

A close-up photograph of two turtles, likely red-eared sliders, resting on a person's hand. The turtles have distinct red patches on their ears and yellow patterns on their shells. The background is dark, making the turtles stand out.

# Node.js at GoDaddy

Production and Proliferation

Charlie Robbins | @indexzero



**WHY, HELLO THERE**



@INDEXZERO

GITHUB

TWITTER



# DIR. UX PLATFORM @ **GODADDY**

Also, Gold Director, Node.js Foundation

Formerly founder at Nodejitsu

Been at GoDaddy about a year now.

@INDEXZERO

GITHUB

TWITTER



# GoDaddy

— HAS ALWAYS BEEN —

an eclectic

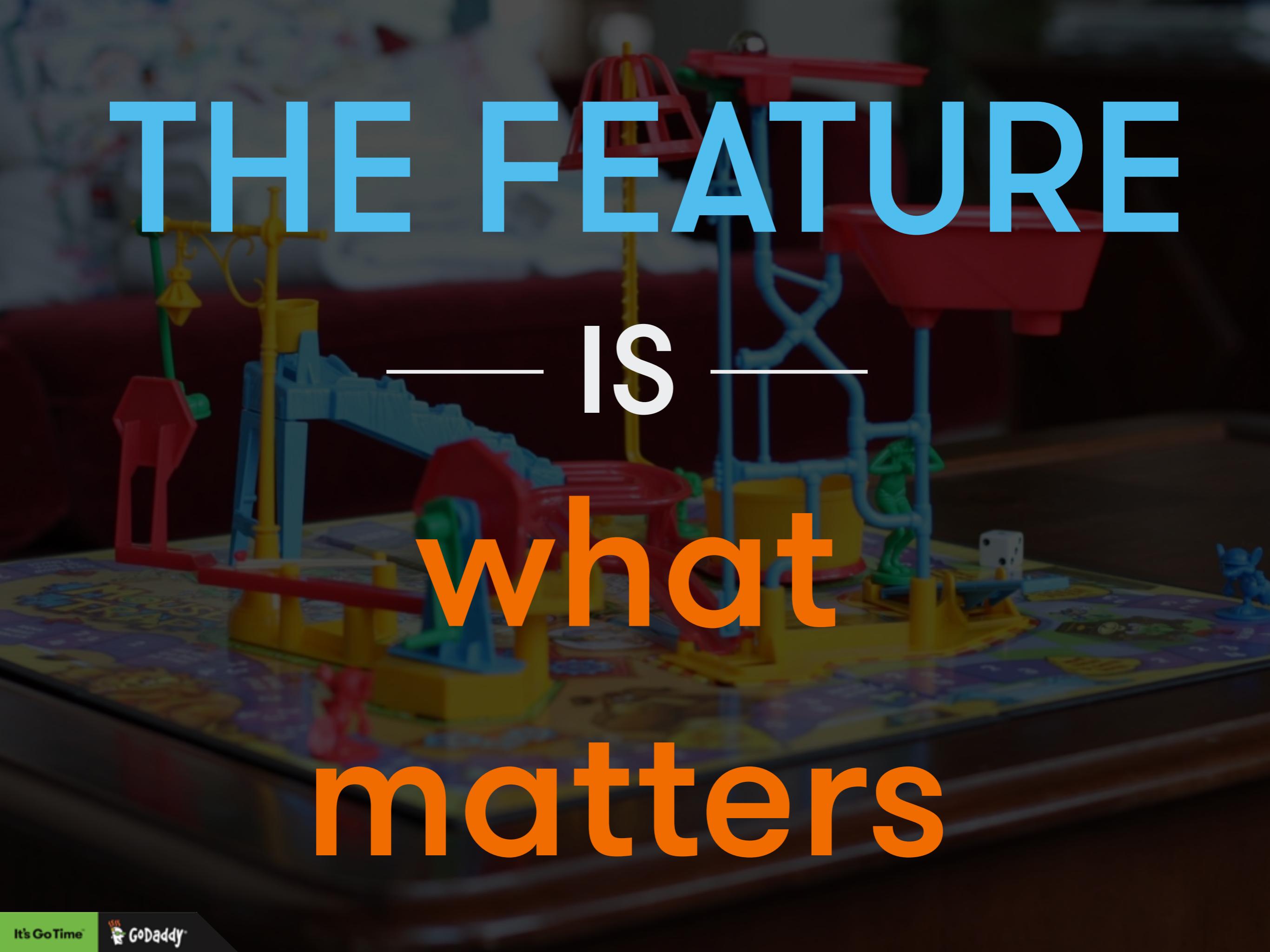
TECH STACK



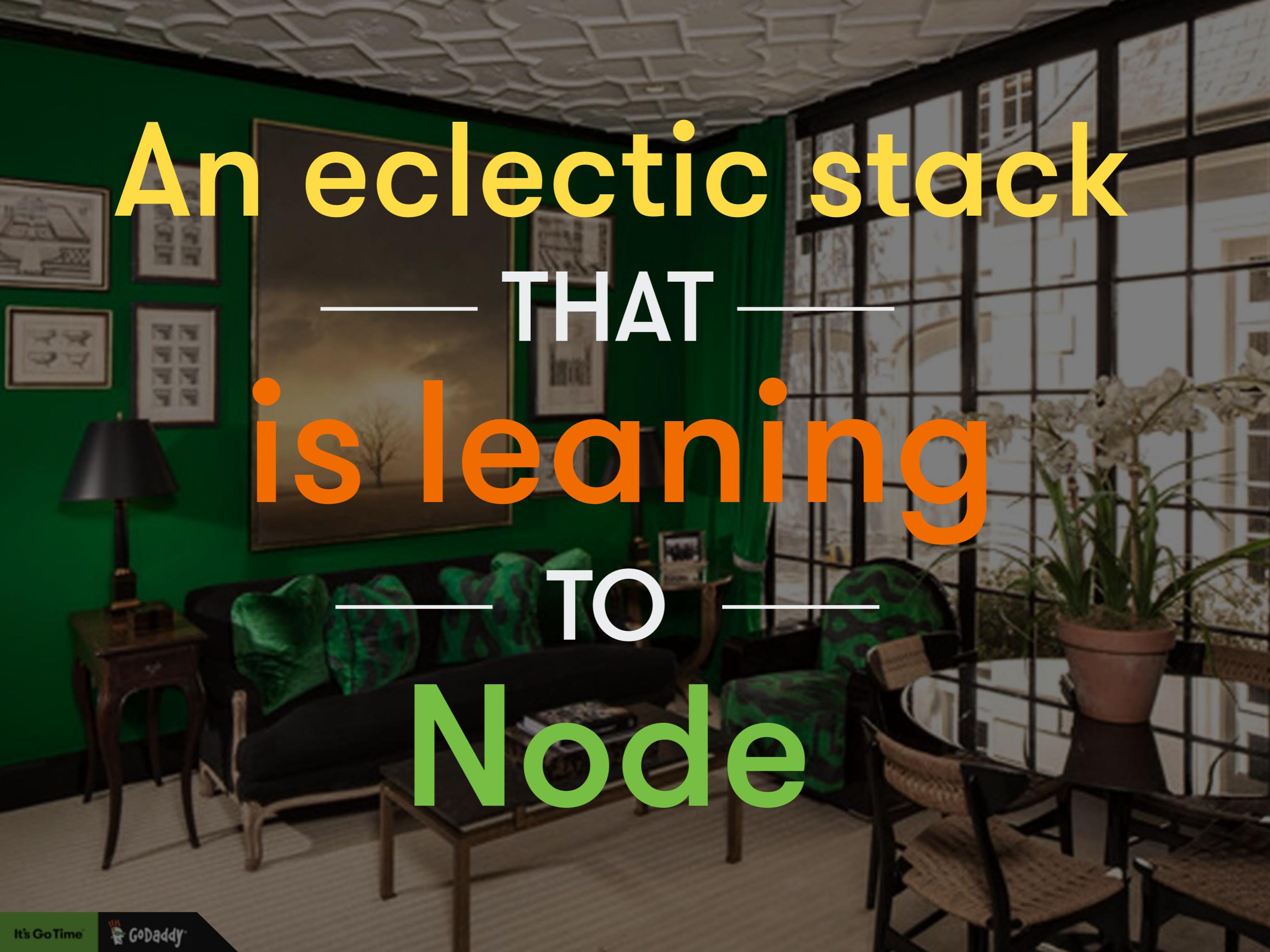
# THE FEATURE

IS

what  
matters







An eclectic stack  
— THAT —  
is leaning  
TO —  
Node



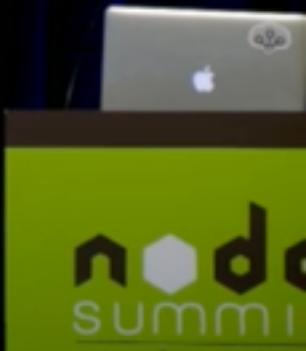
GoDaddy®

How moving to Node changed our team and helped us  
get 10x more scalability

Node Summit 2015

Antonio Silveria  
GoDaddy

node  
summit



From

proof-of-concept

To

How moving to Node changed our team and helped us  
get 10x more scalability

PRODUCTION

And

Antonio Silveria

GoDaddy

proliferation

A large construction site featuring a massive steel truss structure under construction. Several yellow construction cranes are positioned around the site, with one prominent crane on the left and another on the right. In the foreground, several workers wearing blue hard hats and high-visibility vests are working on the steel framework. The sky is overcast and grey.

# CI/CD PIPELINES



# WEBSITE — BUILDER

A fluffy brown dog with glasses and a suit, sitting at a keyboard, with a laptop in the background.

We need to talk  
— about —  
**MICROSERVICES**



A large, modern building with a blue and white geometric patterned facade, set against a dark sky.

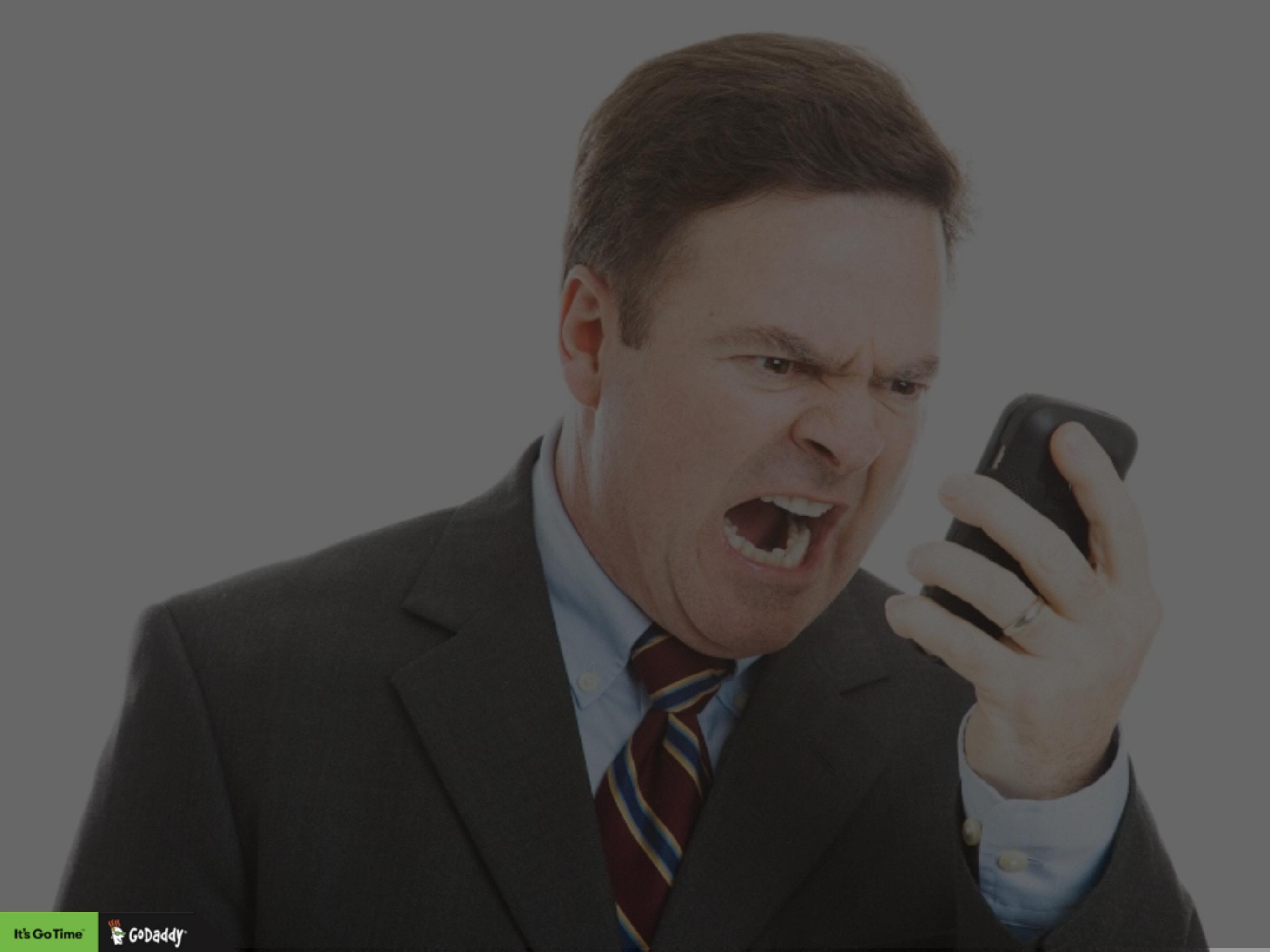
—First—

untether

FROM THE



—First—  
untether  
**FROM THE**  
**MONOLITH**



A man in a dark suit, light blue shirt, and striped tie is shown from the chest up. He has a concerned or stressed expression, with his mouth slightly open as if speaking into a phone. His right hand is holding a black smartphone to his ear. The background is a plain, light color.

What about  
the  
**WHY**  
of

A man in a dark suit and a patterned tie is shouting into a black telephone receiver held to his ear with his right hand. He has a look of intense concentration or anger on his face. The background is a plain, light-colored wall.

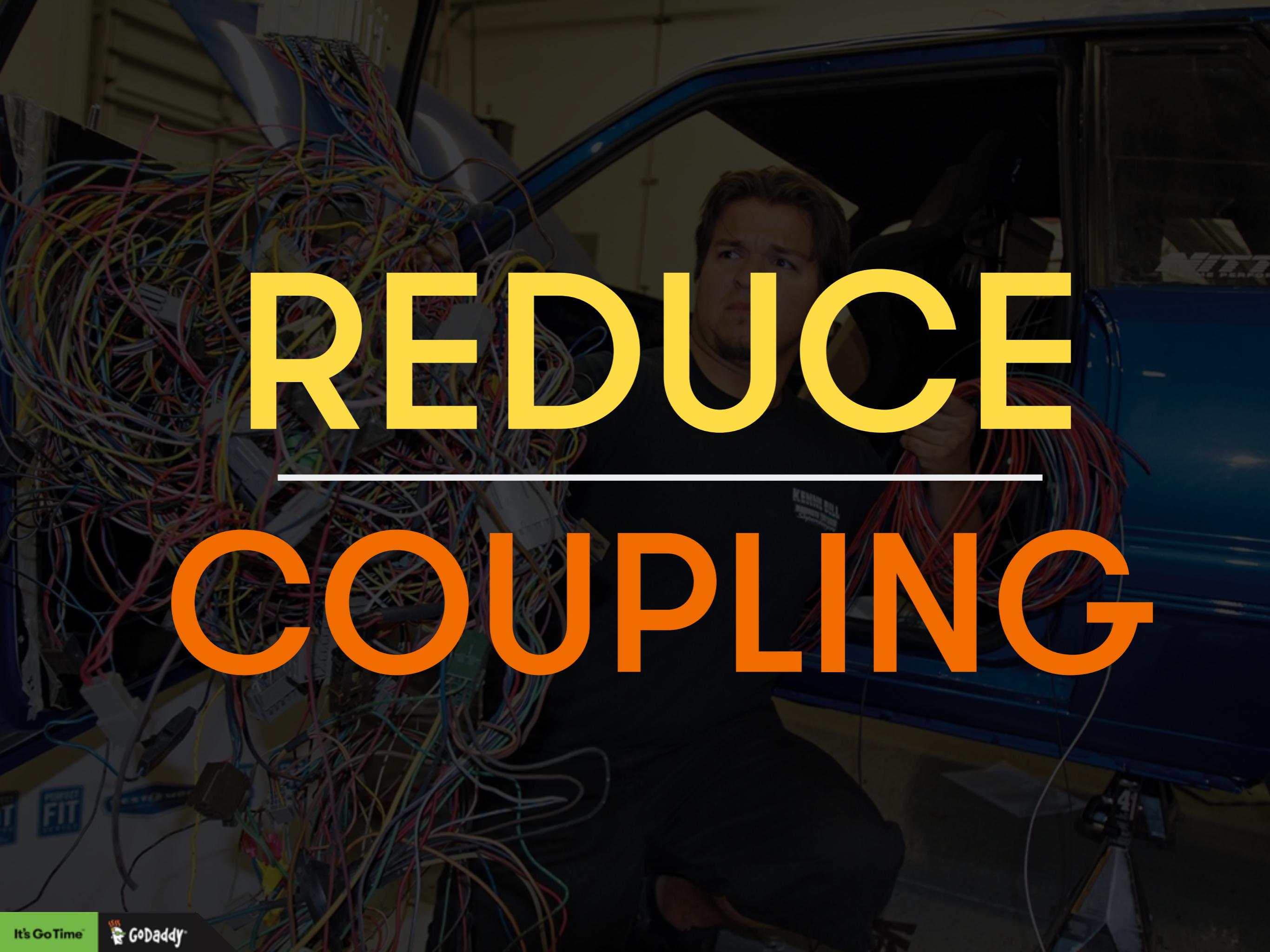
# What about the **WHY** of Microservices?

# CONWAY'S LAW

“ Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure.

— Melvyn Conway, 1967



A man with light brown hair is working on the interior of a car, specifically the dashboard area. He is looking towards the camera with a focused expression. The background is filled with a chaotic tangle of colorful electrical wires and components, suggesting a complex wiring harness or a repair in progress.

# REDUCE COUPLING





# MOBILE

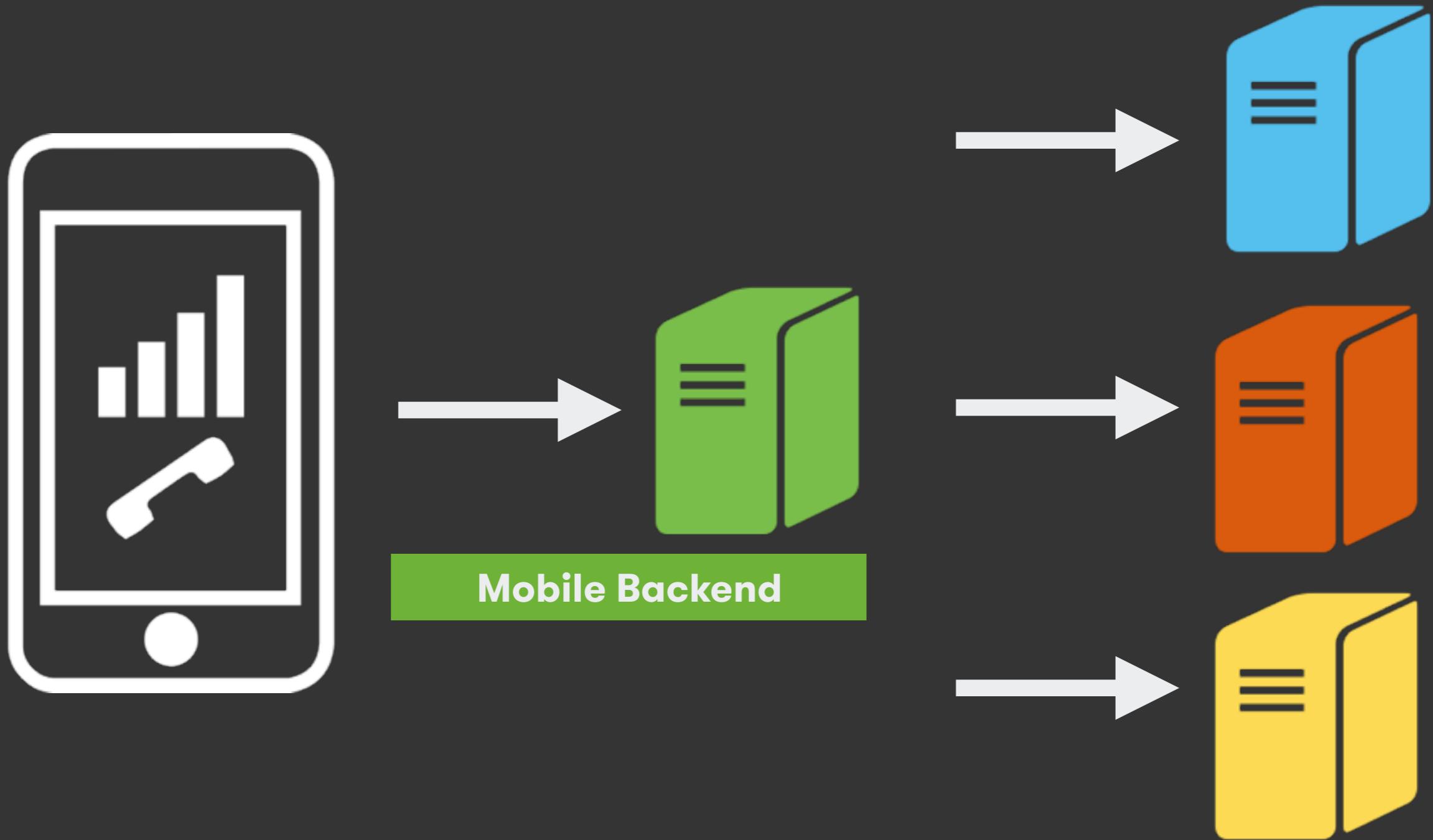
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# PERFORMANCE





**That's THREE roundtrips on the mobile network**



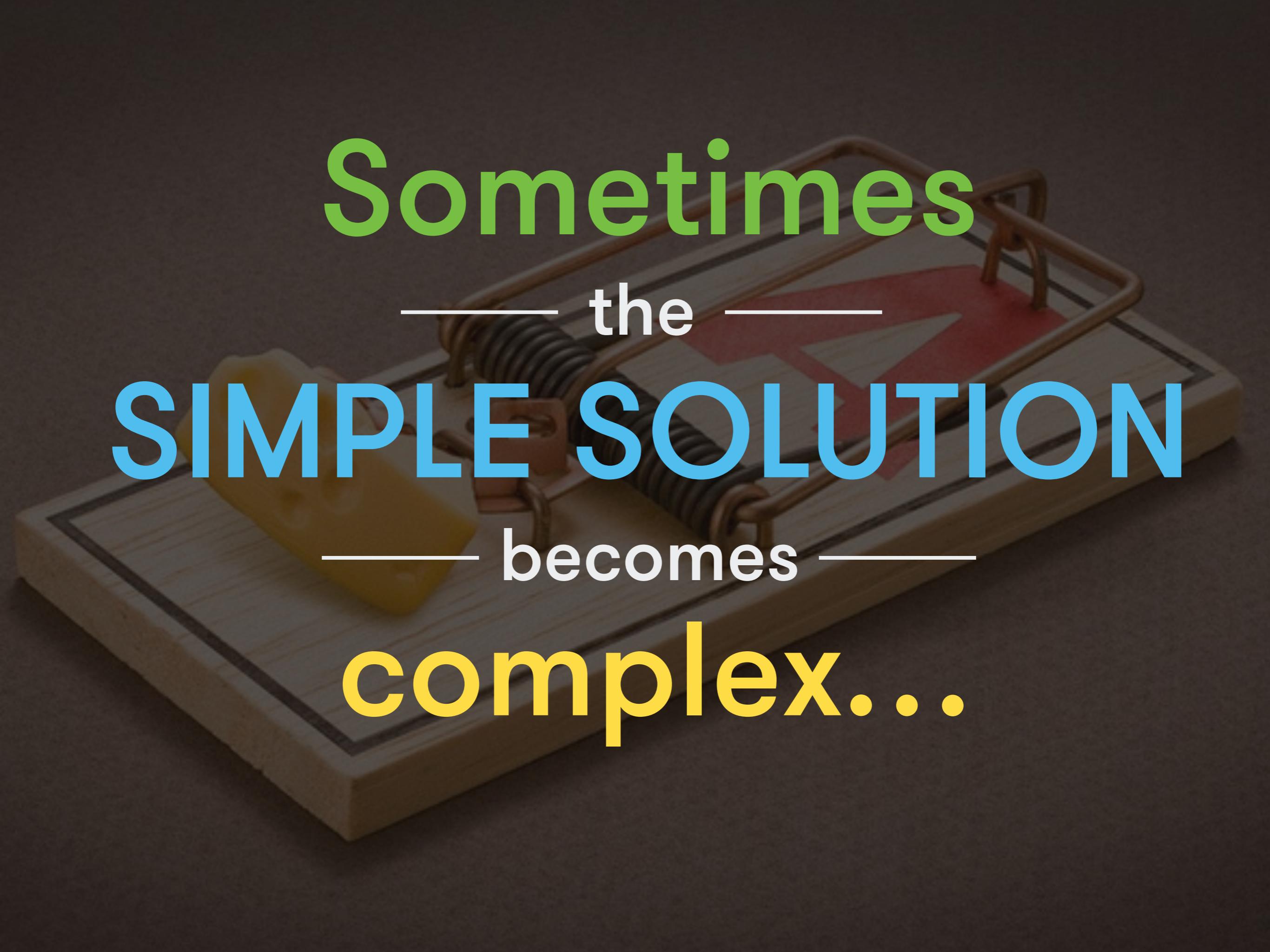
**Make roundtrips on the FASTER NETWORKS**



# SMALLER DEPLOYMENTS



Absolutely NOT  
— all —  
**Rainbows**  
— and —  
**Unicorns**



**Sometimes**  
— the —  
**SIMPLE SOLUTION**  
— becomes —  
**complex...**





Each new service  
—CAN—  
introduce new  
points of failure



# DESIGN —for— FAILURE





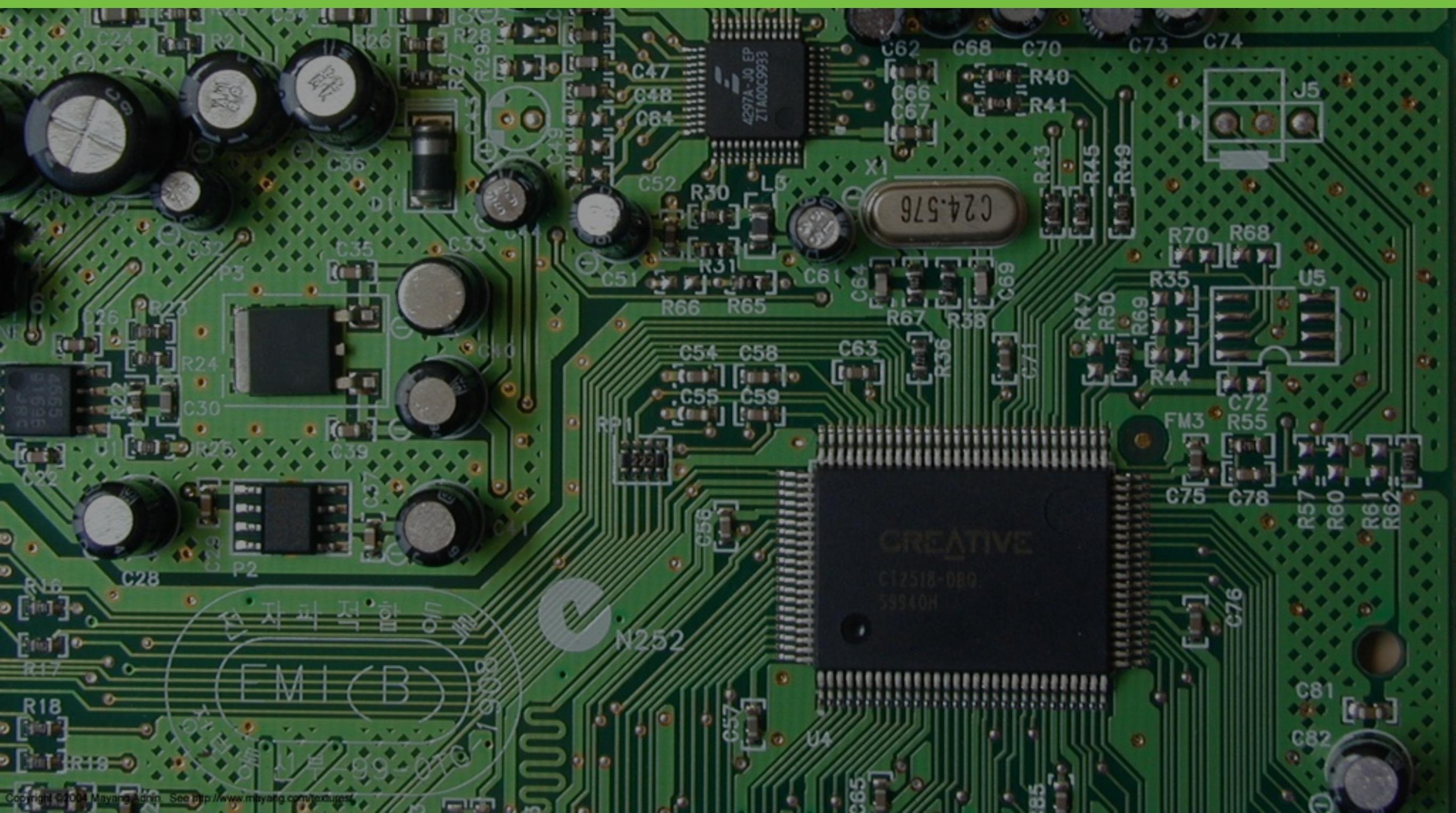
— Let's —

# BUILD

— something —

right here. right now

# NODE.JS



Tested To Comply  
With FCC Standards

# NODE.JS

# EXPRESS

# REDIS/CASSANDRA

# ...now what?





TEST  
YOUR  
CODE



PROXYQUIRE

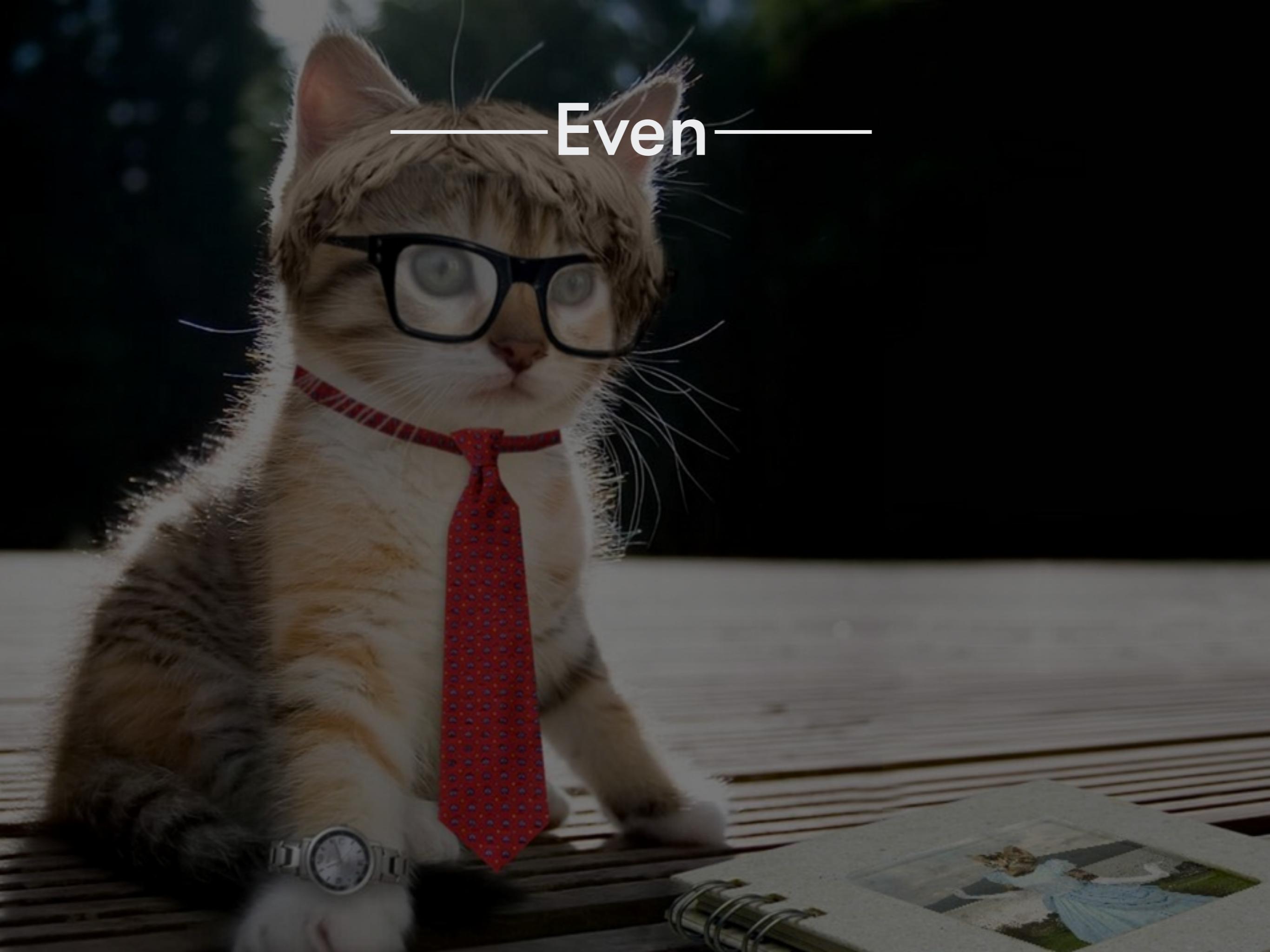
MOCHA

ISTANBUL

CHAI / ASSUME

SINON

—Even—



A fluffy orange cat is the central figure, dressed in a professional manner with black-rimmed glasses, a red patterned tie, and a silver-toned wristwatch. The cat is positioned behind a dark wooden desk, looking slightly to the right. On the desk, there's a laptop with its screen visible, a white spiral-bound notebook, and a blue and white checkered cloth. The background is a dark, out-of-focus indoor setting.

—Even—

**test code**

**IS STILL**

---

**DRY**





**DON'T**  
**REPEAT**  
**YOURSELF**

The background is a dark, atmospheric image of a person wearing a hooded jacket, with a glowing blue rose positioned in the center. The text is overlaid on this image, with each line separated by a thin white horizontal line.

**SIMPLE  
EXTENSIBILITY**

**CONFIGURATION  
MANAGEMENT**

**DRY UNIT /  
INTEGRATI  
ON TESTS**

**VALIDATION  
LOGGING**

**INTERNATIONALIZATION AND LOCALIZATION**

**ISOMORPHIC  
DATA MODELS**

**MONITORING &  
METRICS**

**DIRECTORY STRUCTURE**



There be  

---

**DRAGONS**



Thankfully,

we can

~~KILL~~ Slay

them



**MORE ON THAT**  
— in the —  
**COMING MONTHS**



— YOUR —  
**FRAMEWORK**  
— CAN'T DO —  
**everything**

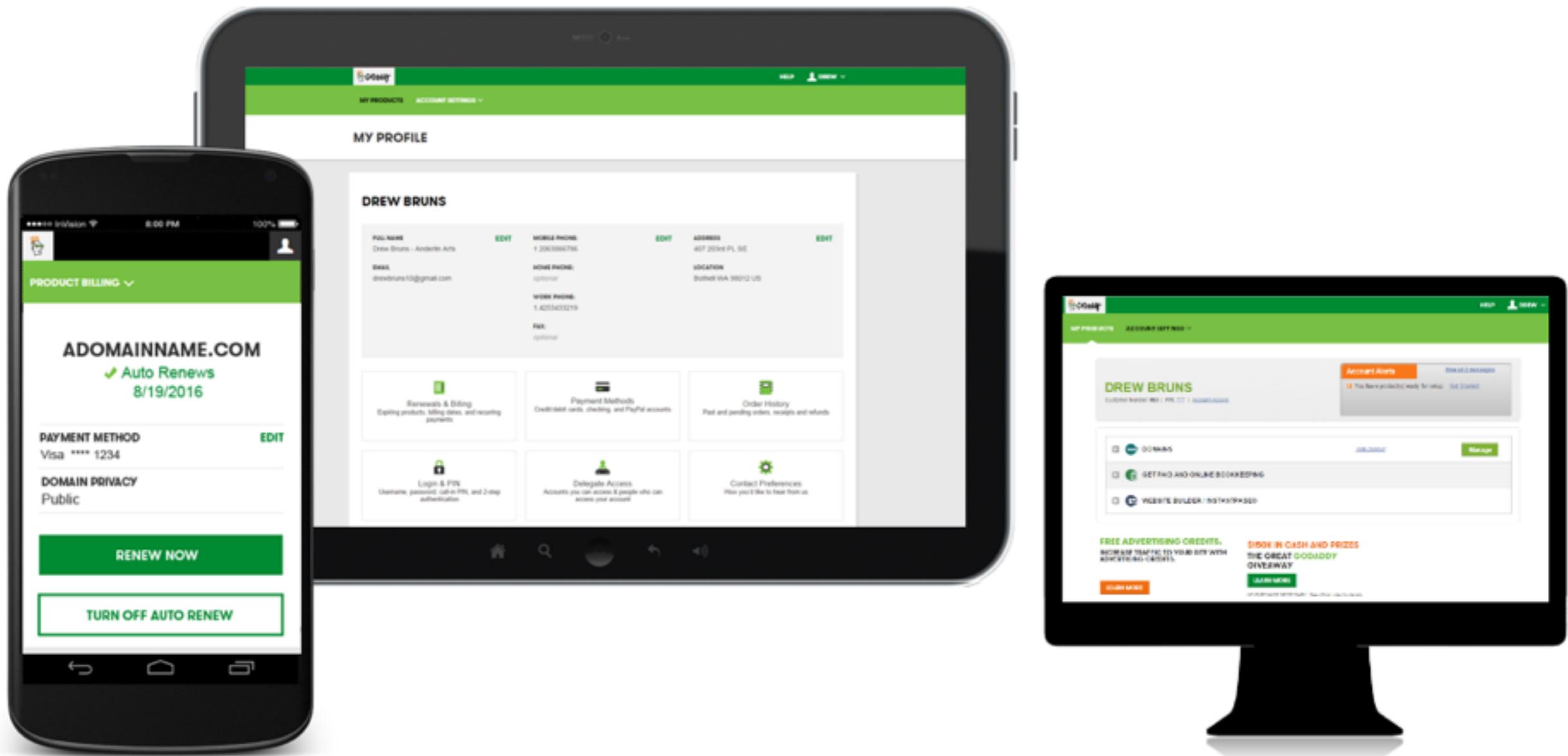




**BUT STILL**

---

**WOW SUCH NODE  
AWESOME**



# NEW & IMPROVED

## ACCOUNT MANAGEMENT

# NOW 10%



COMING SOON  
NEW & IMPROVED  
TO YOU

# ACCOUNT MANAGEMENT

# NEW HELP

# BIG DATA FOR SMALL BUSINESSES

## ACCOUNT MANAGEMENT

**FIREFOX** Can do no wrong, though not as spry as it once seemed.



would be

**MORGAN FREEMAN\***

**CHROME** The new hotness. People love it so much they're nervous it will go wrong and embarrass them later.



would be

**CHRISTOPHER NOLAN**

**IE 6** Everyone thought it died a long time ago, but still seems to crop up all over the place.



would be

**BETTY WHITE**

**IE 7** After years of giving it chance after chance, performance never gets better.



would be

**MATTHEW MCCONAUGHEY**

**IE 8** Trying desperately to stay relevant, even though it's still the same thing.



would be

**THE SHATNER**

**SAFARI** Reliable performance, seems to be everywhere.



would be

**SAMUEL JACKSON**

(Just wait til he collaborates with "Chrome")

**FLOCK** Hip, but people don't take it seriously anymore.



would be

**MICHAEL CERA**

**FIREFOX** Can do no wrong, though not as spry as it once seemed.



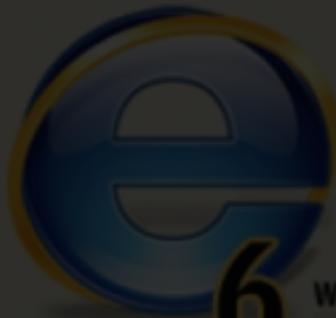
**CHROME** The new hotness. People love it so much they're nervous it will go wrong and embarrass them later.



# FRONT-END

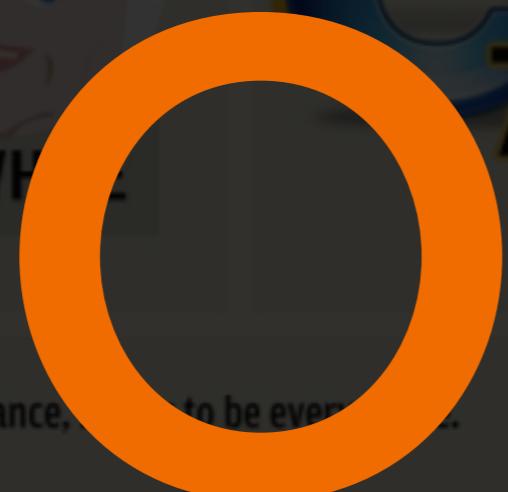
IE

Everyone thought Microsoft was along the way, but still seems to pop up after the picture.



6

would be  
BETTY WHITE



# OPS

**SAFARI**

Reliable performance, but not to be every day.



would be

SAMUEL JACKSON

(Just wait til he collaborates with "Chrome")

FLOCK



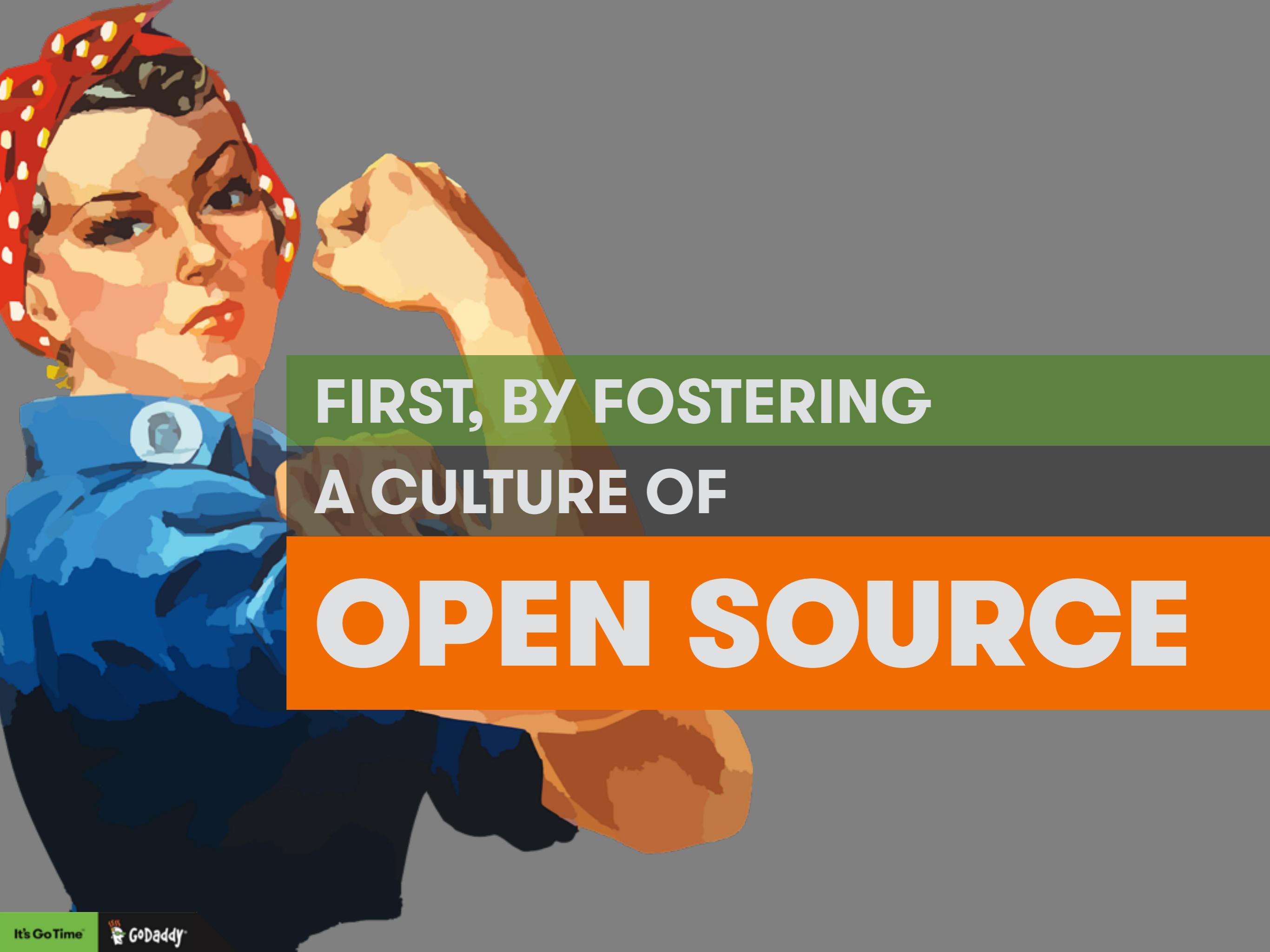
would be

MICHAEL CERA

# CONWAY'S LAW

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— Melvyn Conway, 1967



**FIRST, BY FOSTERING  
A CULTURE OF**

**OPEN SOURCE**



YES! I WANT YOU TO WRITE



OPEN SOURCE





Ok, I'm sold!  
— Tell me, —

**HOW**  
— do we —

**OPEN SOURCE?**



— SCIENCE CAT SAYS —  
**“GOOD QUESTION”**





— CREATE —

**WORKING**

**GROUPS**

—



— DO MORE —





— DO MORE —

# MENTORSHIP

— WITH PEOPLE —

everywhere



WORK TOGETHER

TO MOVE FORWARD





**FIND A  
COMMON  
PROBLEM**

---

---

---

# CASSANDRA



---

# COMMON

---

# PROBLEM





**BUILD**  
**A REUSABLE**  
**SOLUTION**

```
require('apollo');
```

**A REUSABLE  
SOLUTION**



**MORE ON THAT**  
— just —  
**NEXT MONTH**



**WE ARE JUST  
getting started**

# MAY THE SOURCE BE WITH YOU



{github, twitter}.com/indexzero  
crobbins@godaddy.com

## THANKS. Q&A TIME.