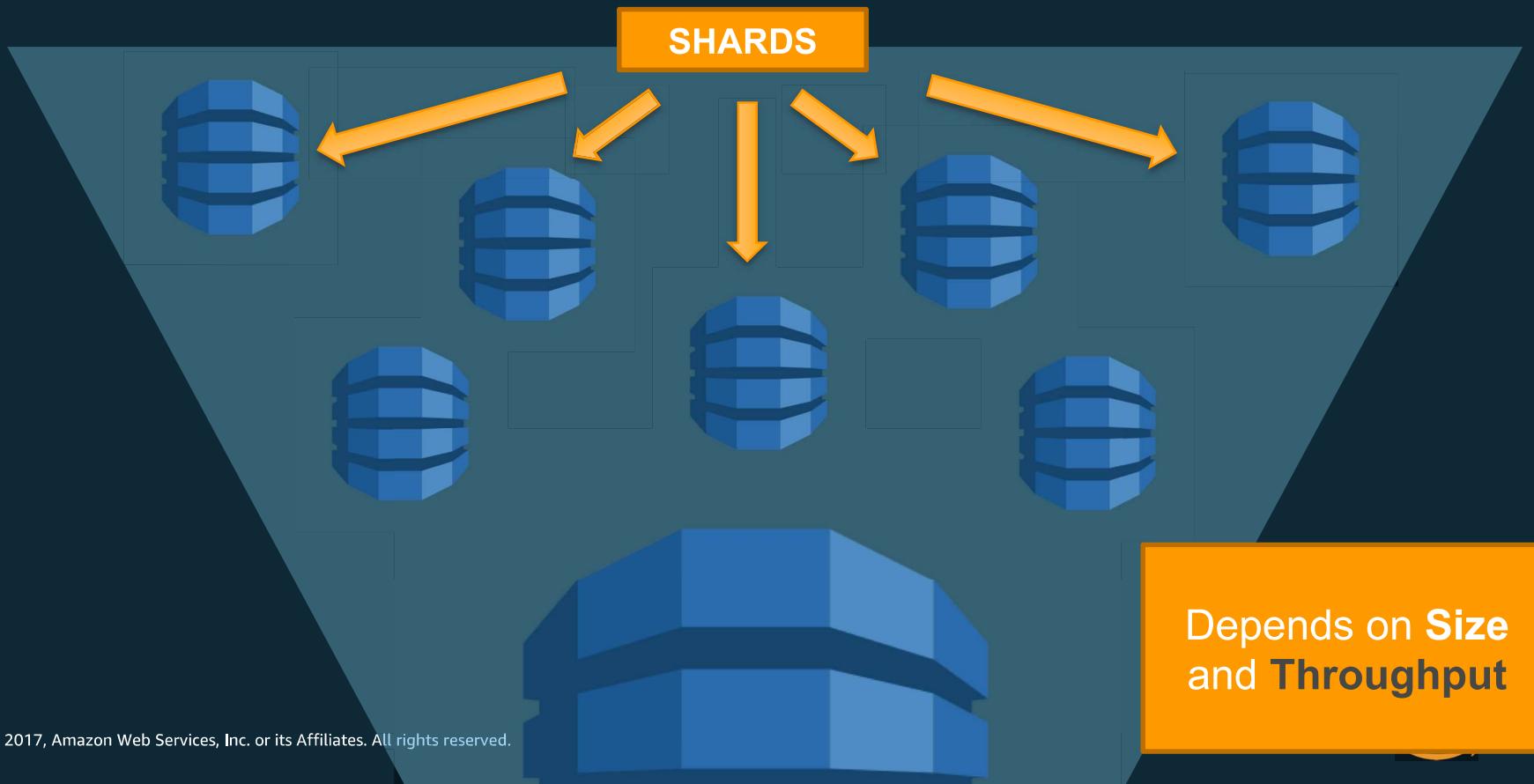


DynamoDB – Baza NoSQL



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DynamoDB – Baza NoSQL

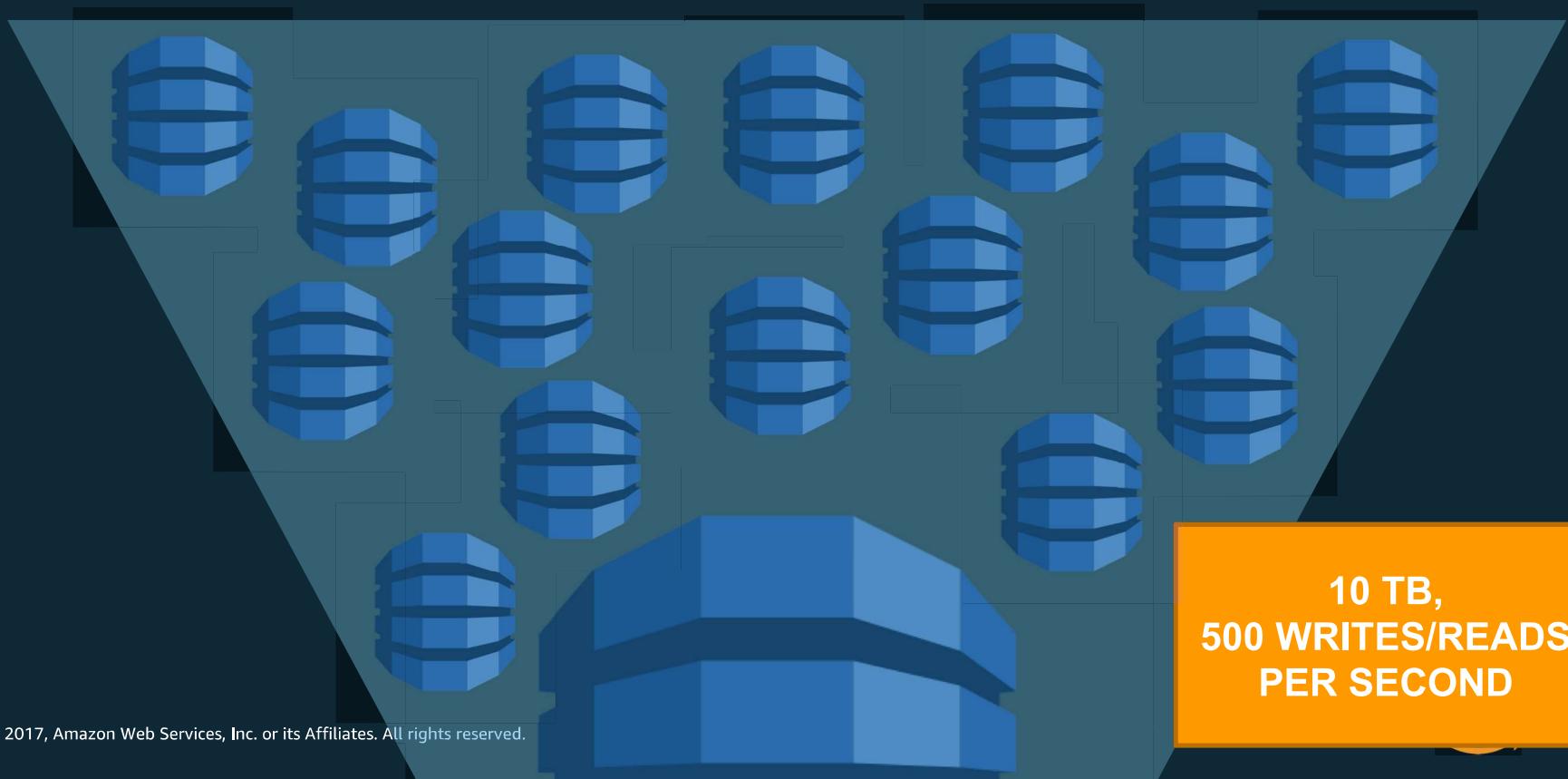


DynamoDB – Baza NoSQL



10 GB,
5 WRITES/READS
PER SECOND

DynamoDB – Baza NoSQL



10 TB,
500 WRITES/READS
PER SECOND

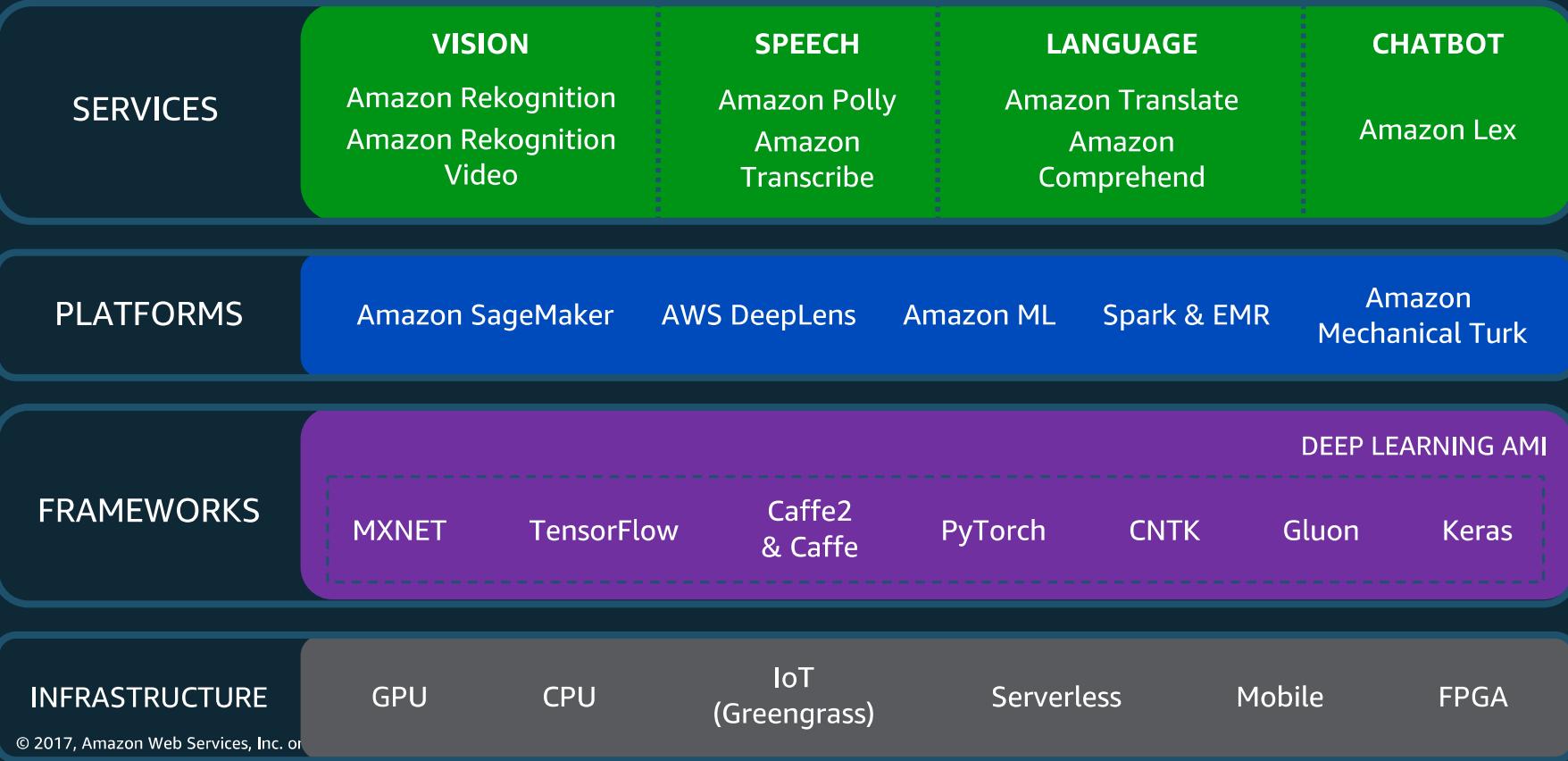
Później zobaczymy inne usługi....

Artificial Intelligence!

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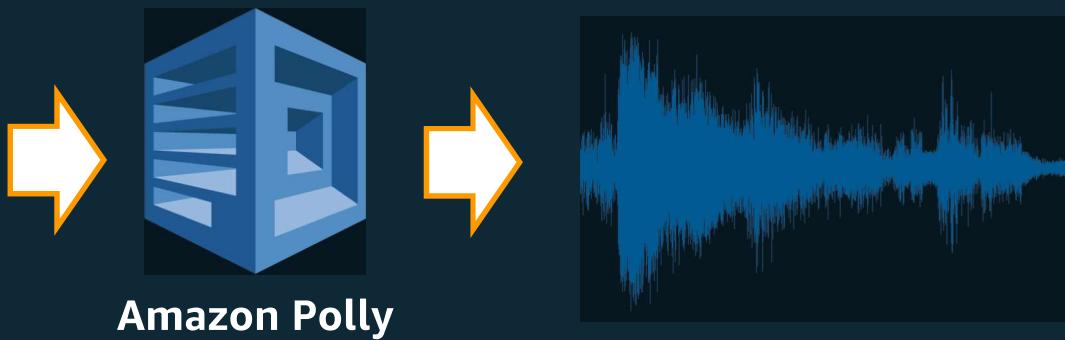


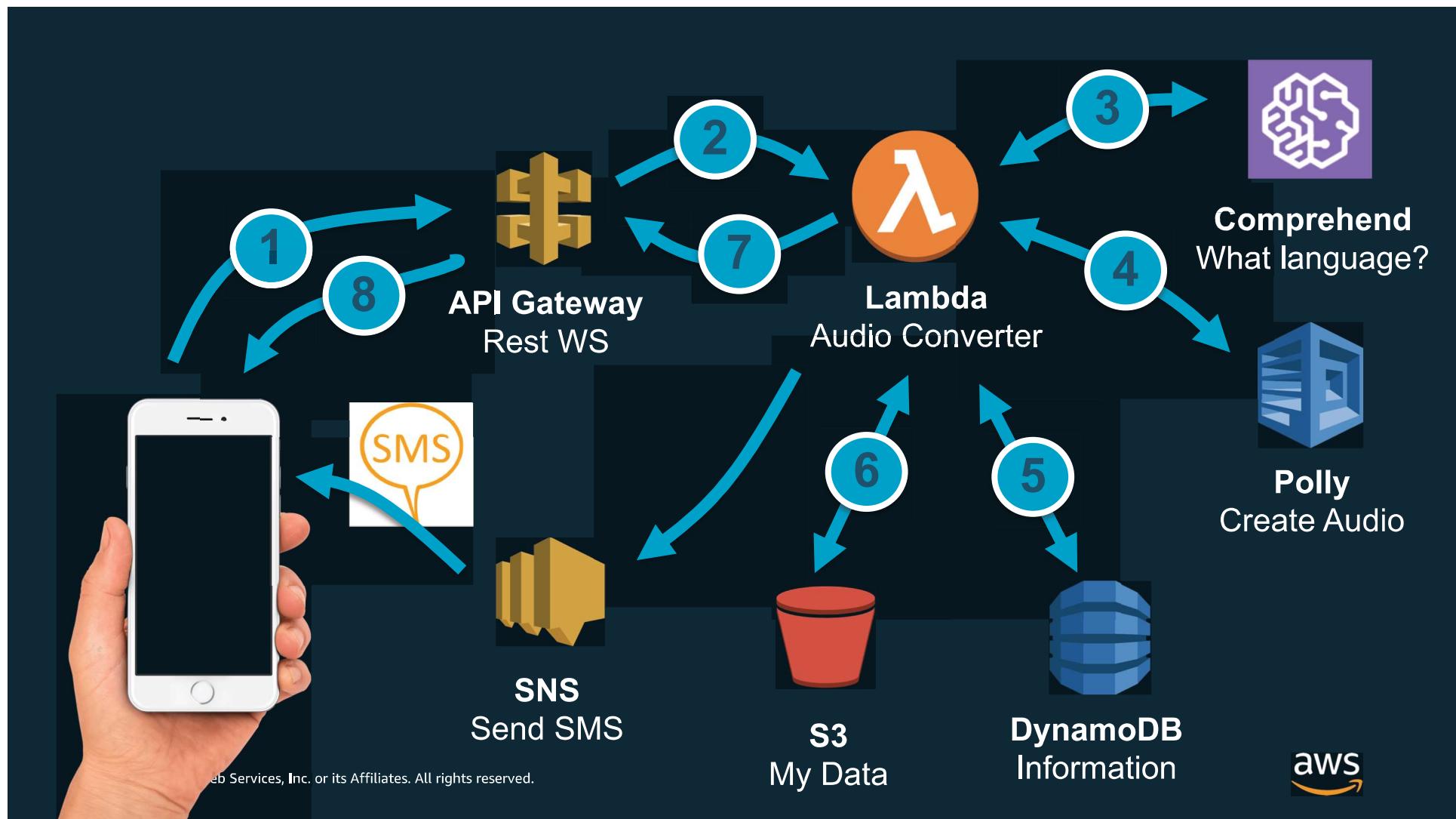
AI?



Amazon Polly – Text-to-Speech

Amazon Polly is a service that turns text into lifelike speech, allowing you to create applications that talk, and build entirely new categories of speech-enabled products.





Budujmy!

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Wejdź:
<https://api.demo-cloud.pl/test/>
AudioConverter

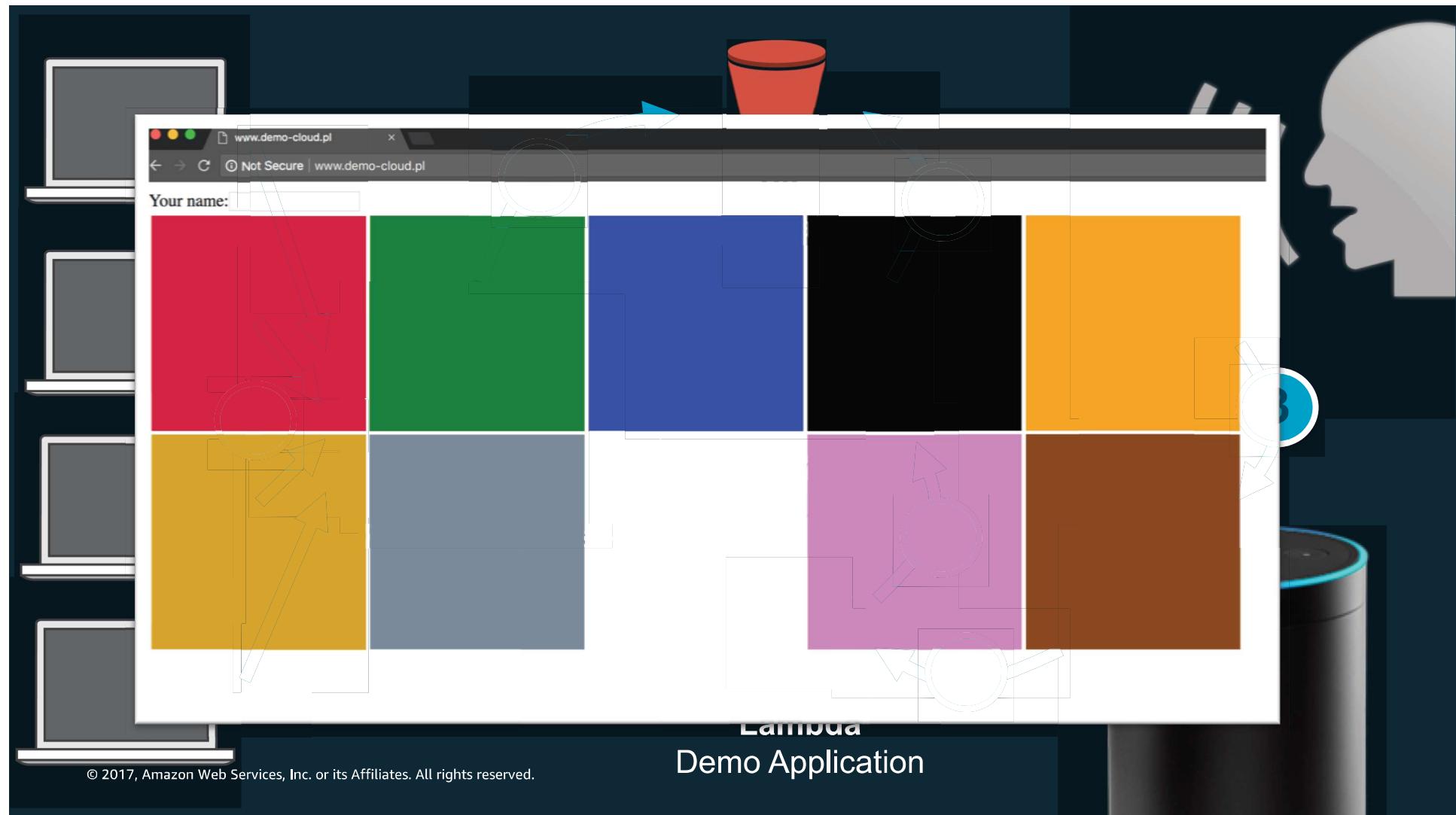
Zmodyfikuj:
[**https://api.demo-cloud.pl/test/**](https://api.demo-cloud.pl/test/)
AudioConverter
?text=**This is Tomasz test!**

Zmodyfikuj:
[https://api.demo-cloud.pl/test/
AudioConverter
?text=This is Tomasz test!
&phone=+4860321....](https://api.demo-cloud.pl/test/AudioConverter?text=This is Tomasz test!&phone=+4860321....)

APP 2

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Lambda Demo Application

www.demo-cloud.pl

price: \$100

Ewolucja ...



Dzięki!

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stachlew@amazon.com

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