From Project to Product

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Agenda

- Who am I?
- References
- Why?
- Project Organisation
- Related Problems
- Product Organization
- Related Advantages
- How to operate the transition?
- Q&A

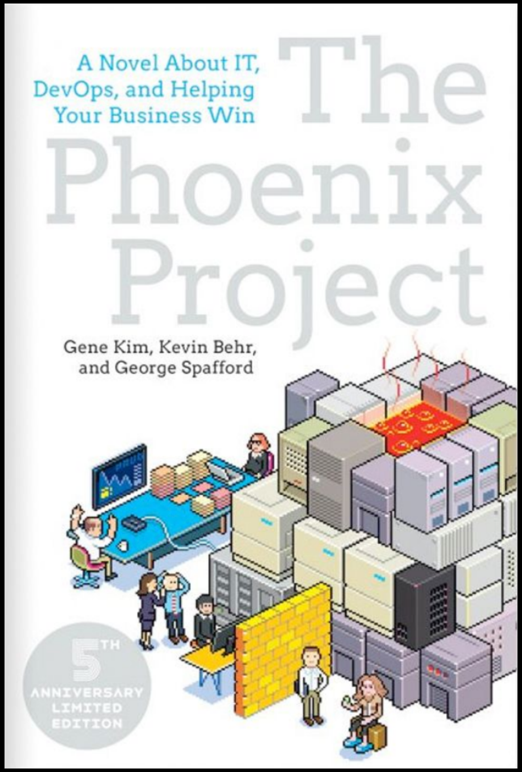
Who am I?

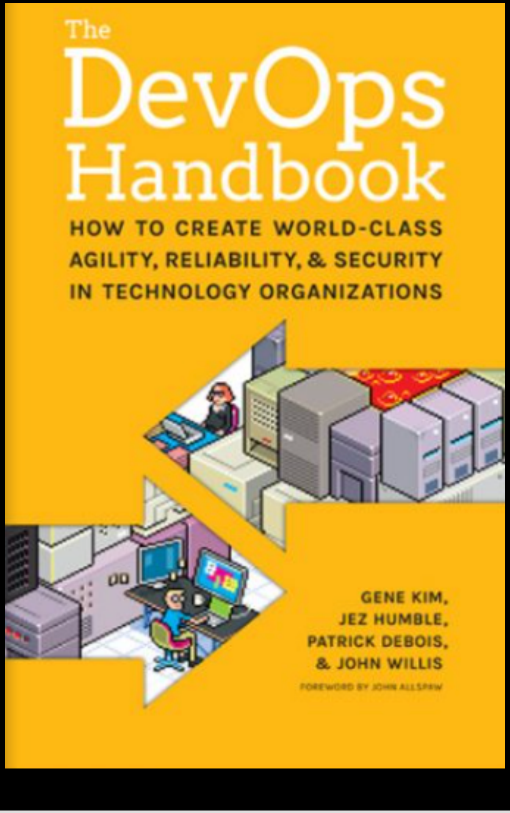
- 20+ YRS EXPERIENCE IN SW DEV
- 10+ YRS AGILITY AND DEVOPS
- SMALL AND LARGE ORGANIZATIONS
- **MISSION:** ACCELERATE BUSINESS VALUE DELIVERY
- SPECIALITIES: CHANGE MANAGEMENT + BEST PRACTICES
- DIRECTOR BEST PRACTICES AT **SAMSUNG-ADS**

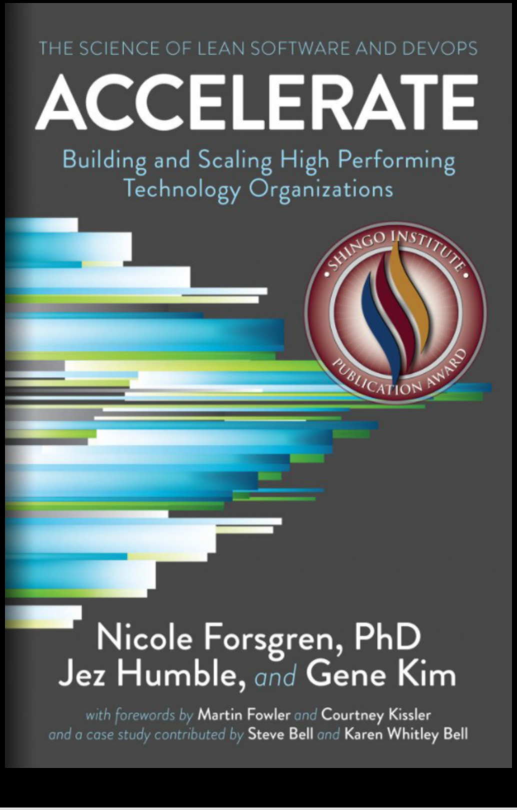
Main Reference

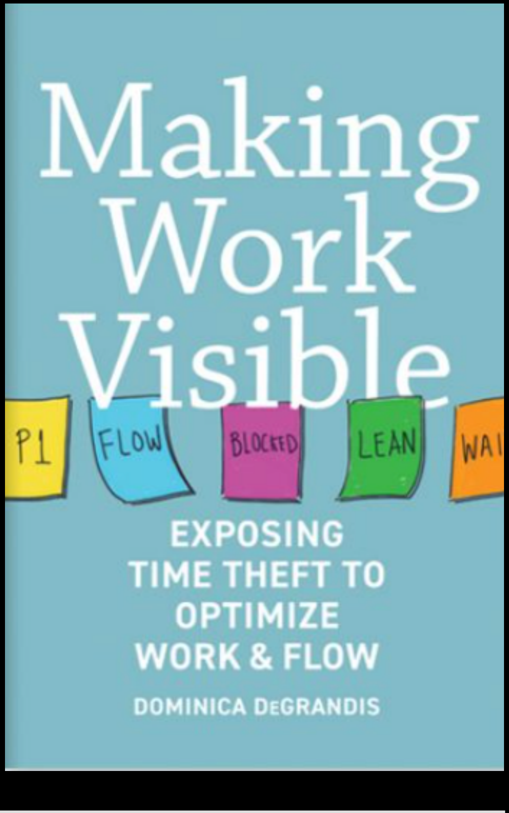
- https://itrevolution.com/book/project-to-product/
- Foreword by Gene Kim (M. Phoenix Project!)

PROJECT TO PRODUCT
MIK KERSTEN
FOREWORD BY GENE KIM
HOW TO SURVIVE AND THRIVE IN THE AGE OF DIGITAL DISRUPTION WITH THE FLOW FRAMEWORK


A Novel About IT, DevOps, and Helping Your Business Win
The Phoenix Project
Gene Kim, Kevin Behr, and George Spafford
5TH ANNIVERSARY LIMITED EDITION


The DevOps Handbook
HOW TO CREATE WORLD-CLASS AGILITY, RELIABILITY, & SECURITY IN TECHNOLOGY ORGANIZATIONS
GENE KIM, JEZ HUMBLE, PATRICK DEBOIS, & JOHN WILLIS
FOREWORD BY JOHN ALLSPAW


THE SCIENCE OF LEAN SOFTWARE AND DEVOPS
ACCELERATE
Building and Scaling High Performing Technology Organizations
SHINGO INSTITUTE PUBLICATION AWARD
Nicole Forsgren, PhD
Jez Humble, and Gene Kim
with forewords by Martin Fowler and Courtney Kissler
and a case study contributed by Steve Bell and Karen Whitley Bell



Other References:
https://itrevolution.com/devops-books/

And « State of DevOps report 2019 + 2020 »
https://services.google.com/fh/files/misc/state-of-devops-2019.pdf

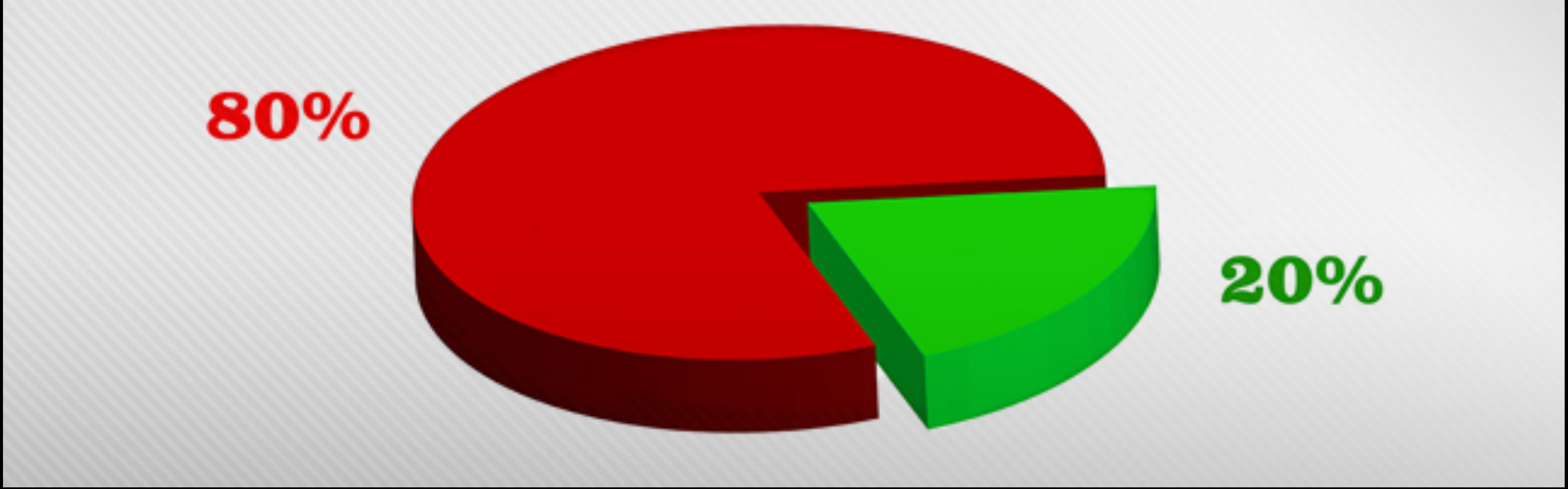
+

https://puppet.com/resources/report/2020-state-of-devops-report/

Why transforming from Project to Product ?

Success rate(!) of IT transformations: less than 20%

Really not enough!



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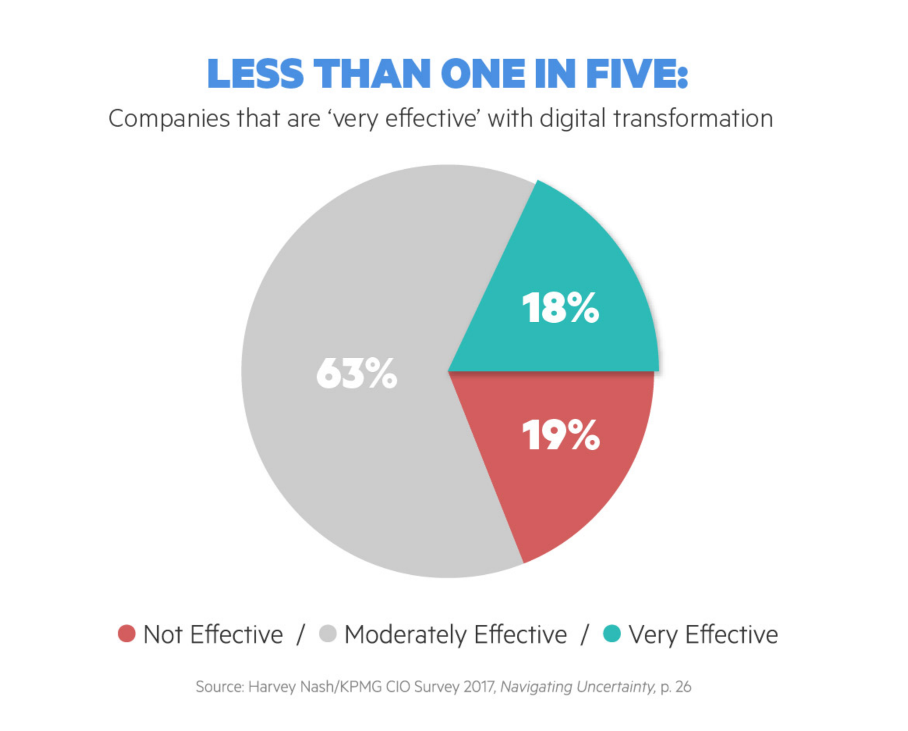
Failures are often partial, but…

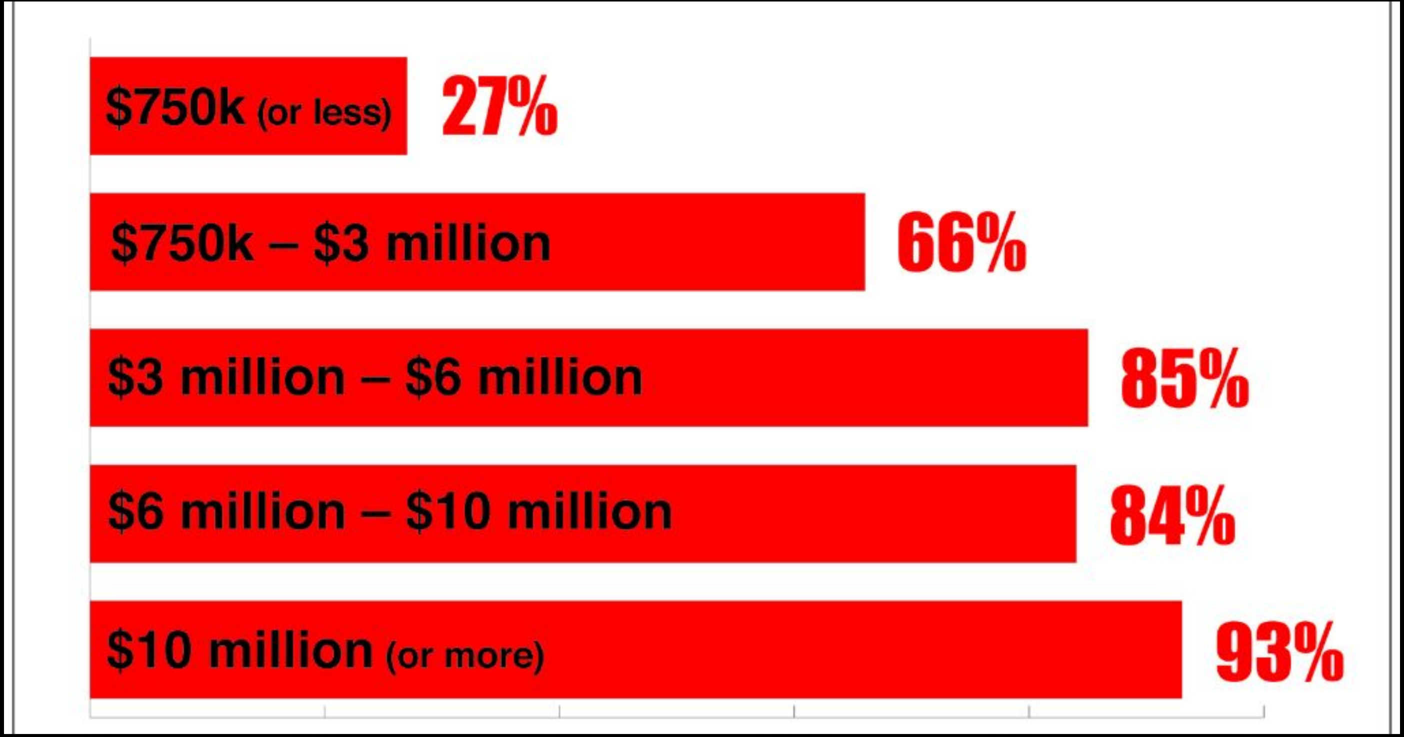
The larger the project, the higher its chance of complete failure…



LESS THAN ONE IN FIVE:

Companies that are 'very effective' with digital transformation

Source: Harvey Nash/KPMG CIO Survey 2017, *Navigating Uncertainty*, p. 26

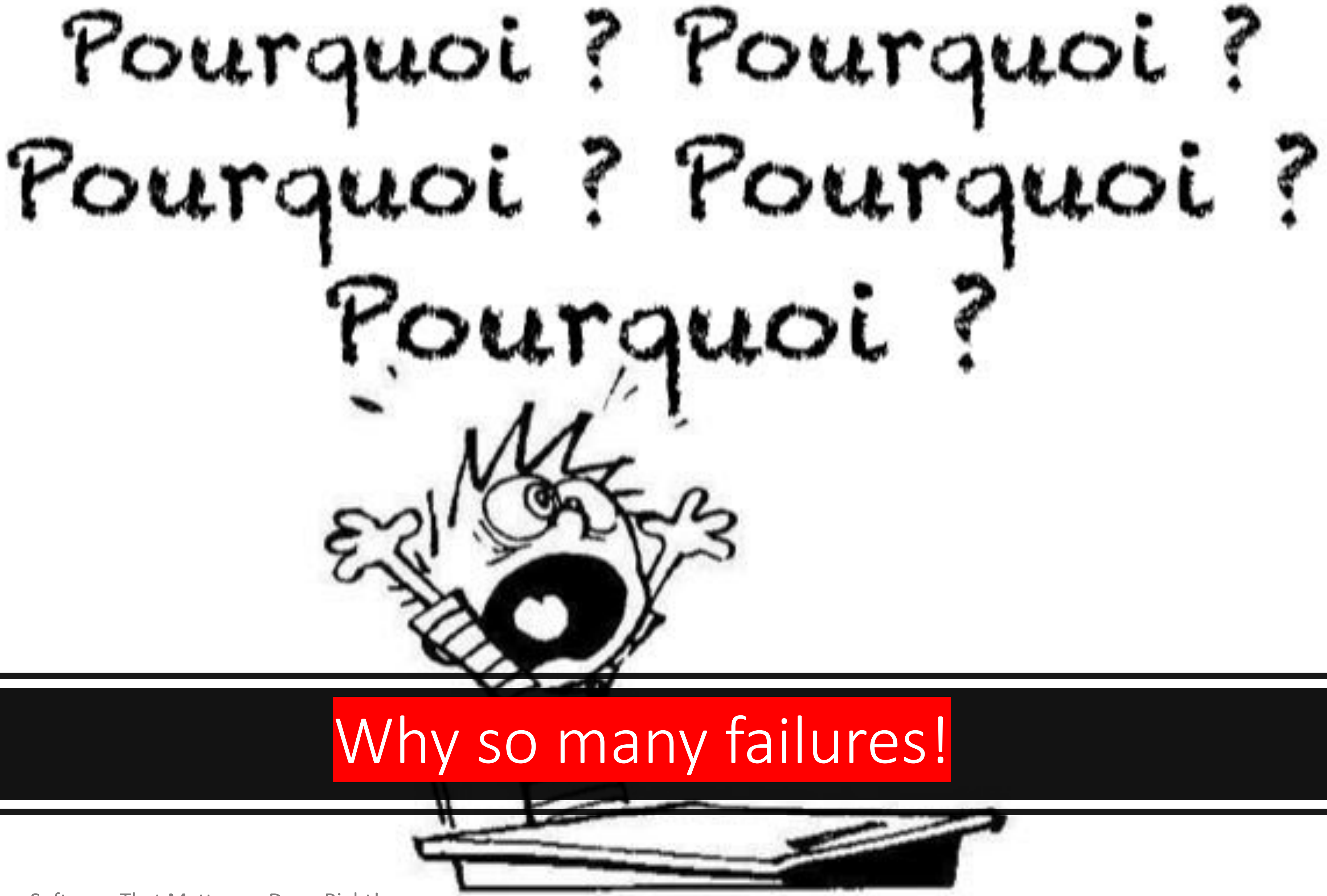


But what is a failure really?

Not getting expected benefits

AND

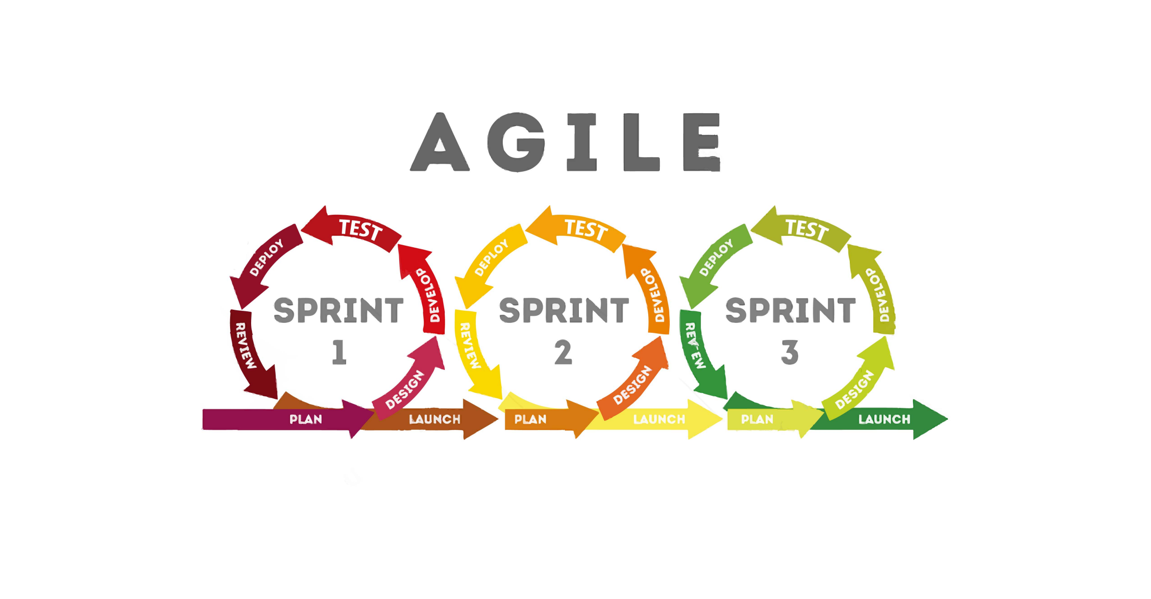
Not learning from our failures

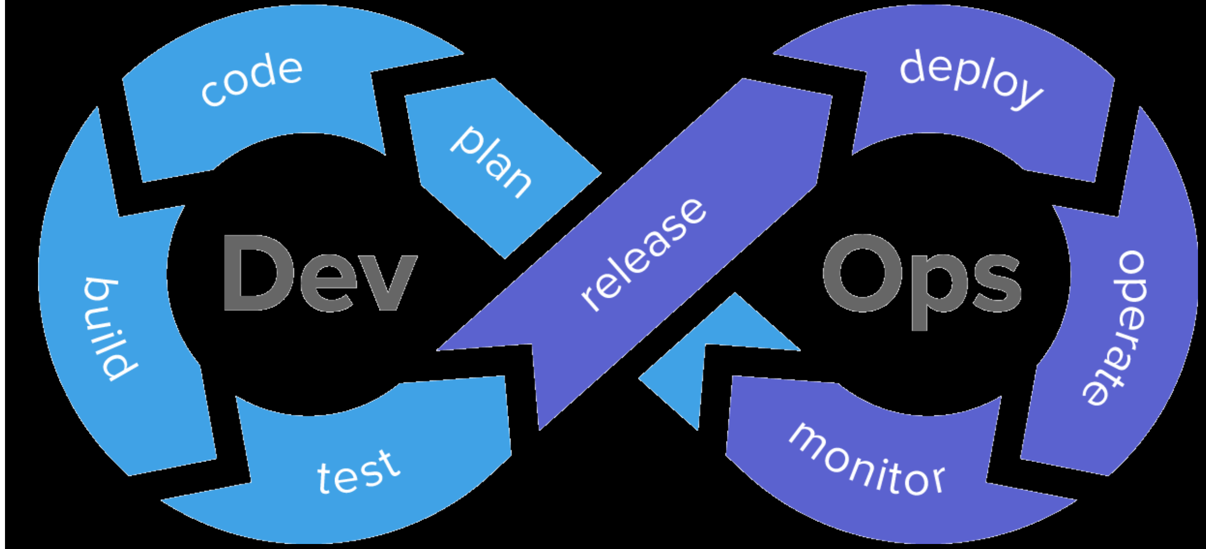


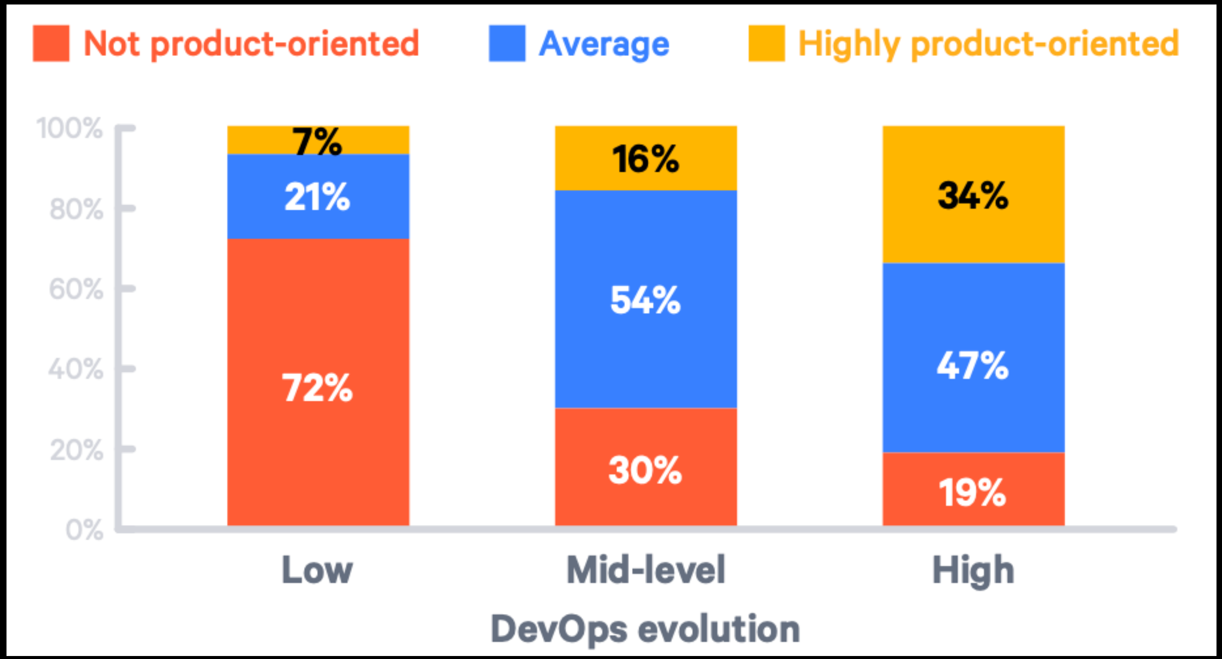
Why so many failures!

Our tools to learn are insufficient

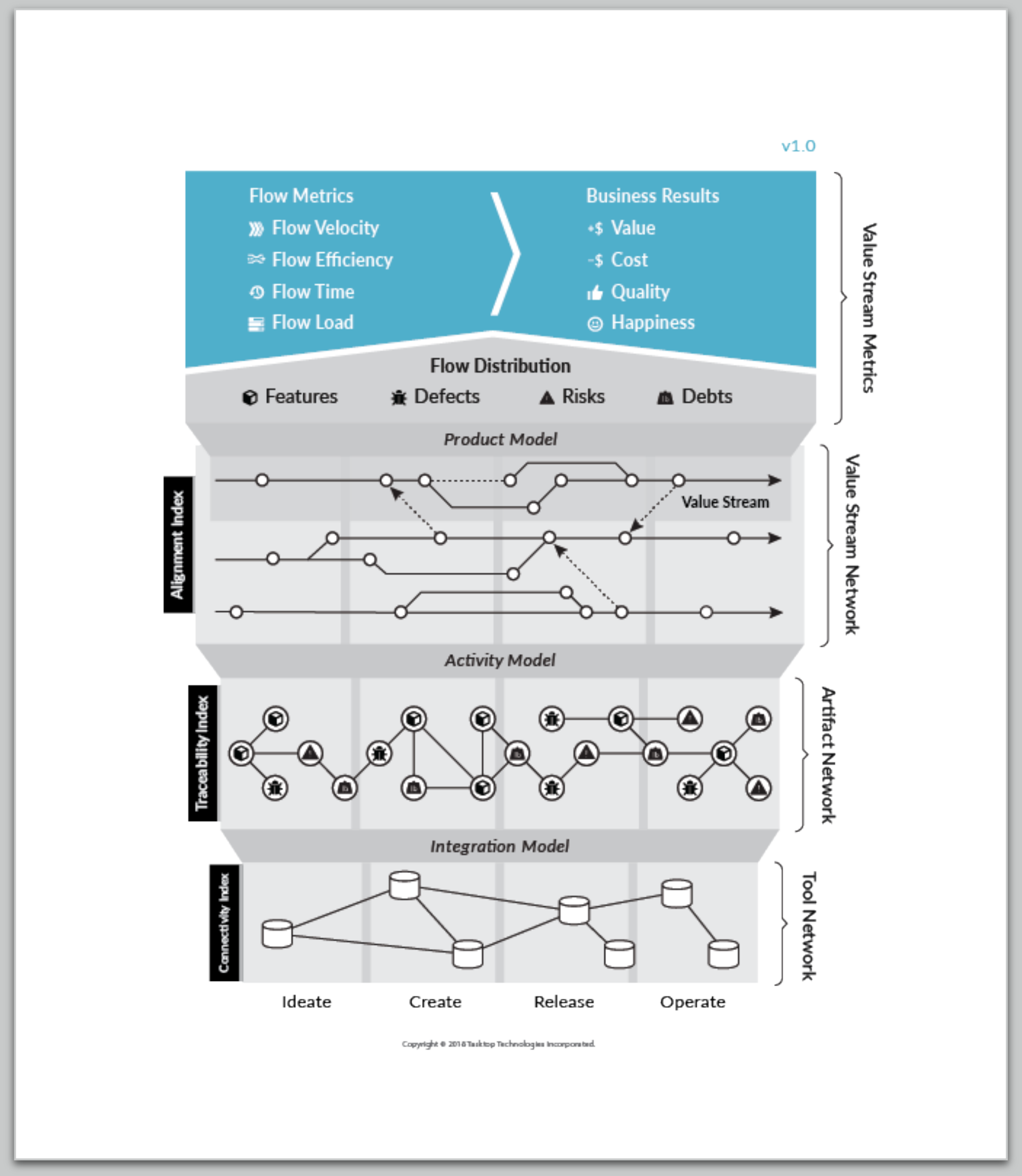
- Agile + DevOps: yes, but…
- We need more…
- IT-scoped instead of business-scoped
- Global success measures difficult to get







Very high correlation between DevOps maturity of organizations and their adoption of the product-based model
(state of DevOps 2020)



We have to migrate to another way to work, more enterprise global

Proposed tool:
The Flow Framework

But first, let’s review Projects vs Products characteristics

Budget and Duration

Project	Product
Time, Budget, Scope fixed → Variable quality	Time, Budget, quality fixed → Variable scope
New budget → New project	New users requests → New budgets
What happens to products after projects?	Unknown duration Product lifecycle (Creation → Obsolescence)

Success

Project	Product
Scope delivered on time + on budget	Value delivered to users
Generate large projects (pressure towards the end)	Generate small increments, based on results (sane pressure/ constant)
Happy PM/Org… Good measure ?	Happy customers… Better measure ?

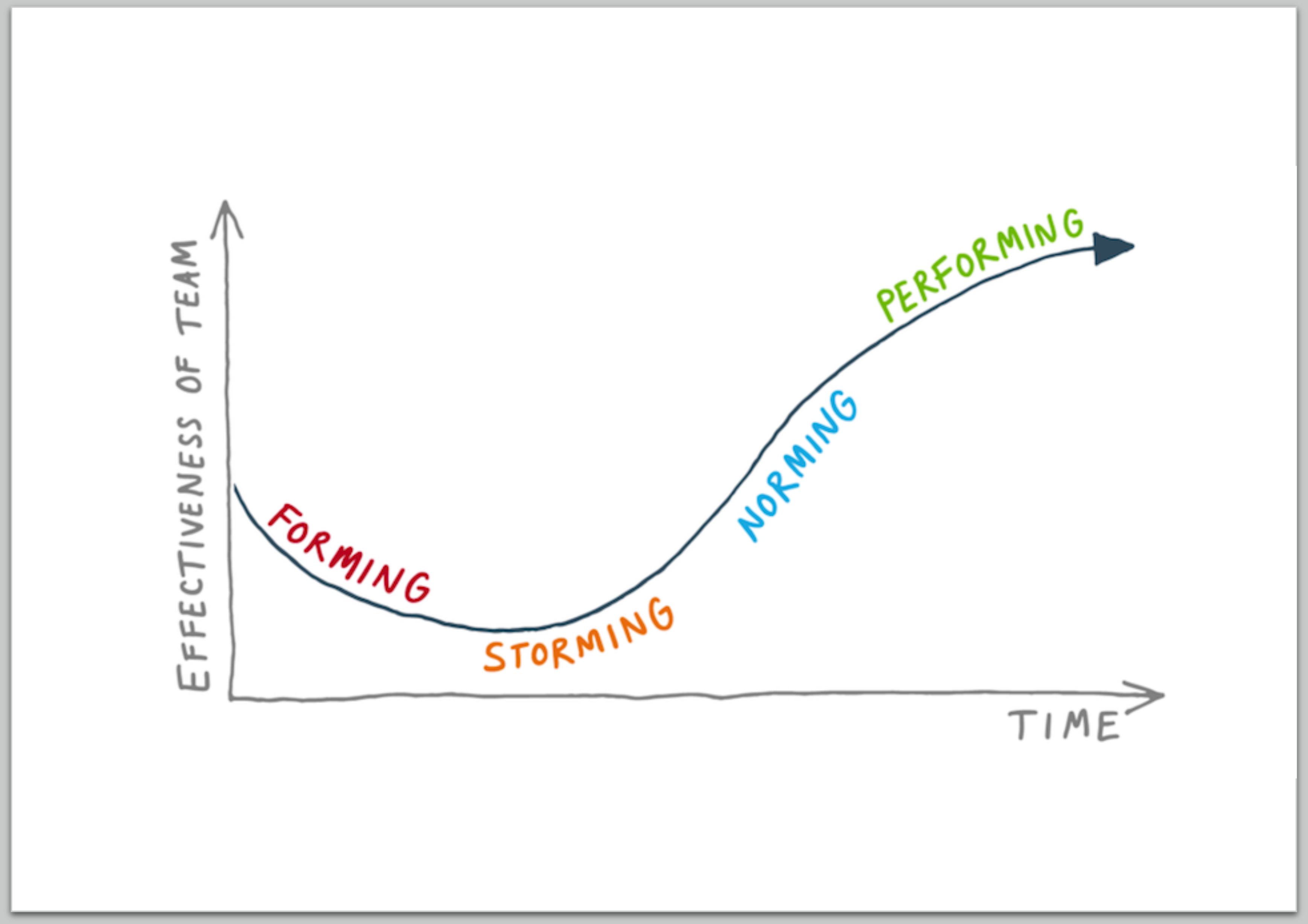
Risks

Project	Product
High risk (market-fit validated late)	- Direct users validation - Constant strategic adjustments
Long feedback loops	- Fast feedback loops - Avoid large failures

Teams

Project	Product
- Changes often - Key members often on 2+ projects	- Stables - Permanent members - Value stream based
Functional teams (not covering full scope → Production	Multidisciplinary teams (Autonomous A-Z Dev → Production)

Tuckman's Teams maturity model



Priorities management

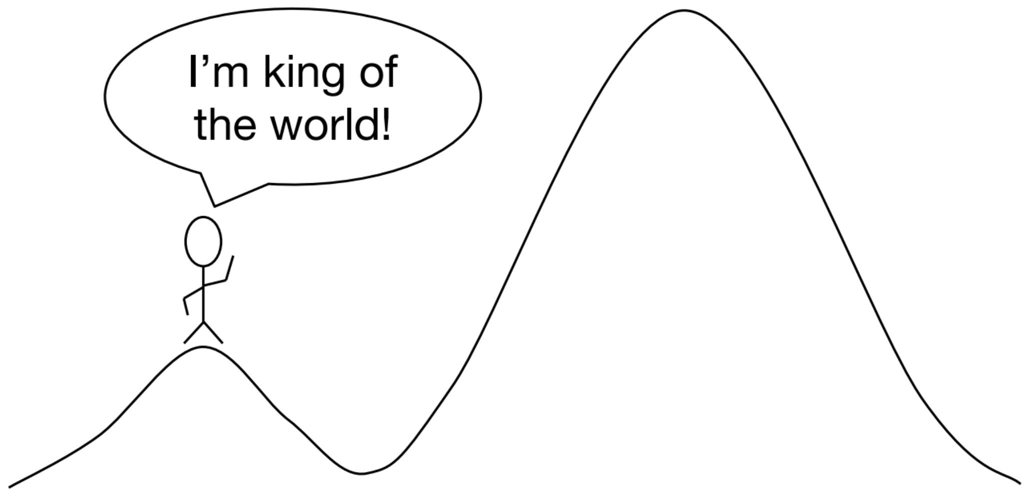
Project	Product
- Directed by plan - Waterfall orientation	- User value directed - Agile orientation
Implicit link to users’ needs	- Explicit link to users’ needs - A/B testing validated

Visibility

Project	Product
Scope – IT (Black box outside IT)	Scope – Organization (transparent)
Very centered on technical silo, opaque to others	Centered on complete value stream

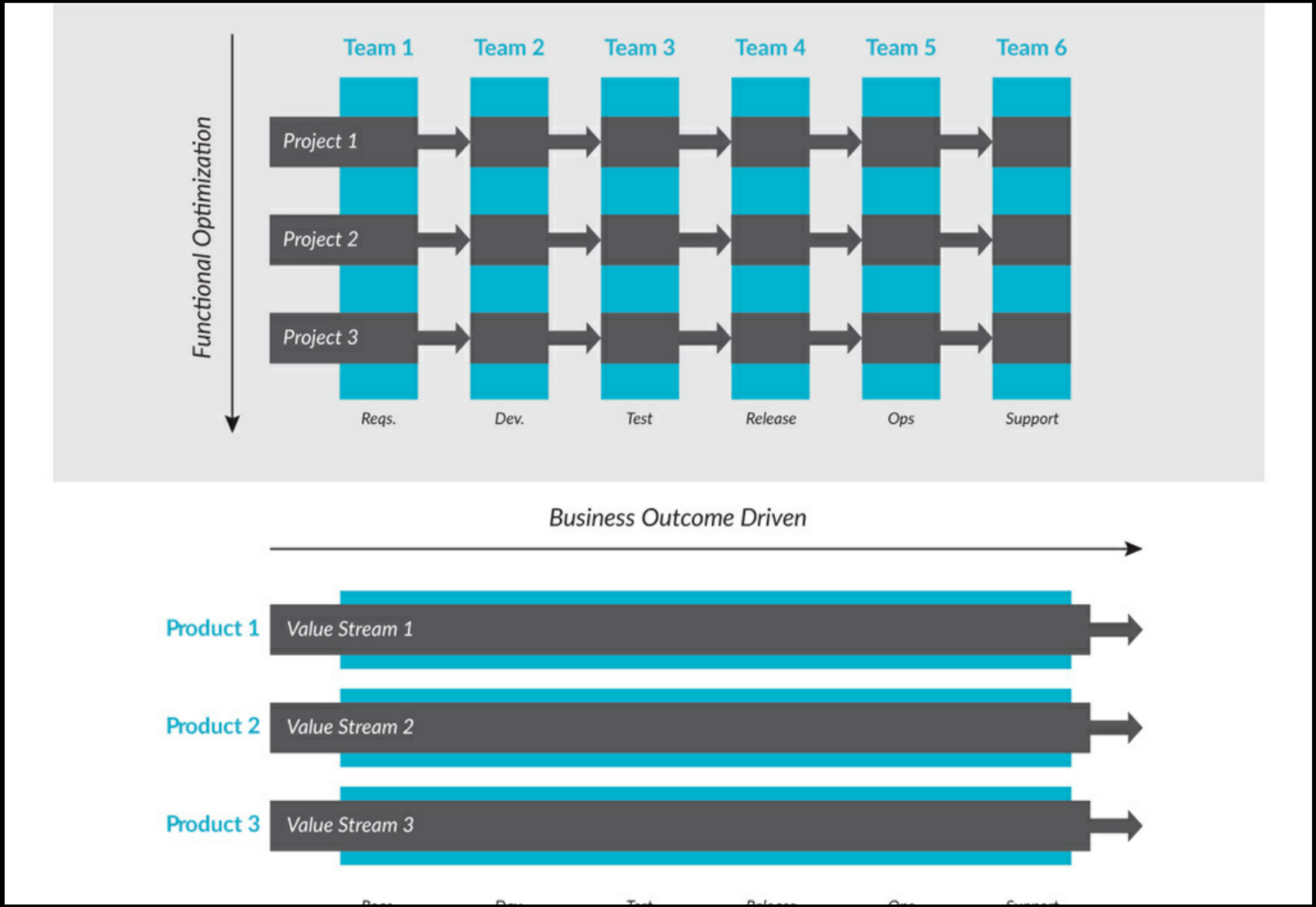
Conclusion

Project-Product Characteristics



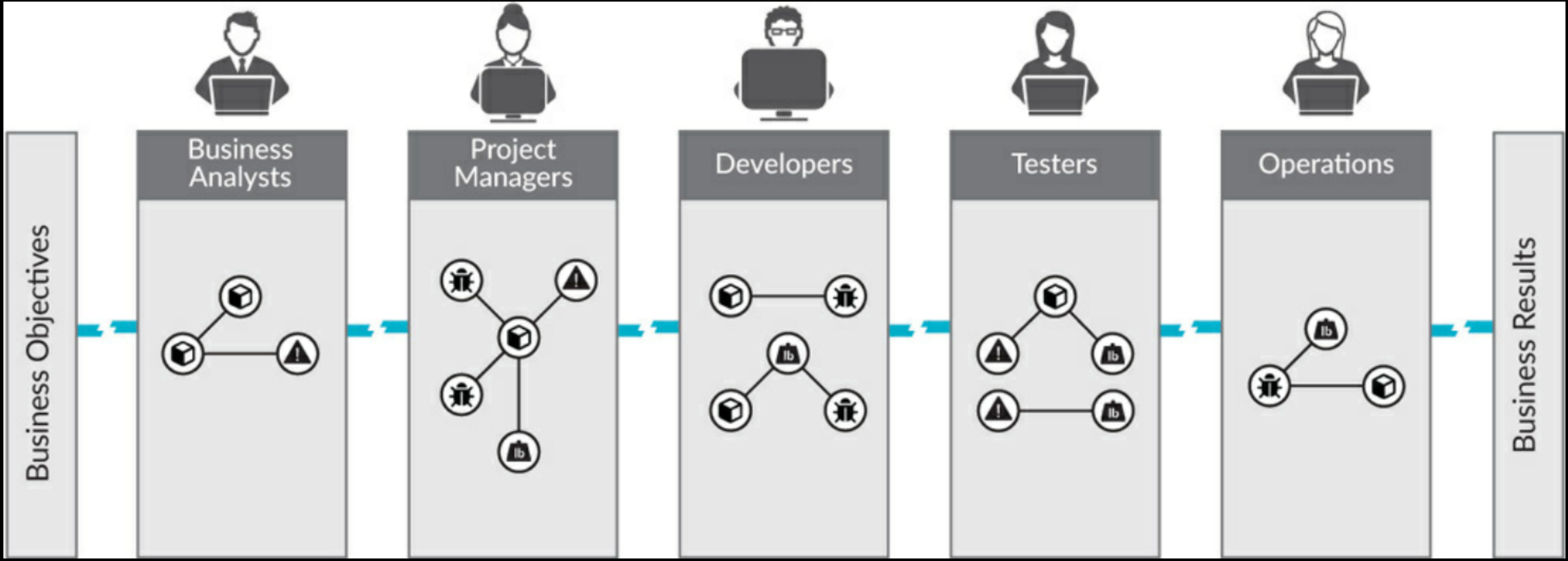
Project-based management has an optimization effect that is **local** to IT technical silos while Product-based management has an enterprise wide **global** optimization effect, centered on value delivered to customers

Ho to transition from one to the other –what is the Flow Framework?

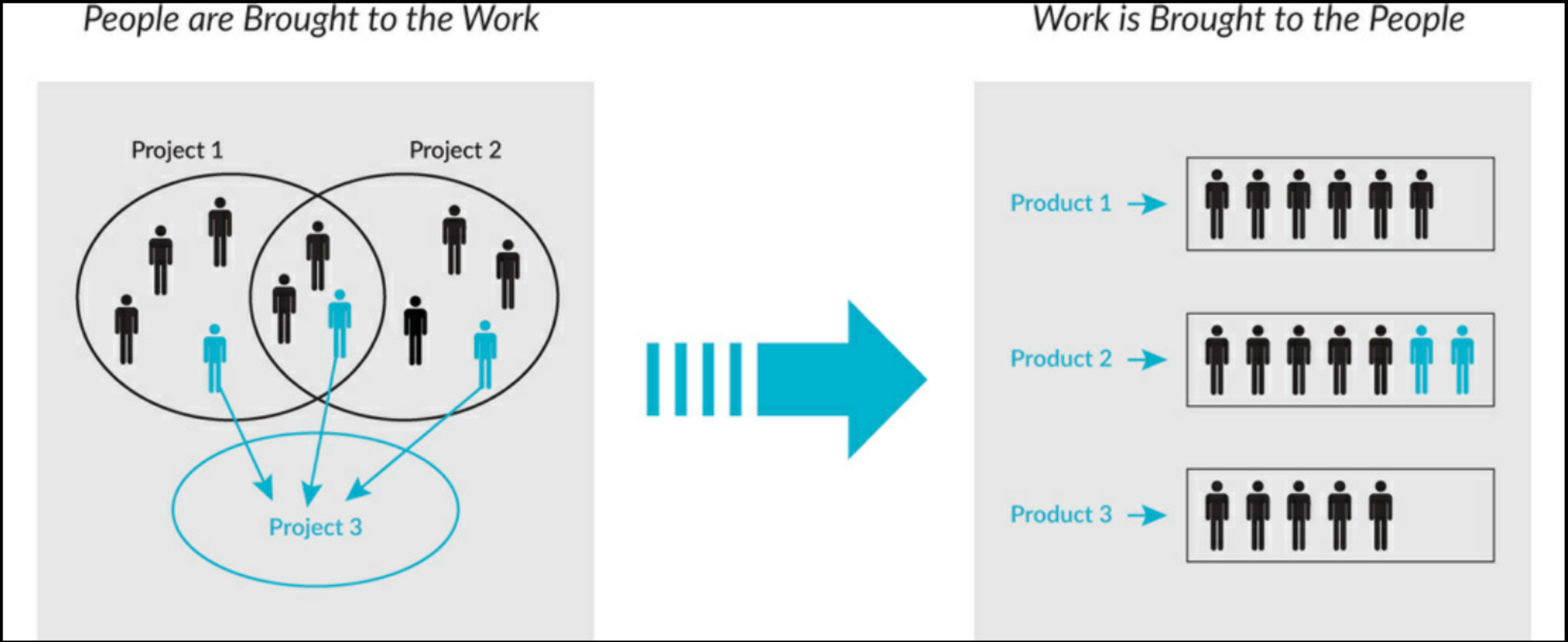


Organize your teams by value streams, not by functions

Fund multidisciplinary products/teams and not projects



Don’t fragment your value streams, limits the flow, too many *hand-offs*



Stability and focus in your teams (➔ efficiency)
Teams/Products Budgets and not projects
➔ Facilitates a lot Cloud costs allocation ;-)

Lots of IT transformation failures have their root cause in the wrong balance between the various work items types to be done

Categorize and Visualize the four items types:

Valeur d'affaire	Visible	Invisible
Positive	Feature	Architecture (Sécurité)
Négative	Bug	Tech Debt

Flow Distribution

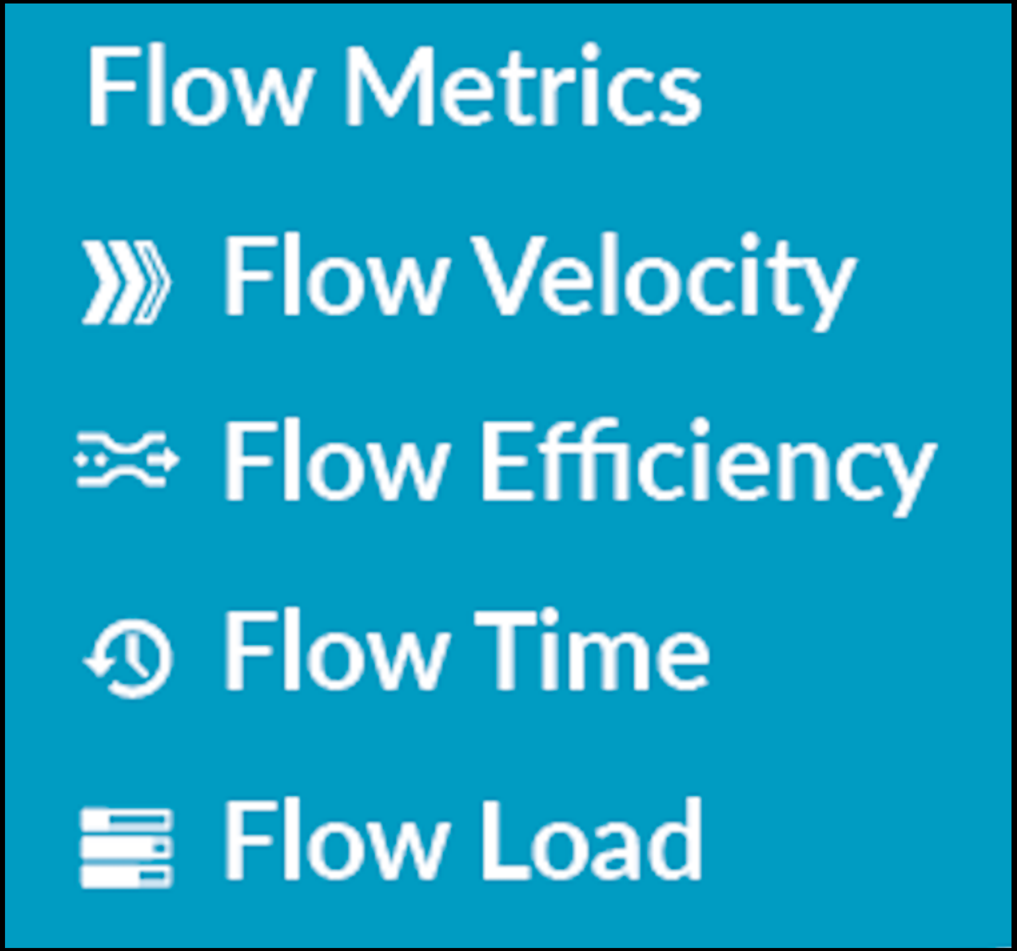
Features Defects Risks Debts

# of items done per sprint

time worked / time waiting

Average duration for one item to be done

# of concurrent items being worked on (WIP)



Flow Metrics

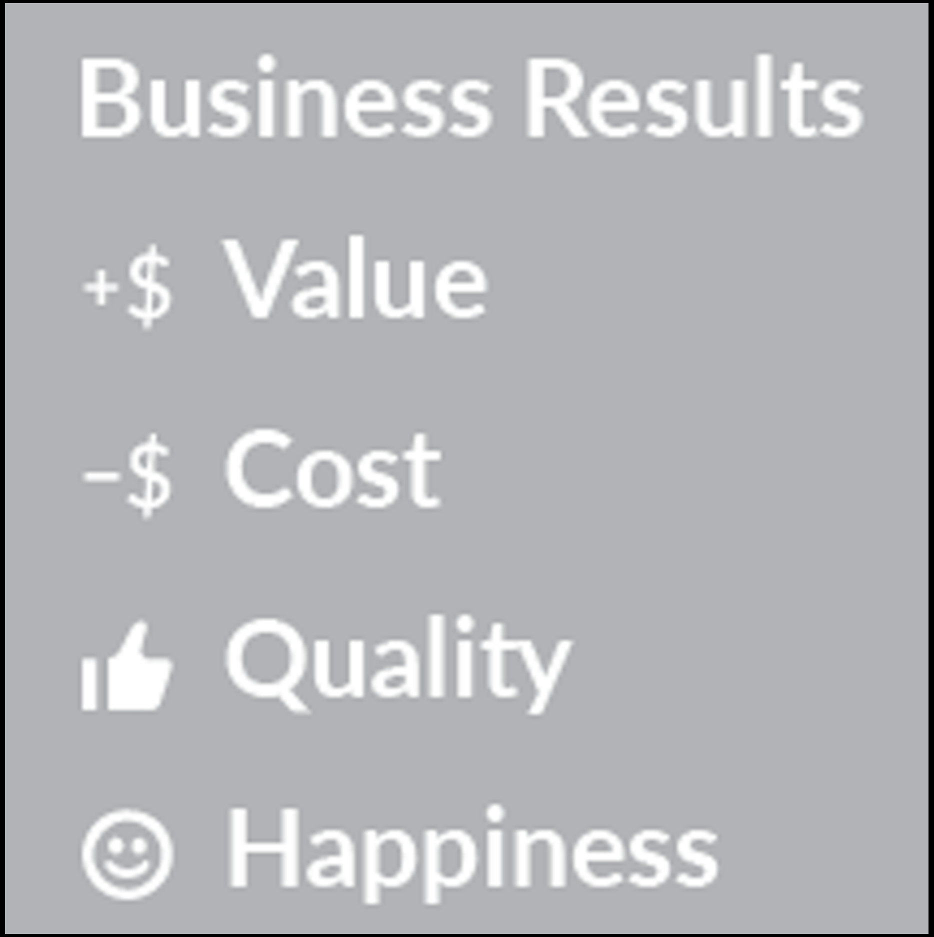
- Flow Velocity
- Flow Efficiency
- Flow Time
- Flow Load

Increase in delivered Business Value

Decrease in Cost or better production at the same cost

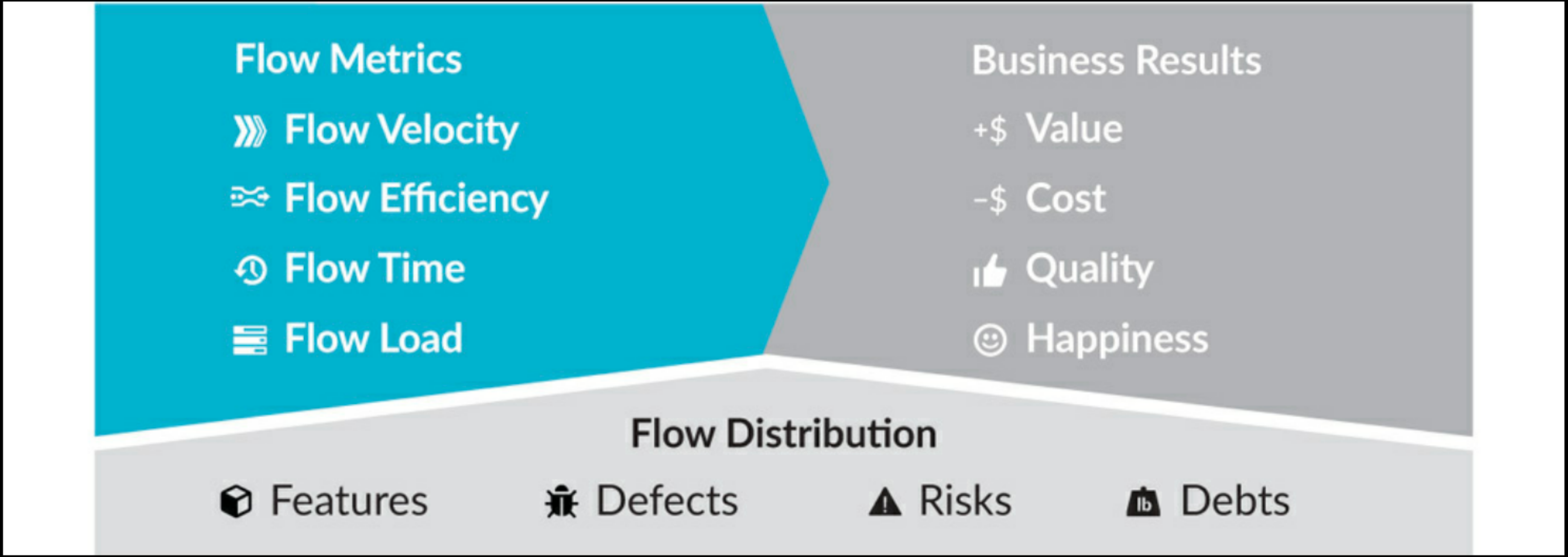
Better Quality perceived by customers

Increase team member Happiness, better engagement levels



Business Results

- +$ Value
- -$ Cost
- 👍 Quality
- ☺ Happiness



Flow Metrics

- Flow Velocity
- Flow Efficiency
- Flow Time
- Flow Load

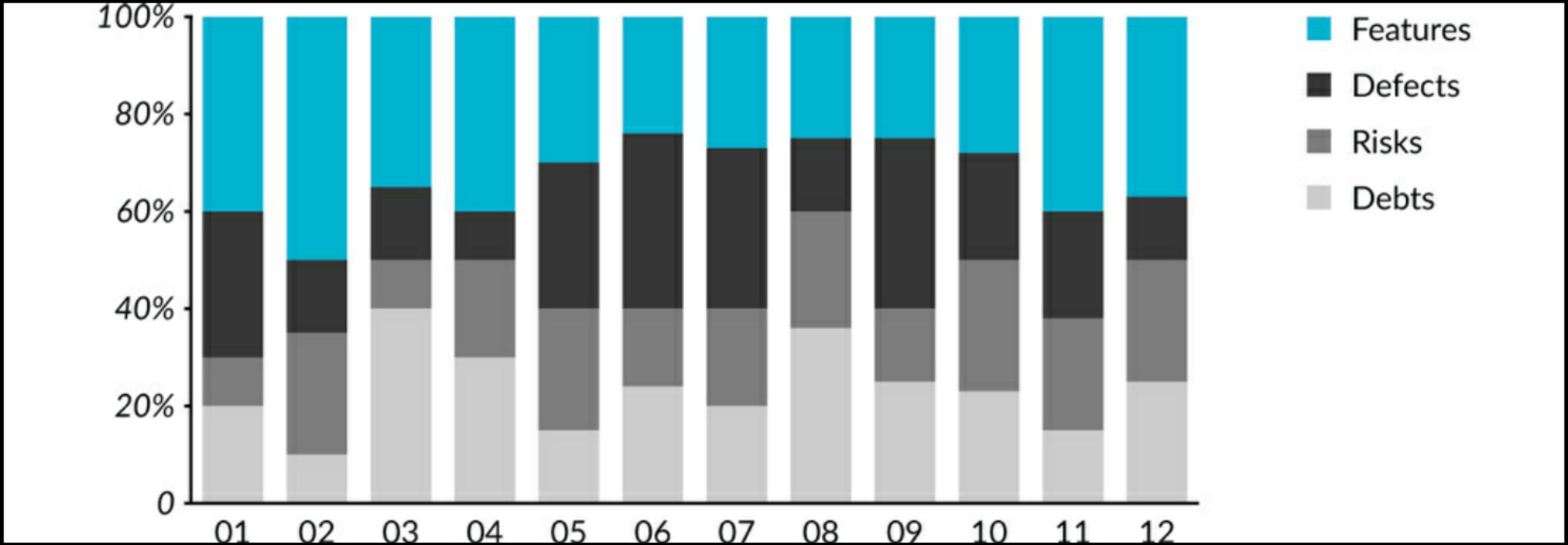
Business Results

- +$ Value
- -$ Cost
- Quality
- Happiness

Flow Distribution

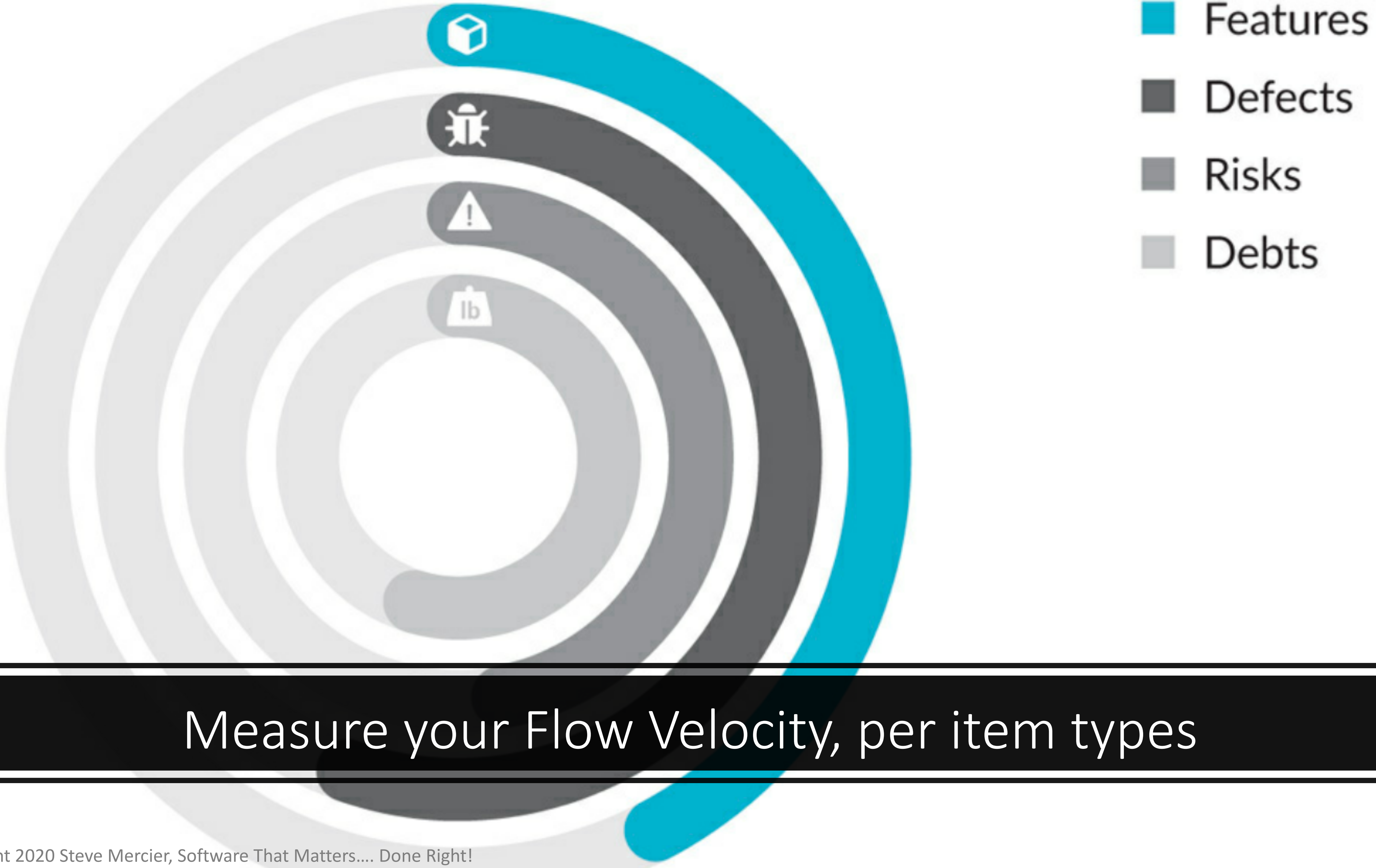
Features Defects Risks Debts

Good Flow Distribution of items + Flow metrics measures → Business Results!

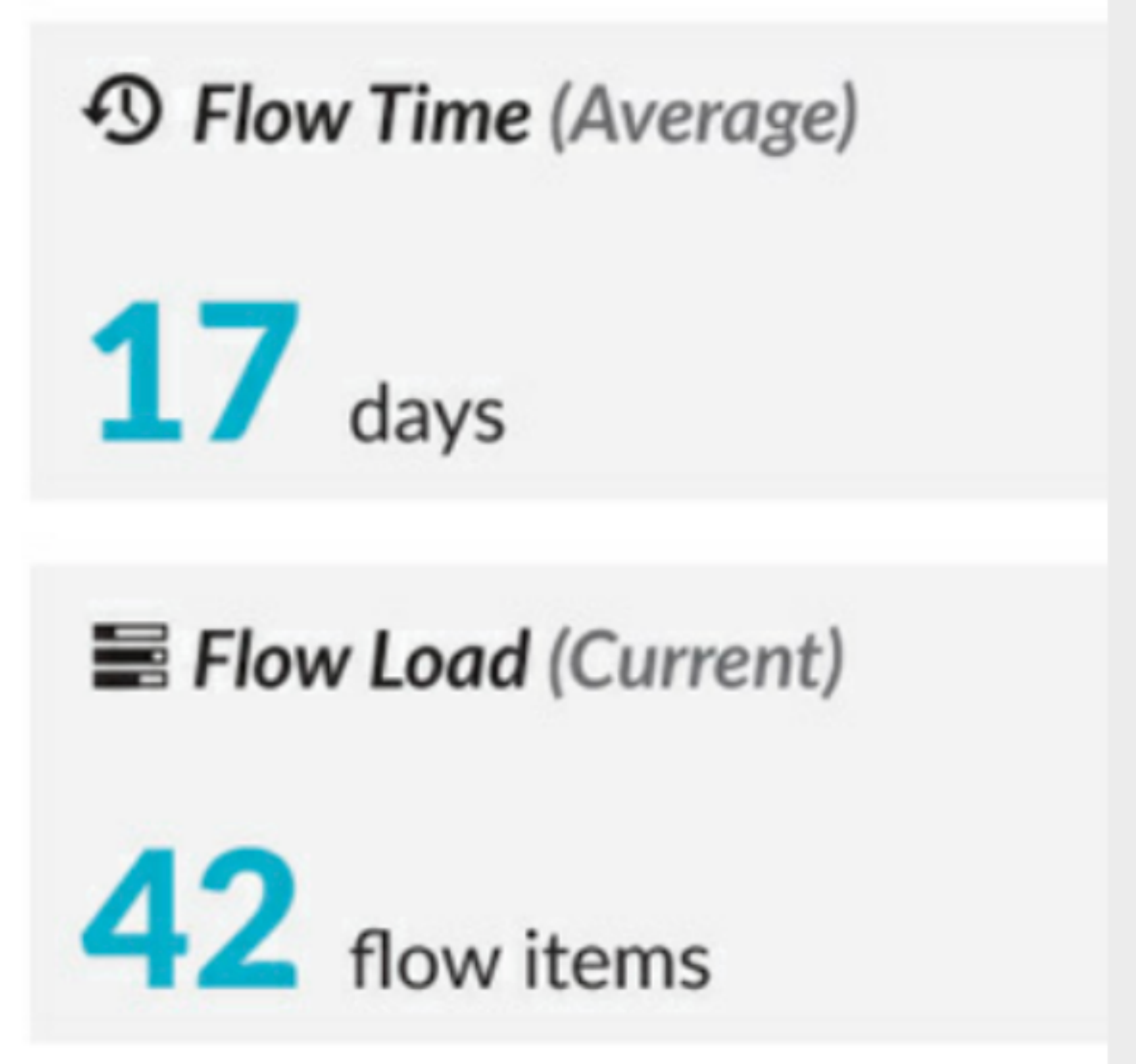


Measure your Flow Distributions – ratios should vary by value streams and over time

Measure your Flow Velocity, per item types



Measure Your Average Flow Time and your Current Flow Load (WIP)

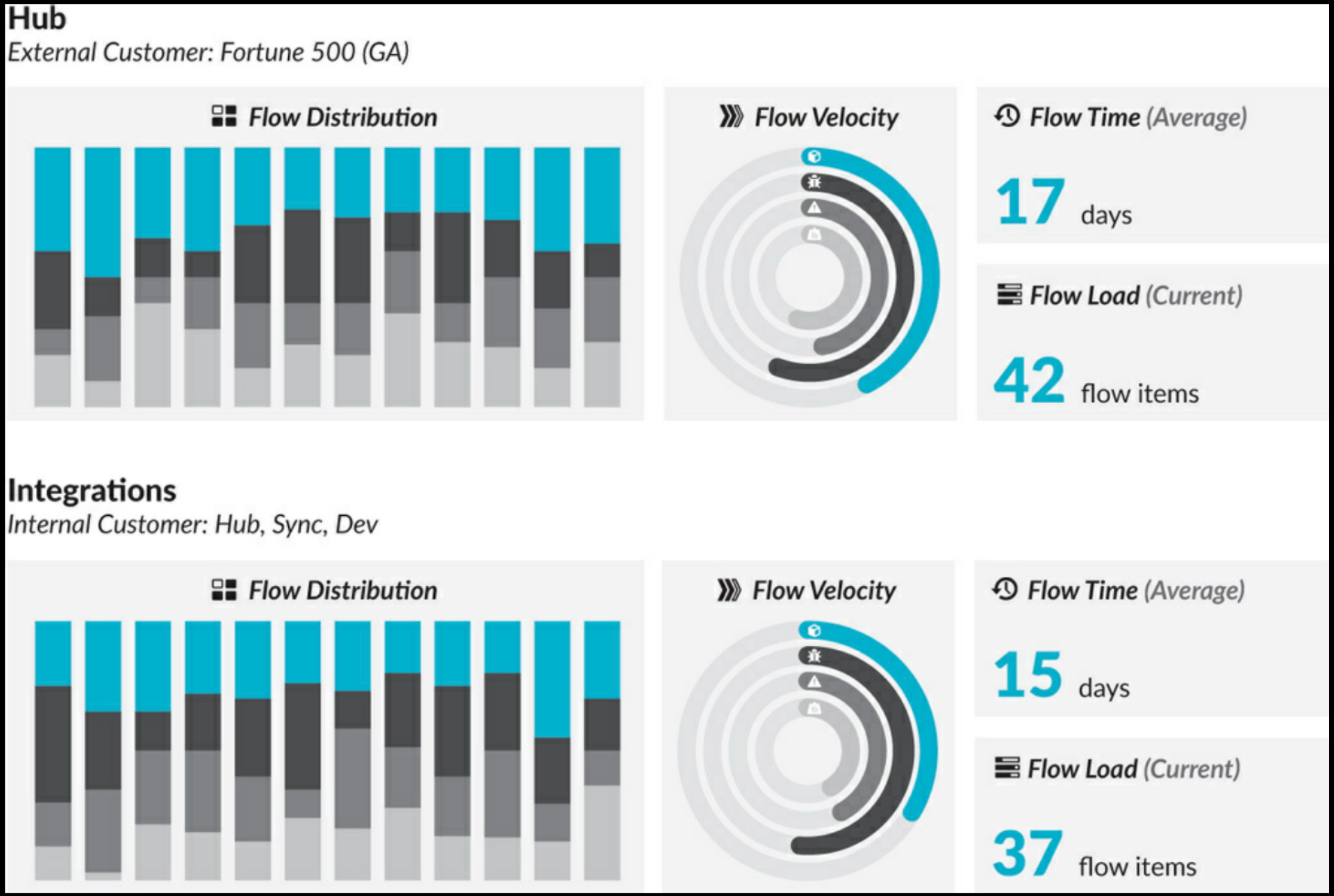


Flow Time (Average)

17 days

Flow Load (Current)

42 flow items



Hub

External Customer: Fortune 500 (GA)

Flow Time (Average)

17 days

Flow Load (Current)

42 flow items

Integrations

Internal Customer: Hub, Sync, Dev

Flow Time (Average)

15 days

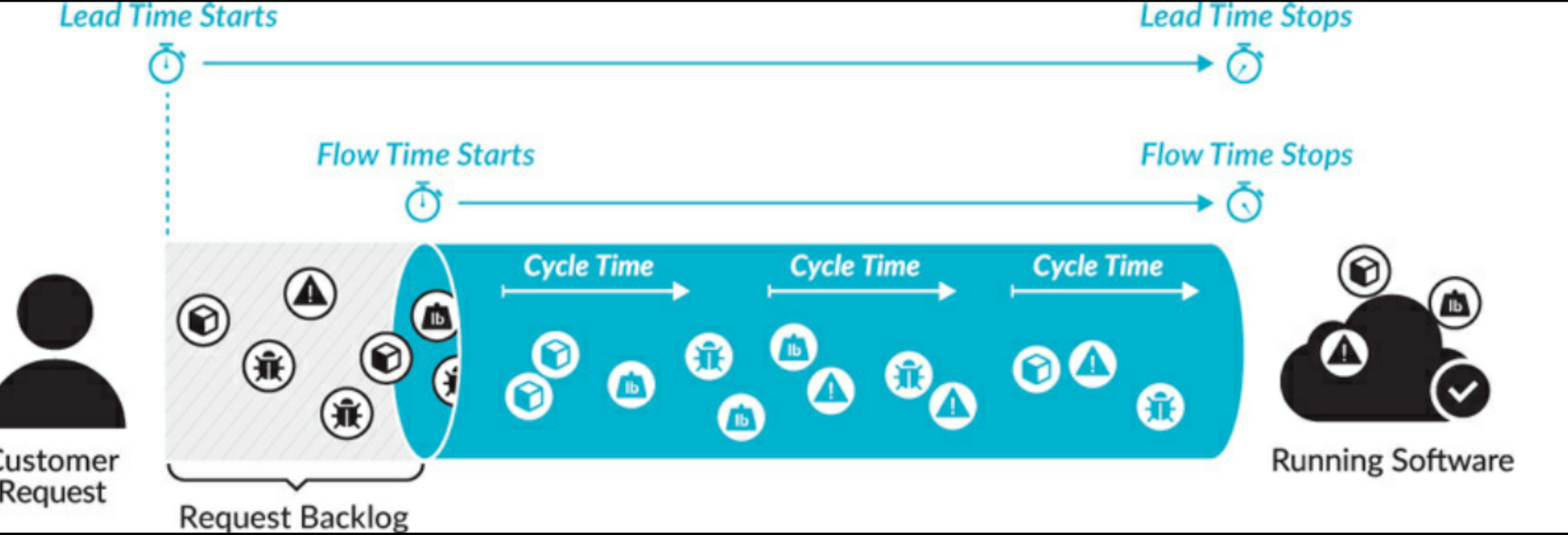
Flow Load (Current)

37 flow items

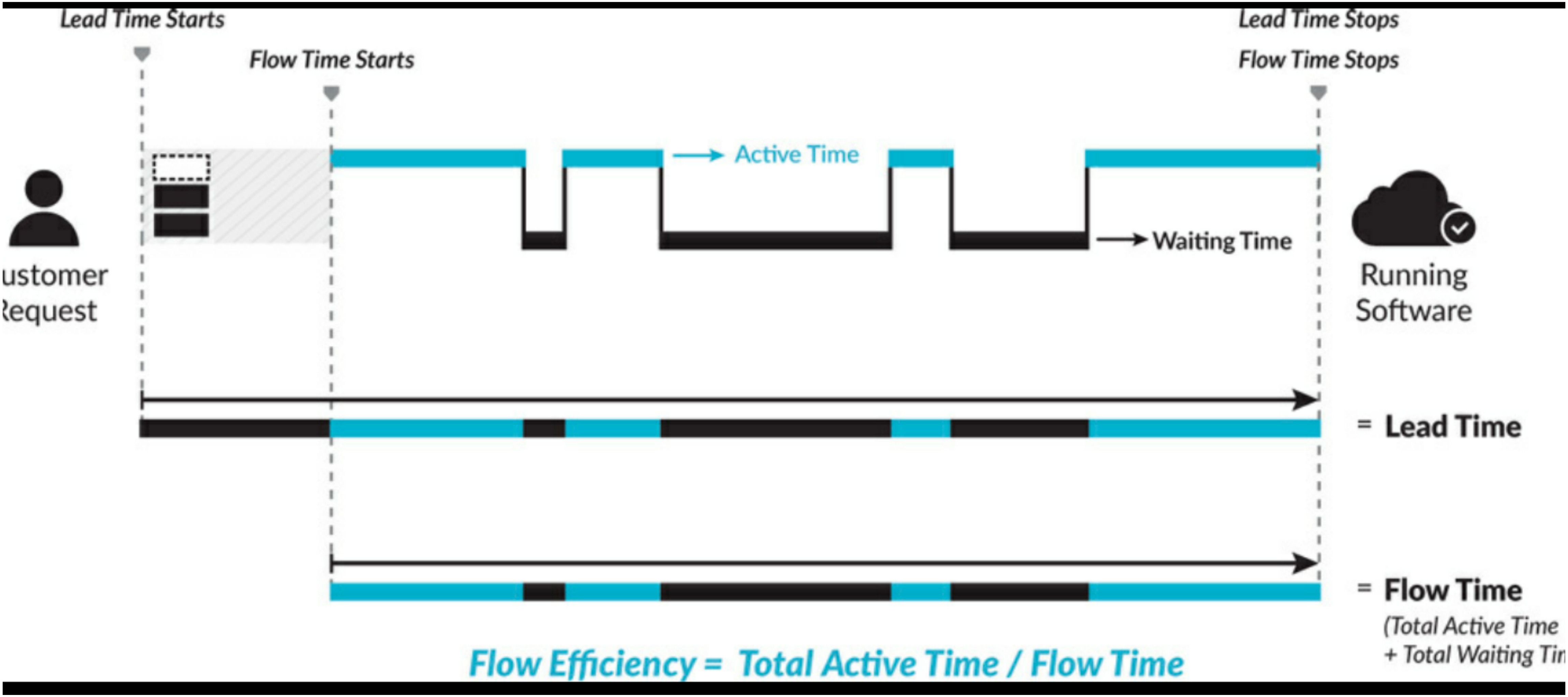
Create a dashboard with the Flow metrics for all your products (internal and external)

Show it!

Govern with it!



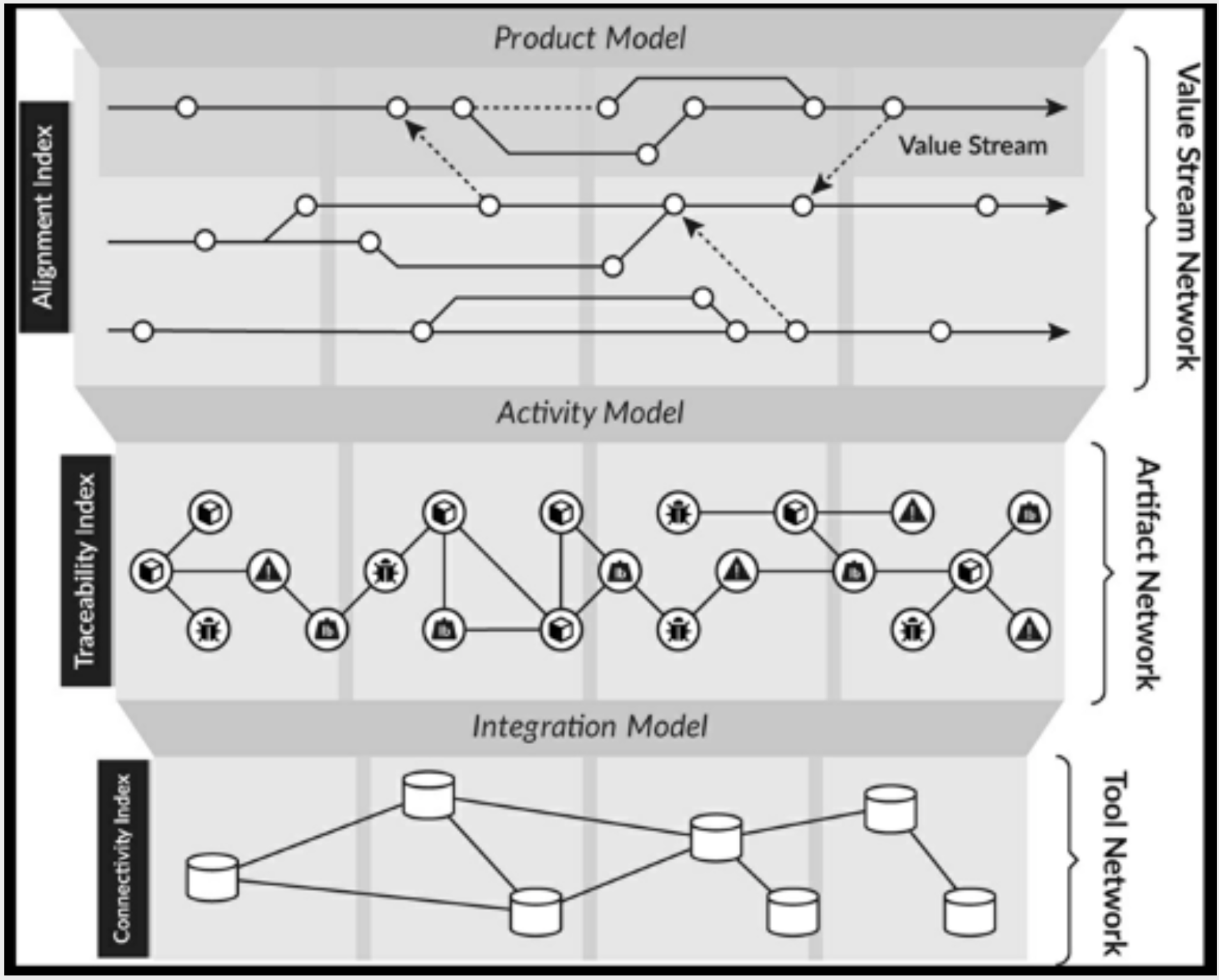
Measure your Lead + Flow + Cycle times



Measure your Flow Efficiency (Active time / total time)

Minimize Wait time == *waste*

To create your Value Stream Network (VSM), first map your tools and artifacts networks



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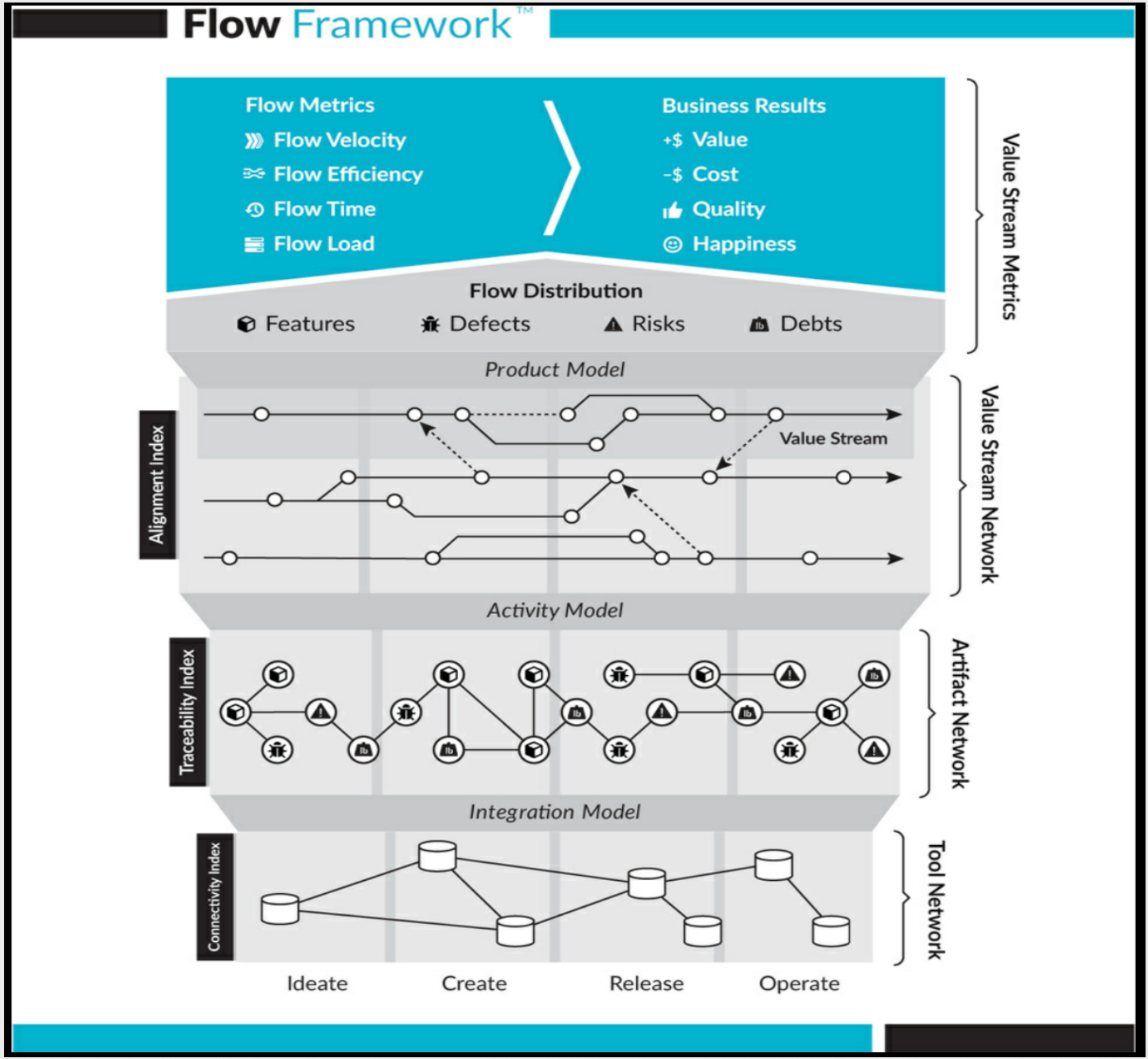
Apply Flow framework

Will ease Agile + DevOps



Solutions for a successful transformation

- Products Centered
- We improve what we measure → Measure the right things!
    - Show the global value stream and Govern with it!
- Keep a business global vision
    - Agile + DevOps, yes, but not only
- Segregate 4 business value types in your sprints
    - Manage rations based on contexts, adjust
- Do small iterations, small scope, adjust, become better
- Simplify your tools (share the same across complete value stream)

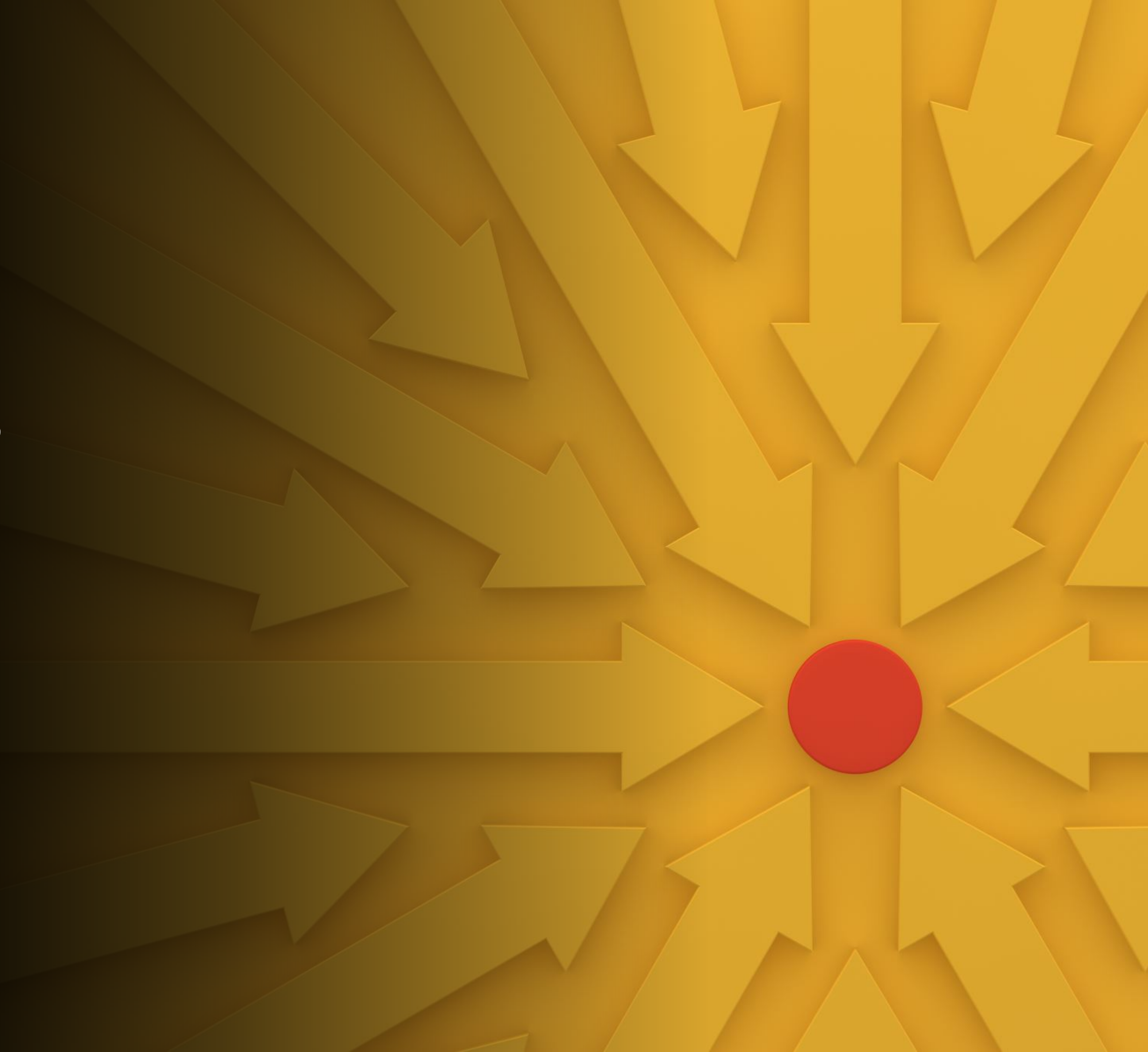
Pitfalls

- Wrong metrics
  - Not showing them, not using them
- Not involving real users/ using bad proxies
  - Wait to long before involving them / lengthy iterations
  - If it hurts, do it more often!
- Non multidisciplinary teams → dependencies between multiple teams across the whole value stream
- Too many tools of the same type across the value stream (ex: Excel, JIRA, Service desks, etc. for requirements)

Don’t forget: a transformation is not the goal

Only a strategy to attain it!

… And very often that is the customers + employees satisfaction!



Questions / Comments