

DEVOPS HANDBOOK: **EXPERIMENTS IN ACCELERATING DELIVERY**

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NATIONWIDE



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NATIONWIDE: PROTECTING WHAT MATTERS MOST

16+
MILLION
POLICIES

\$209.8
BILLION
IN ASSETS

\$17
BILLION

PAID IN CLAIMS
AND BENEFITS
IN 2016

\$400
MILLION
CONTRIBUTED
TO NONPROFITS
AND COMMUNITIES
SINCE 2000



34,000 Nationwide associates
serve customers in every state



We're #1 in:



TOTAL SMALL
BUSINESS¹



PET²



457 PLANS³
(based on number of plans)



FARM AND
RANCH⁴



CORPORATE
LIFE⁵

FORTUNE
100
BEST
COMPANIES
TO WORK FOR⁶
2017

7th
LARGEST
COMMERCIAL
INSURER

90
YEARS
of serving
our members

#68
ON THE
FORTUNE
500 LIST

7th largest



HOMEOWNERS⁷
INSURER

&

COMMERCIAL
LINES INSURER⁸



8th largest

AUTO INSURER¹⁰



& LIFE
INSURER¹¹





NATIONWIDE IT

200 AGILE / LEAN
STANDING TEAMS

50
PRIMARY
TECHNOLOGIES

>2500 APPLICATIONS

#51: COMPUTERWORLD BEST
PLACES TO WORK IN IT

5100 IT ASSOCIATES

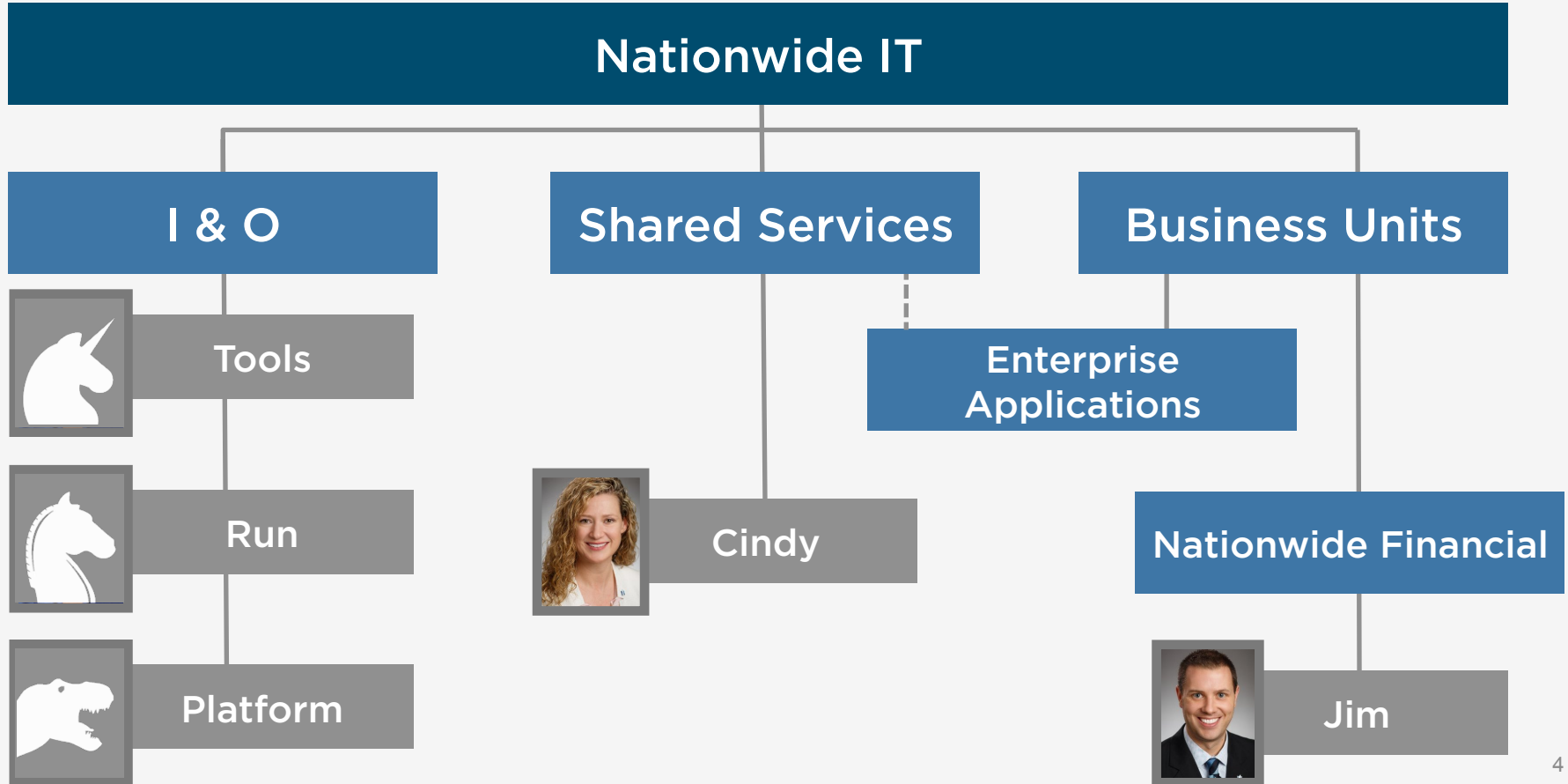
23
BUSINESS UNITS

BALANCE
— OF —
INNOVATION
— AND —
DISCIPLINE

>260
DEVELOPERS & TESTERS



ORGANIZATIONAL STRUCTURE





WHERE WE STARTED

10 YEARS AGO, WE SET OUT TO BUILD A **GLOBALLY COMPETITIVE**
IN-HOUSE SOFTWARE DEVELOPMENT CAPABILITY

AGILE

How we deliver
software with
high quality

+

DEVOPS

How we deliver
with speed,
efficiency, and
low risk

+

LEAN

How we
manage IT at
enterprise
scale

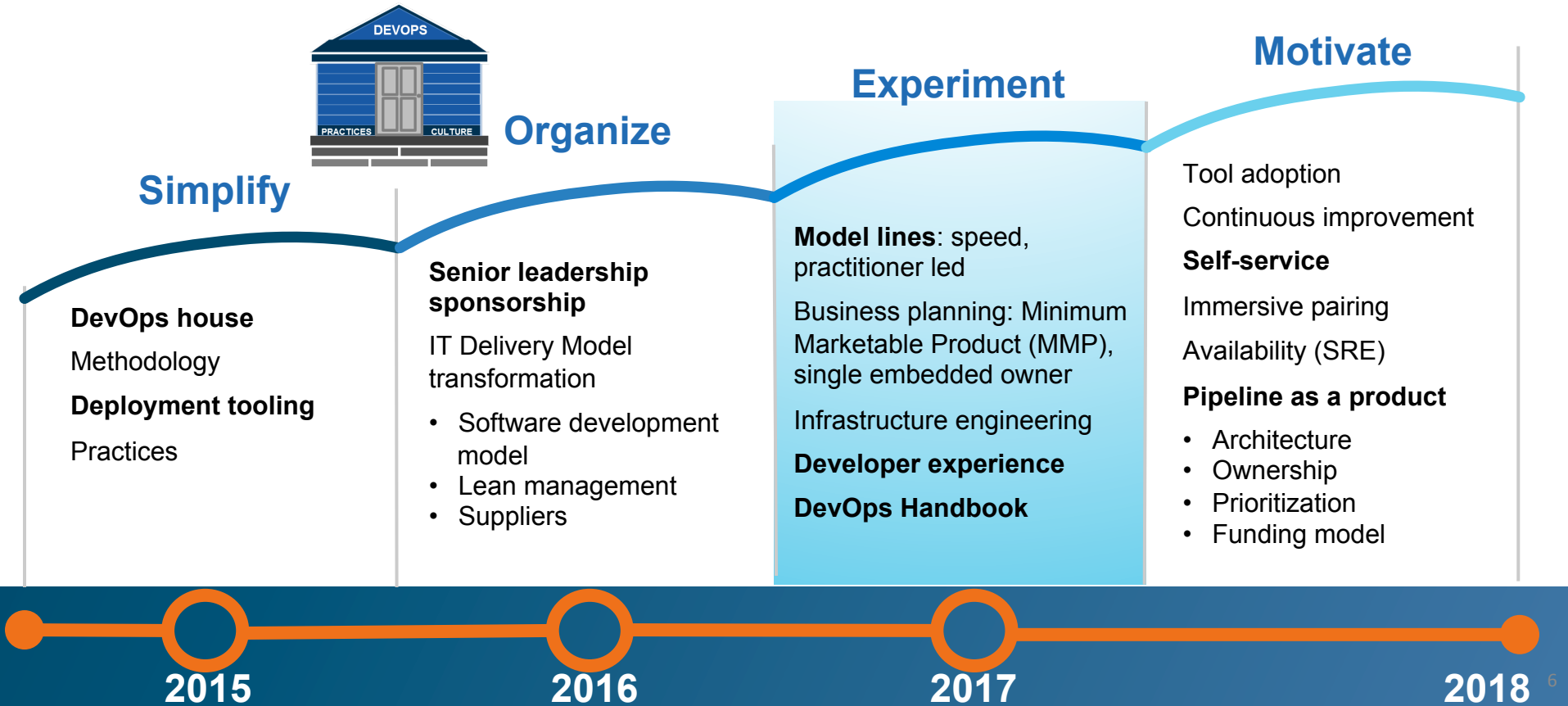
+

CMMI

How we provide
industry
validation of our
progress

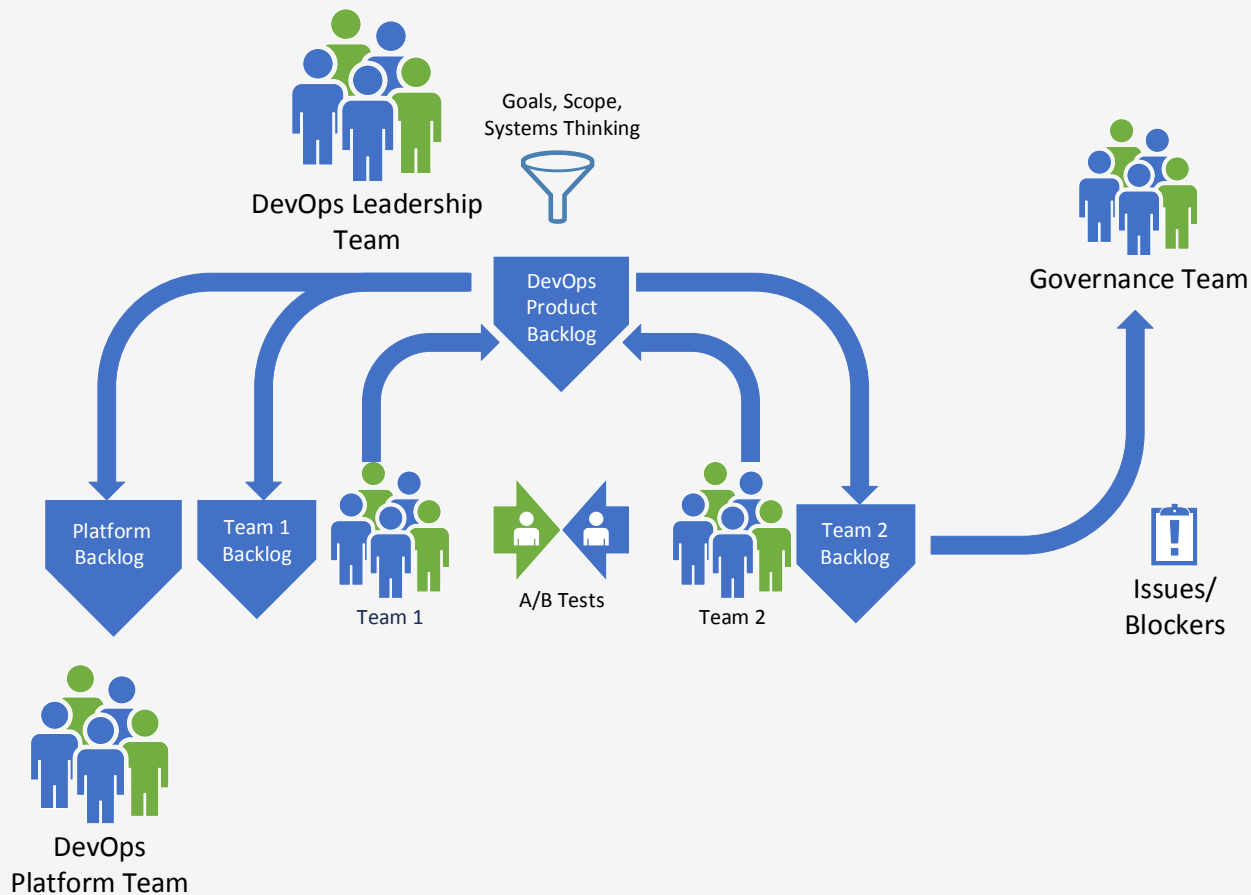


WHERE WE STARTED





INTERACTION MODEL



EPICS

Version Control Everything

Automated Testing (unit, integration, performance)

Continuous Integration to the Trunk

Automated Infrastructure

Continuous Delivery into Production-like Environments

Automate Low-Risk Releases

Architect for Low-Risk Releases

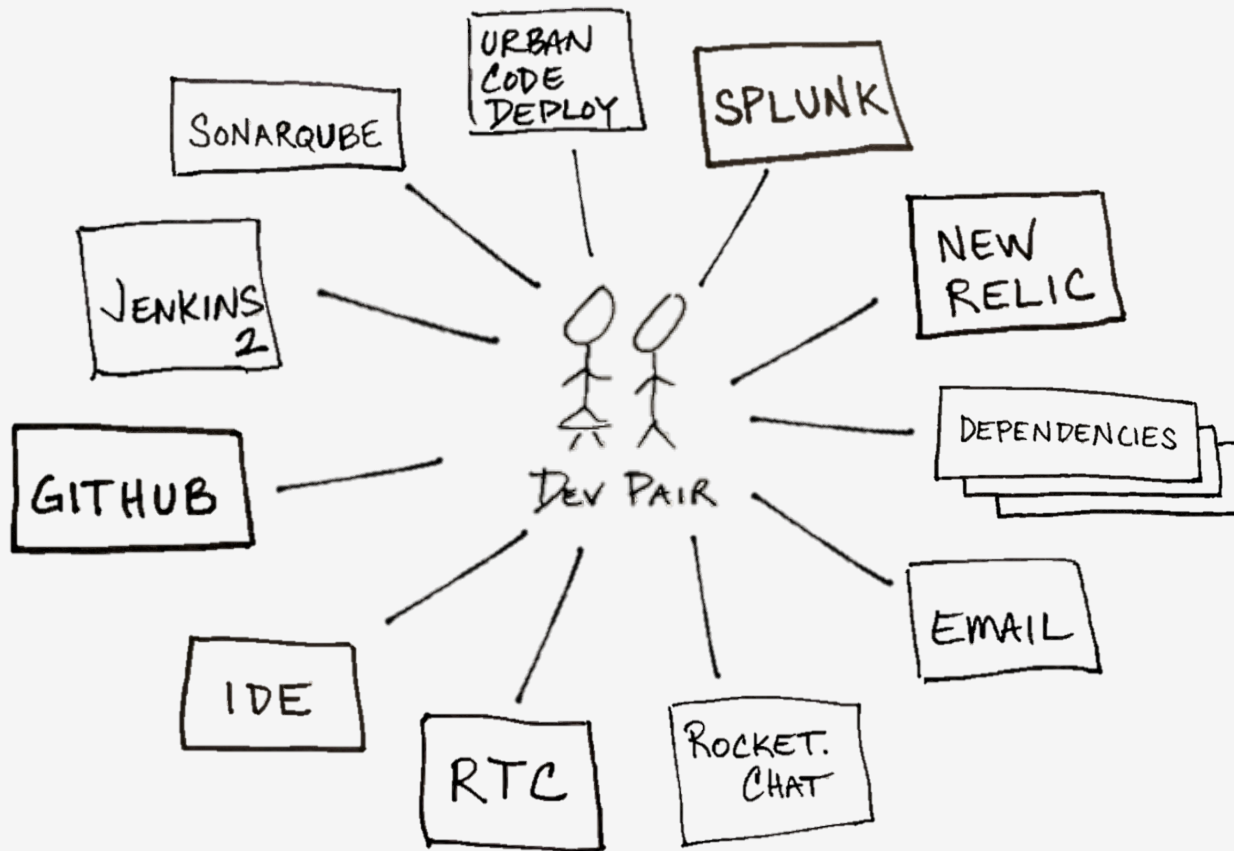
Monitor Everything





DEVELOPER EXPERIENCE

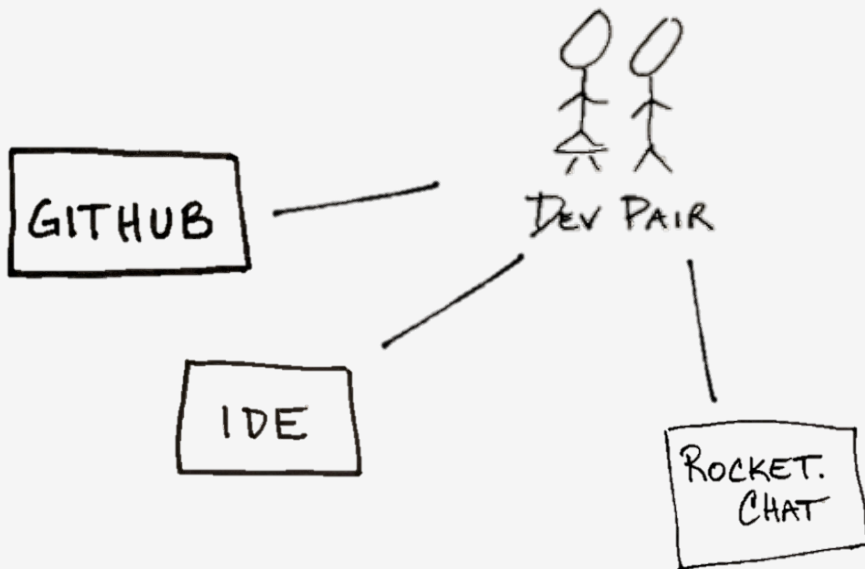
GREAT TOOLS, LOTS OF CONTEXT SWITCHING





DEVELOPER EXPERIENCE

EMBRACING CHAT BOTS TO REDUCE CONTEXT SWITCHING



Nationwide

DevOps Journey



Outfitters

New Relic

urban[code]

GitHub

Jenkins

splunk

sonarqube

ROCKET.CHAT

Hand Book

BASE CAMP

- Agile adoption first
- Adopt tools
- Start DevOps Handbook book club
- Develop continuous improvement (CI) mindset

NORTH CAMP

- Automate code and data deployments
- Implement dark launching
- Release code when ready/certified
- Push pipeline health issues to Rocket.Chat
- Minimize context switching using chatbots
- Polyskilling
- Decentralize control of performance testing, security testing, and deployment
- Automate production validation and feedback
- Map value stream and understand constraints
- Use lead time metrics to drive CI

SUMMIT

- Daily releases
- Implement ChatOps
- Business partners create MMPs and act on feedback metrics
- Single piece flow

SHERPAS

- Tech Consulting
- DevOps Leaders

COMING SOON

- Immersive Pairing
- DevOps Dojo
- Delivery Pipeline Support



THE NORTH STAR – LEAD TIME

Introduced lead time metrics for
all 200 development teams

Empower teams to pick their
course guided by lead time

Drive towards daily, zero
downtime deployments



Outfitters

New Relic

urban{code}

GitHub

Jenkins

splunk>

sonarqube

ROCKET.CHAT

Hand Book

THE MAP AND THE EQUIPMENT

Tools enable practices

Tools alone have benefits

Handbook is your map



SHERPAs



- Tech Consulting



- Build Capability SMEs

COMING SOON



- Immersive Pairing



- Monthly DevOps Dojo



- Delivery Pipeline Support

SUPPORT MODEL

Development teams must make their own journey

Tech Consulting and DevOps leaders are expert climbers

Cross-pollinate

Support the Delivery Pipeline as a single product





HURRICANE HARVEY

High volume of flooded cars

Business ask: optimize online claims process

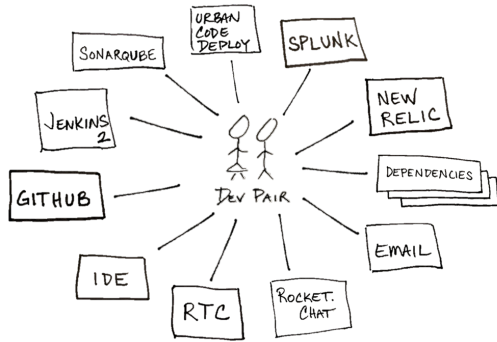
IT response: collaborative design and implementation in 8 hours

Results: streamlined online claims process by 40%



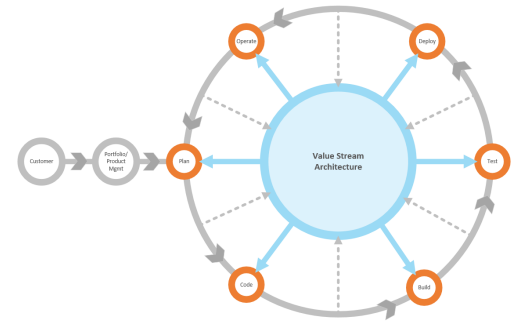
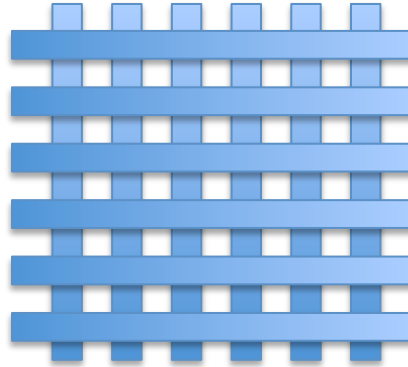


WE STILL NEED HELP



Leader Experience

Matrixed Org Model



Value Stream Architecture

Thank you

