



JOHN DEERE

Enterprise Technology Leadership Summit

[Amy Willard
Justin Thomsen
Adam Brunner]



100+

locations globally

82,000+

full-time employees

500+

digital product teams

11,000+

enterprise GitHub users

3,500+

digital software engineers

Our ongoing *evolution*

2019+

Agile Operating Model

Focused on changing what we work on, how we work, and a more tech-ready foundation.

2022+

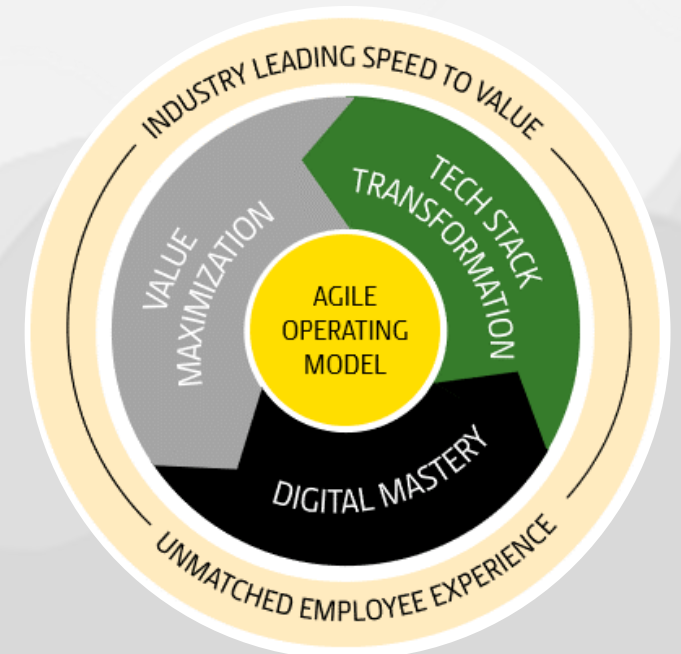
Digital Leaps

Sustain and improve our Agile Operating Model to achieve John Deere's Leap Ambitions via value maximization, technology stack transformation and digital mastery.

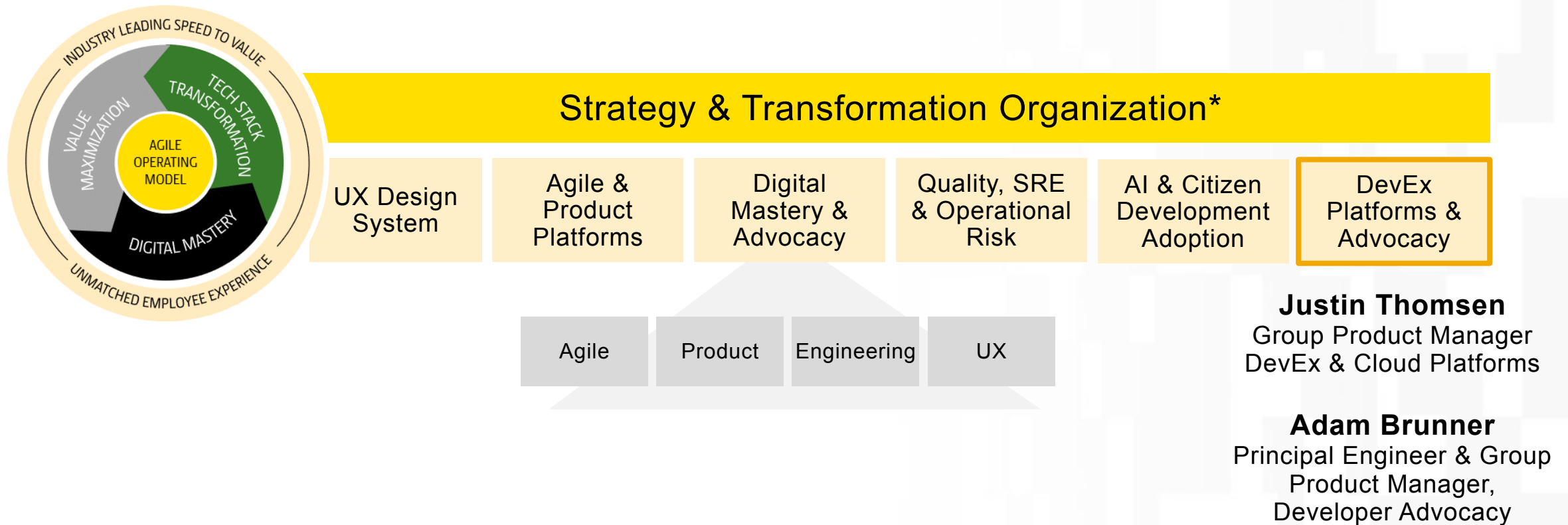
2024+

Amplifying our Digital Leaps

Accelerating towards even greater industry leading efficiencies and value creation.

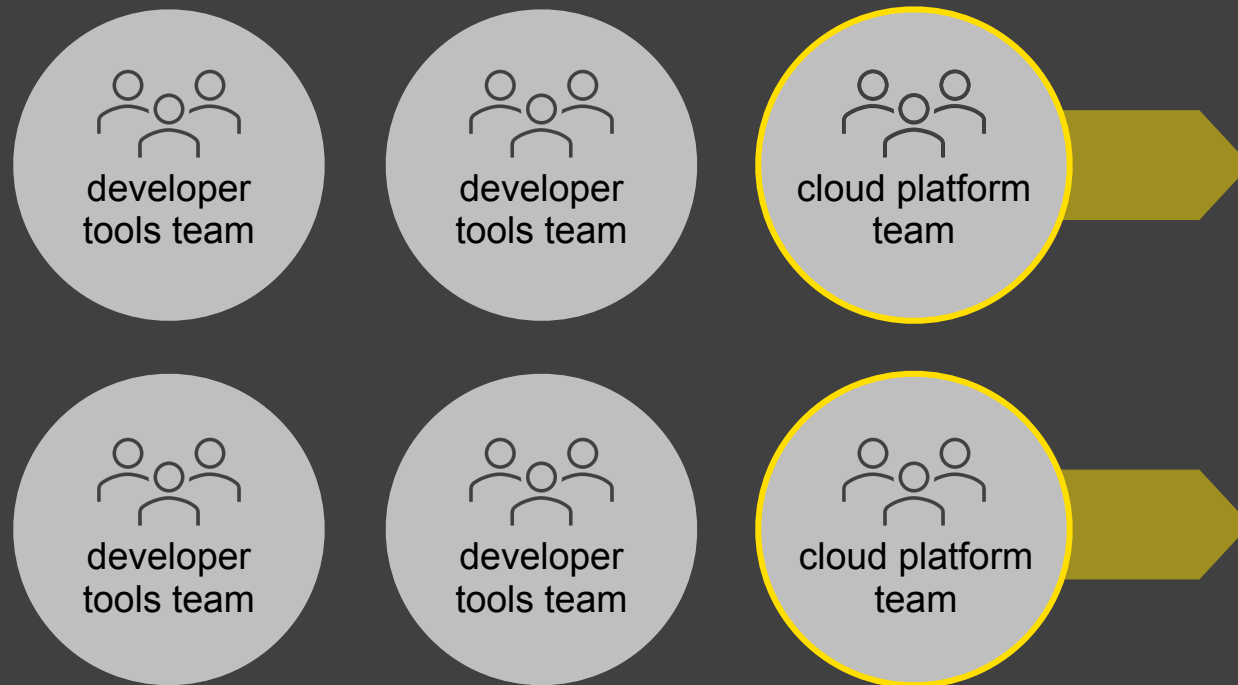


Our *strategy & transformation* organization at-a-glance



*Partnered by design with Security, Architecture and embedded change agents

Looking at where we *started*



The cloud platform teams were already very mature, with great success using an enforcement approach.

- Required infrastructure as code
- Automated governance for policies & roles
- No human-to-machine deployments to production

We began our Agile Operating Model transformation with several developer tools teams

Monitoring
DevOps
Continuous Deployment
Continuous Delivery
Observability
Immutable Artifacts
Static Application Security Testing
ITIL
Cloud
Event-Driven Architecture
Code Signing
Infrastructure as Code
Secrets Scanning
Lean Service Management
Acceptance Test
Software Composition Analysis
Infrastructure as Code
Refactor
DORA Metrics
Infrastructure as Code
Pair Programming
Change Management
Microservices
Behavior Driven Development
Infrastructure as Code
ICQ
YAGNI
Infrastructure as Code
Logging
Infrastructure as Code
Extreme Programming (XP)
KISS
GitOps
The Three Ways
ITSM
Microfrontends
Version Control System
Pull Request
DevSecOps
Configuration Management
Code Review
Technical Debt
Pull Request Review
Continuous Integration

**How can we balance
reducing complexity
with *adding value* in
a way that engineers
naturally prefer using
our platform?**

Maximizing value for our *engineers*



Value maximization in software engineering

We had problems
to *solve*

Too many platforms
High cognitive load
Barriers to entry
Low adoption

We identified what
value meant to us

Productivity gains
Risk reduction
Cost reduction

We determined how to
measure it

Hours saved via centralization
How much time does this feature
save vs. how many people does
it affect

We felt good about our *next steps*



Build it and they will come

Enforcement Approach:
K8 solution for edge
factories

43%
market
share

Let's extend it to the public cloud
and save engineers even more time!

Container as a Service for all!

Opt-in Approach:
K8 "Container as a Service"
solution for public cloud

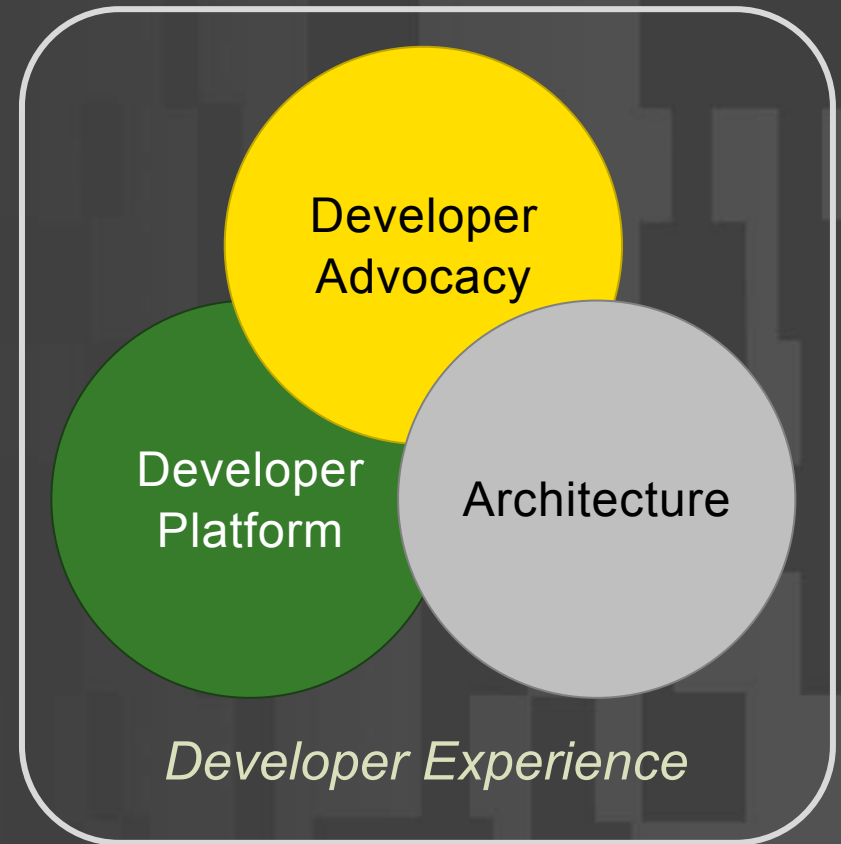
3%
market
share

*So, were we really creating as much **value** as we could?*

We realized tracking potential value wasn't enough

We had to *shift our thinking*

How do we consider the entire developer experience?



Identifying the *root cause*



Do our engineers understand why this is important?



Do our engineers have the skills needed to be successful?



Do our engineers understand how to apply this solution?



Is this a current priority for the teams' product?

We needed to think about how to engage the engineers as *people*.

1,100

engineers proficient in containers

500+

total learners engaged

90

production apps migrated off legacy platforms

We needed to *evolve*



Let's try this again: *Minimum Continuous Delivery (MCD)*



Understand why
this is important



Learn what is
expected



Apply the
solution



Gain alignment
with business



Build it into the
platform

47%

repositories that opted
into the paved path

92%

repositories automatically
covered when built into the
platform

In their words

“

The implementation of MCD has **enhanced our code quality** by establishing guardrails around our repositories enforced through an automated and efficient way.

This has enabled us to **iterate more rapidly** through efficient automated processes while maintaining security and auditability. Furthermore, the segregation of duties **empowers teams to operate independently** and more effectively.

”

Rene de la Garza | Principal Software Engineer | John Deere

“

The partnership with Developer Experience and IT Audit on the MCD initiative has been **unique and game-changing**.

Through the MCD partnership, we've been able to engage with the developer community in a way that makes understanding the expectations of audit **easier and more accessible**. It has helped developers understand what really matters when it comes to controls, and **the value those controls deliver**.

This partnership has been **beneficial to everyone**, and I'm excited about the potential for continued innovation.

”

Lynn Bestold | Director, IT Internal Audit | John Deere

Key Takeaways

1

Quantify the Value of Your Developer Platform



Implement data-gathering tools to measure key metrics and articulate the value these metrics bring to your organization and customers.

2

Treat Employees Like Customers



Develop targeted communication plans, involve employees in the change process, and recognize their efforts.


3

Continuously Listen and Automate Away Toil



Establish robust feedback loops and invest in automation to enhance productivity, boost morale, and create space for more meaningful and innovative work.

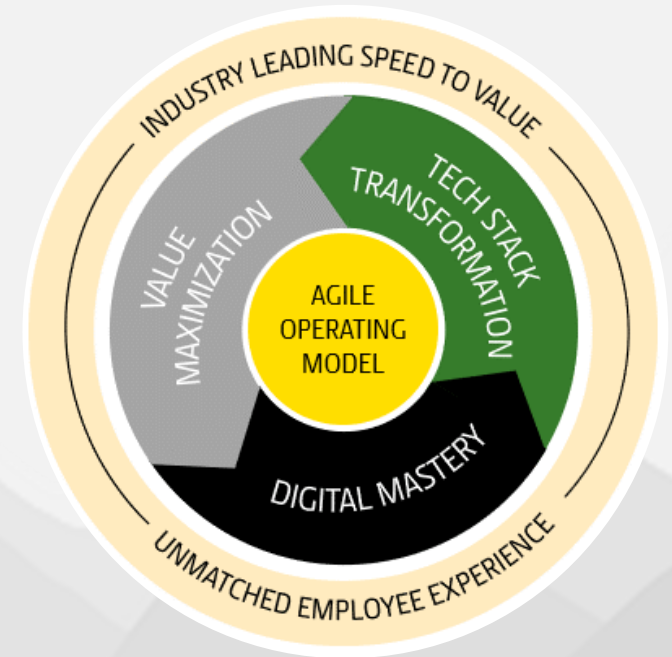
Our continued *priorities*



Value maximization through
technology stack transformation
& digital mastery

Industry leading speed to value

AI native in how we work



We would love your help

- How are you **maximizing value** and **adoption** of your developer platforms?
- How do you **intersect** skills development with engineering practices?
- How are you **embedding Gen AI** into your platforms and ways of working?

 [linkedin.com/in/amy-willard-5985846/](https://www.linkedin.com/in/amy-willard-5985846/)

 [linkedin.com/in/juthomsen/](https://www.linkedin.com/in/juthomsen/)

 [linkedin.com/in/brunneradam/](https://www.linkedin.com/in/brunneradam/)

Thank you!





JOHN DEERE