

A practical guide towards becoming a High Performance Organization

“FUNCTIONALLY SLICING THE TRANSITION”

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A bit about me



Michiel Sens

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- ▶ Job (current):
 - ▶ Solution Architect & Principal DevOps Consultant @ Xebia
 - ▶ DASA “DevOps Fundamentals” co-author and master trainer
 - ▶ DevOps Trainer @ Xebia
- ▶ Main area of expertise
 - ▶ Continuous Delivery, DevOps and Automation (the whole spectrum)
- ▶ Previous
 - ▶ In IT industry as of 1996, background in Java Development since 1999
 - ▶ In 2004 move towards architecture
 - ▶ Managing Consultant / People Manager @ IBM
- ▶ Key working areas:
 - ▶ Assessments, value stream analysis, hands-on-delivery, architecture, conferences, presales and the whole shebang



Donovan Brown – Principal DevOps Manager
Microsoft's Cloud Developer Advocacy team
<https://twitter.com/donovanbrown>
#LoECDA

“DevOps is the union of people, process and products
to enable continuous delivery of value to our end users”

While a lot of products have been developed in the automation space

You'd typically like to strike a balance between other topics as well ...



Often, the focus is only on this!!

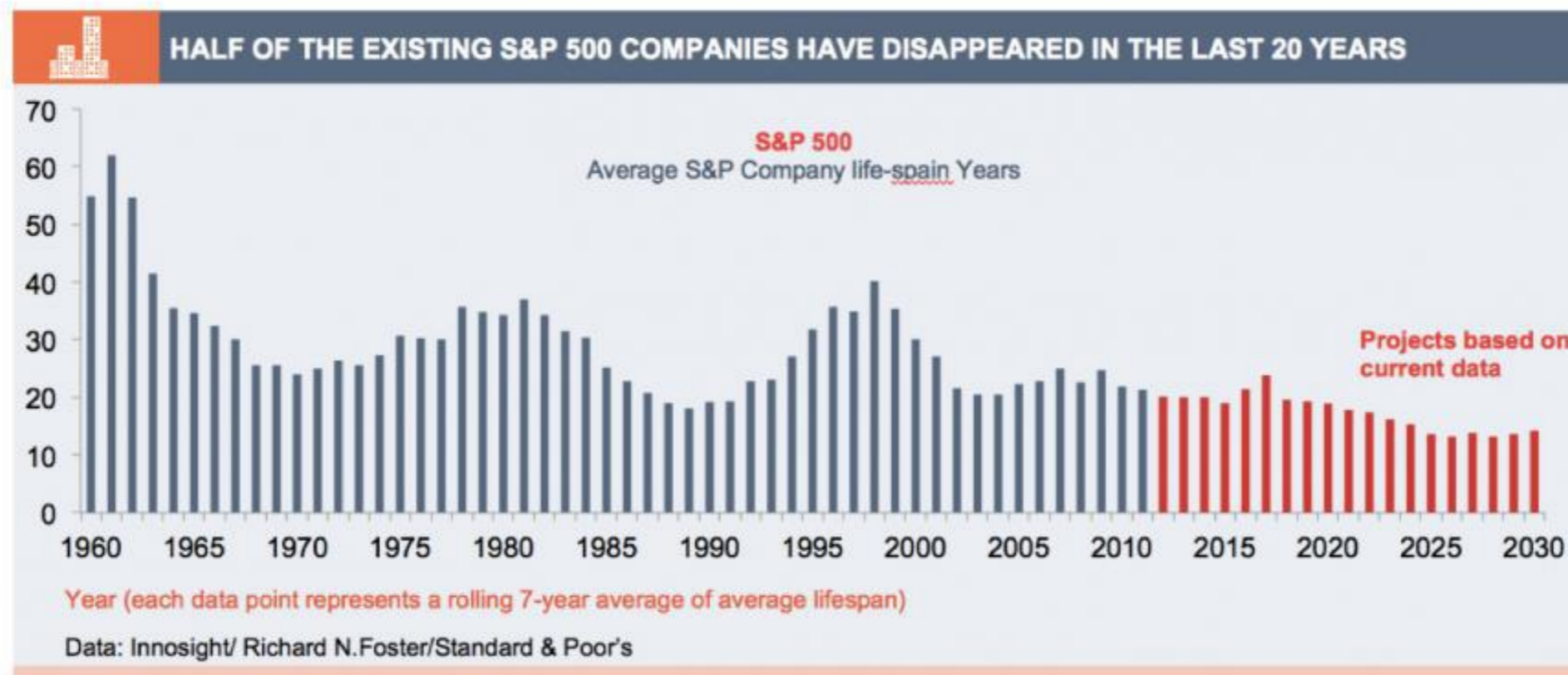
To really benefit, we need the 'right' mix of..

- Culture
- Organization
- Architecture
- Processes
- Automation
- Measurements



Technology provides the customer with alternatives

Lifespan of S&P 500 companies has decreased from 67 to 15 years



The average lifespan of an S&P 500 company has decreased from 67 years in the 1920s to just 15 years today¹. Of the 74 or so companies that have stayed in the S&P 500 for more than 40 years².

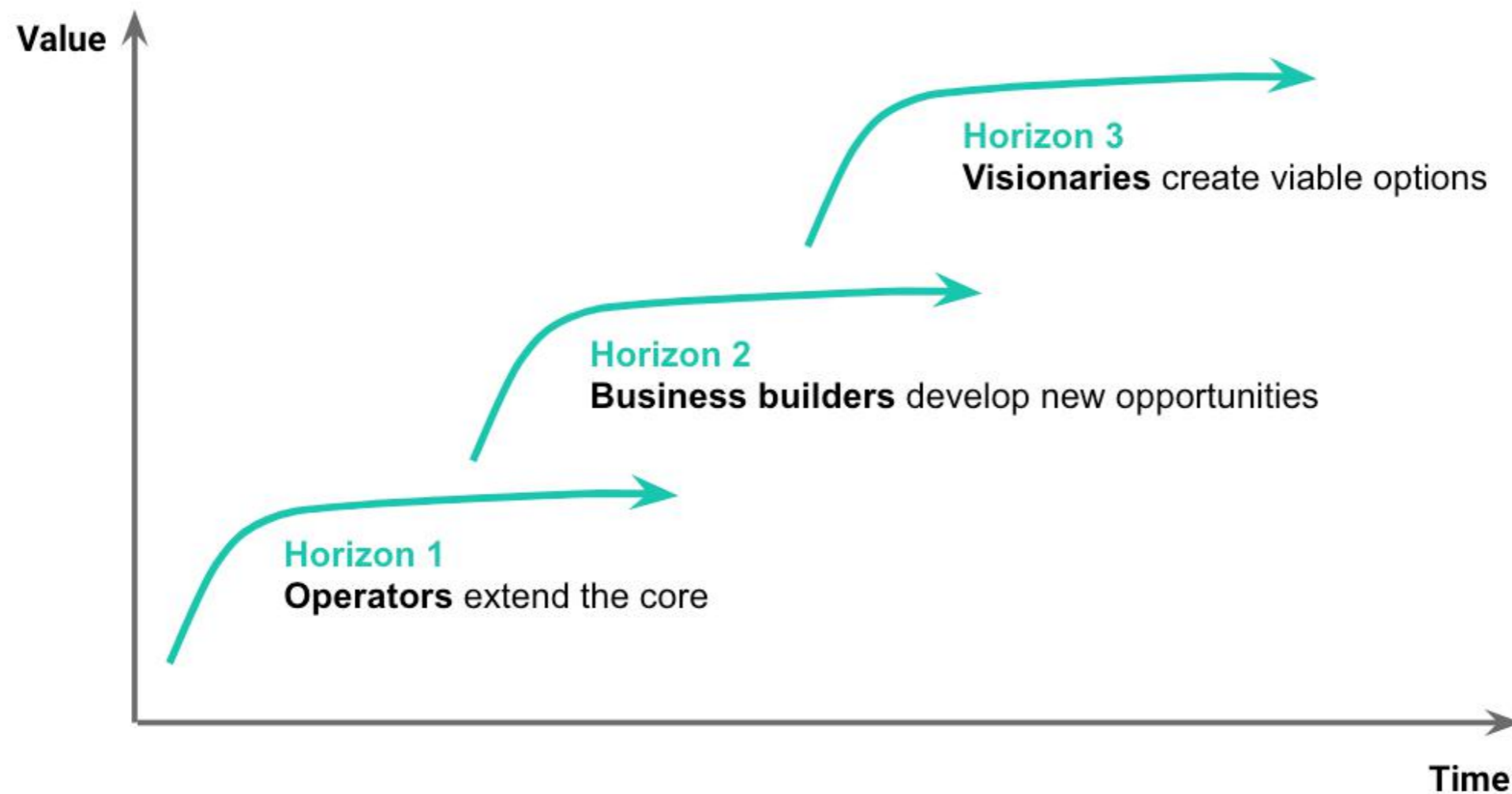
Who will be the next Kodak in your area of operation?

- ▶ Many companies are ‘trapped’ inside their own success the horizon 1 dilemma



Source: <https://www.adformatie.nl/design/wie-wordt-de-kodak-jouw-branche>

In essence, each Product follows the Three horizons model



1. EXPERIMENT

2. GROW

3. OPERATE

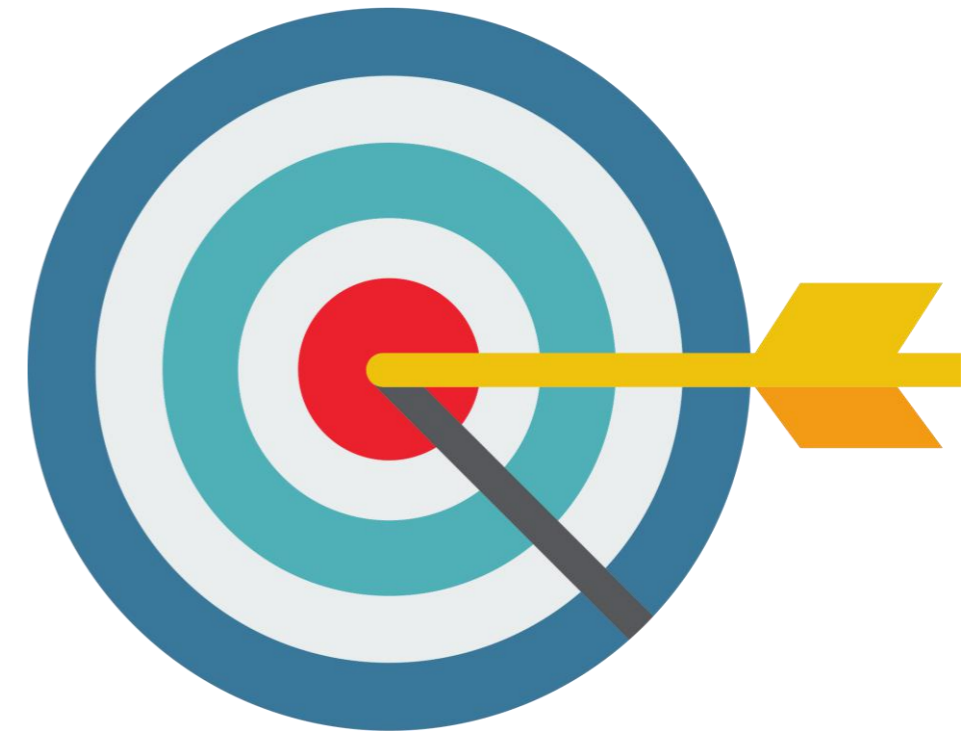
It's no longer just about the product, it's about *the garden* of products ...



- ▶ To be responsive to continuous change, we need our garden to **facilitate speed** in delivery – in this is where **DevOps** comes into play

Source: <https://www.adformatie.nl/design/wie-wordt-de-kodak-jouw-branche>

What we need
to achieve

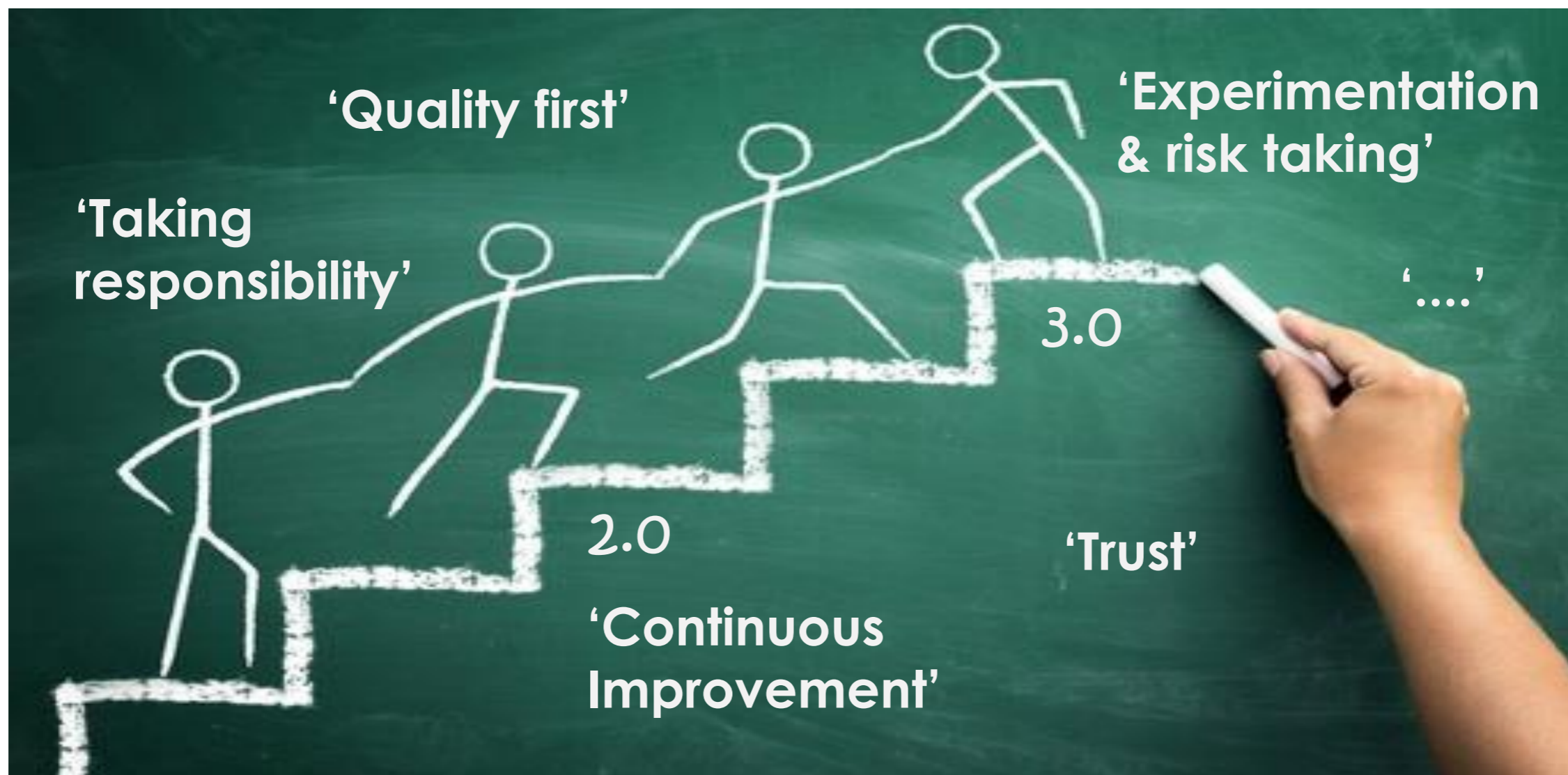


Topics to address

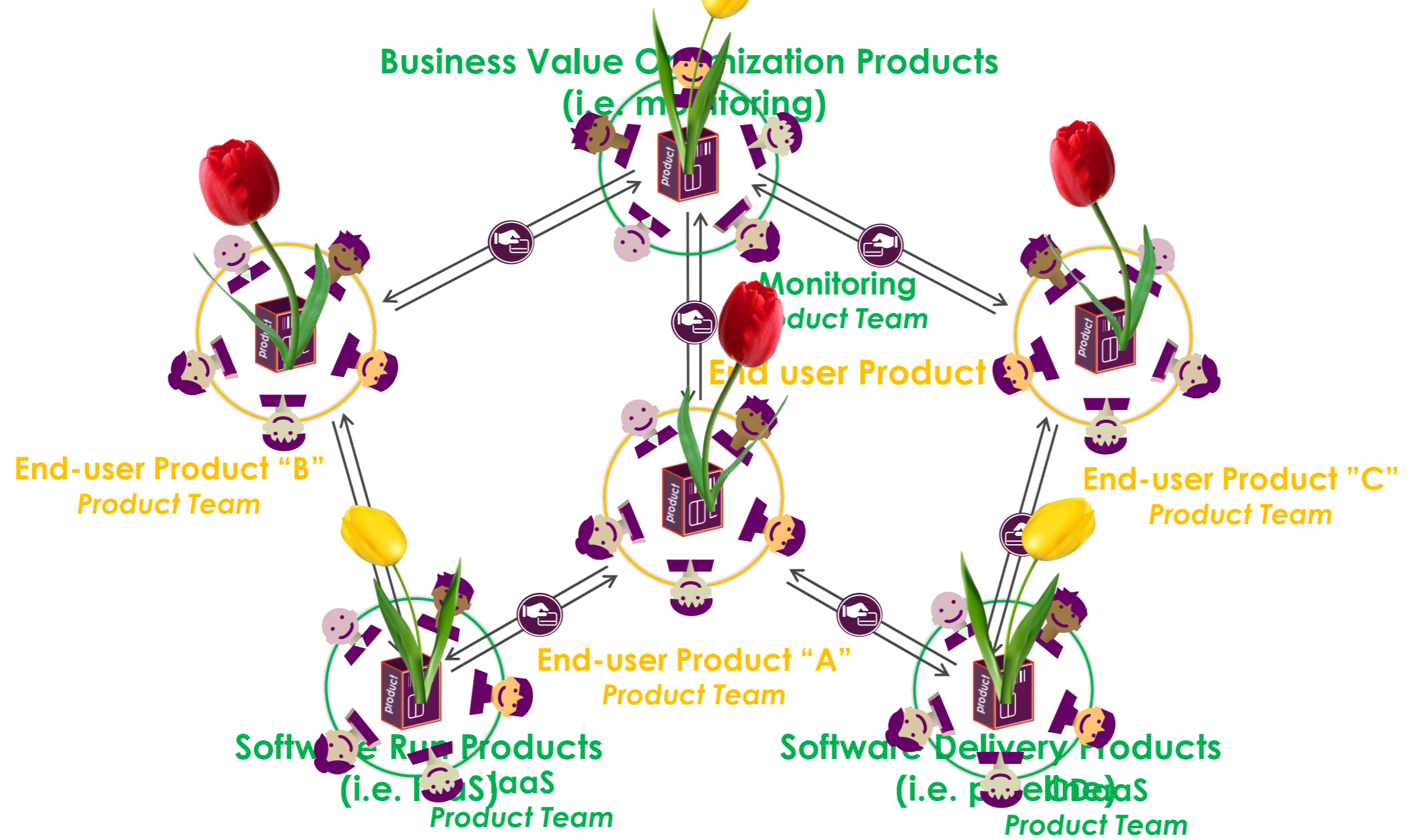


- Culture
- Organization
- Architecture
- Processes
- Automation
- Measurements

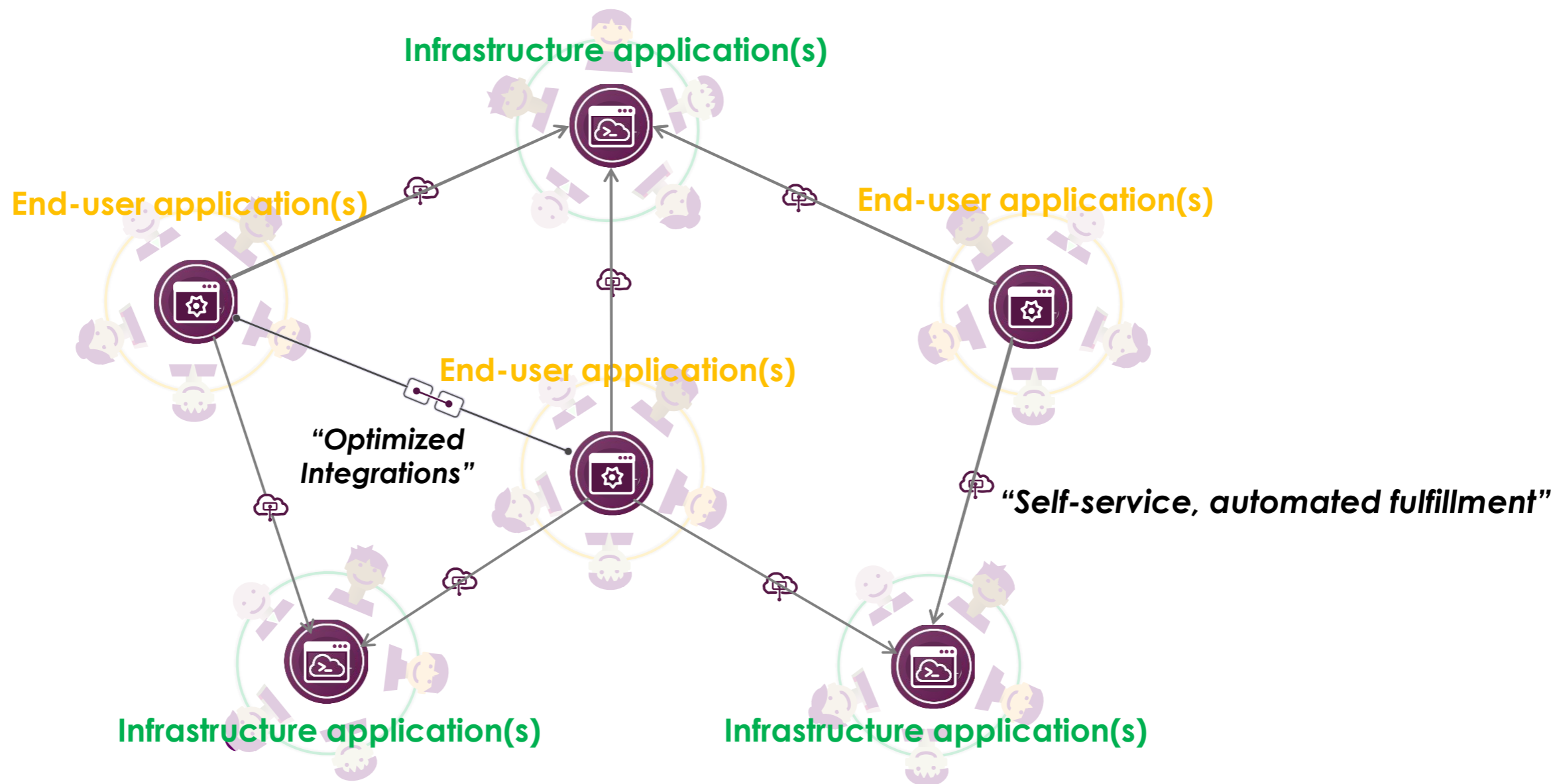
A high performance **culture**



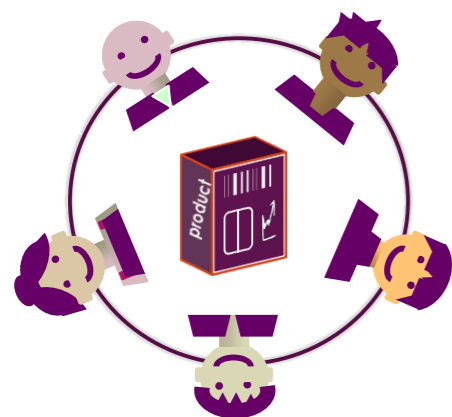
A product based organization



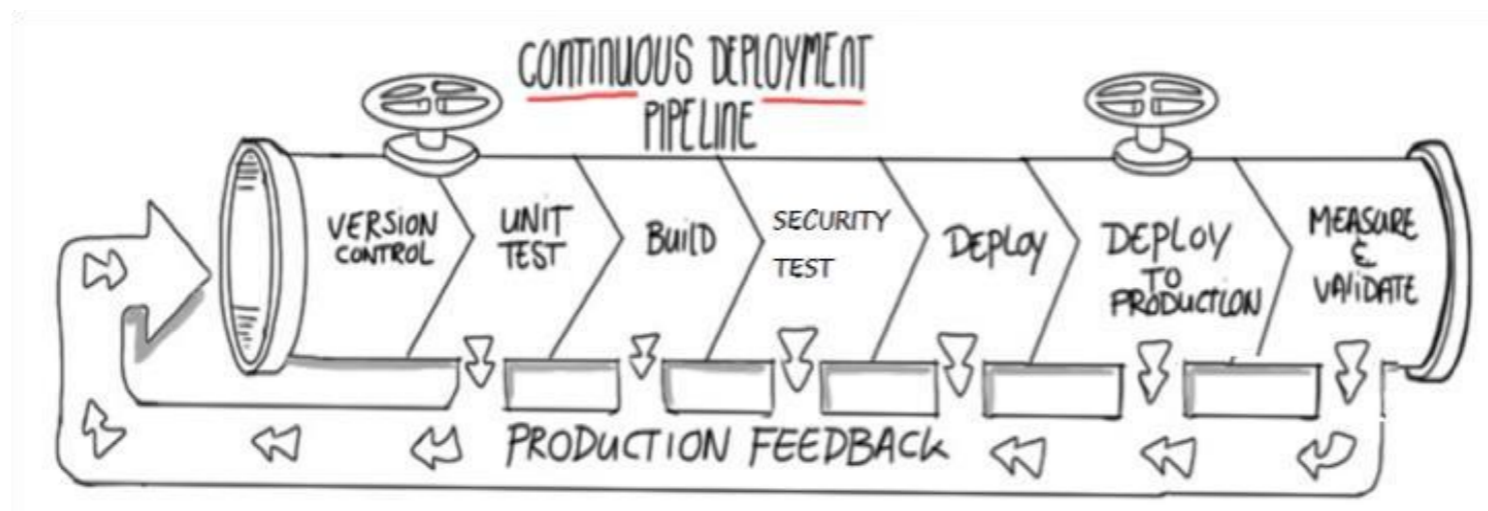
An **architecture** driving team autonomy



Every manual step **automated**



Automated (delivery of) IDE

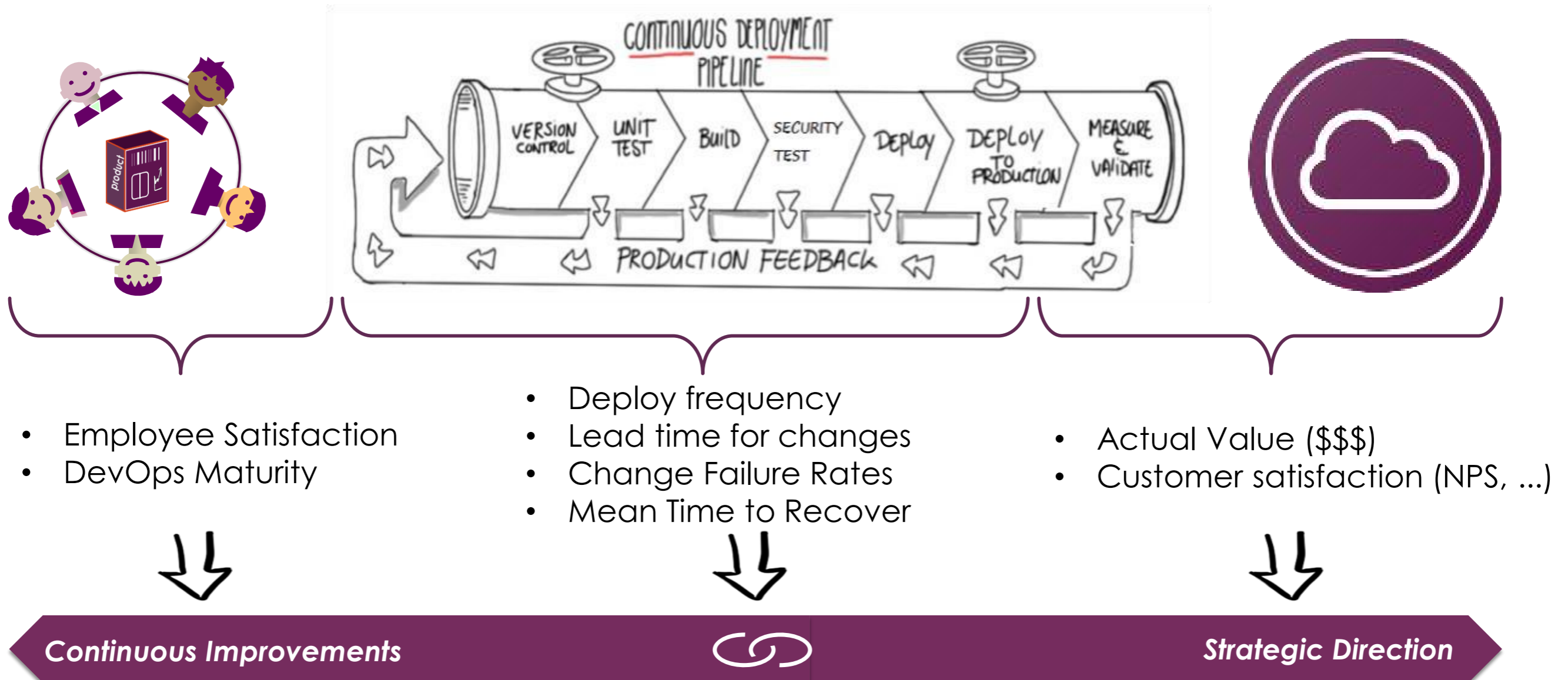


Automated delivery process



Automated infrastructure

Everything **measured** for effectiveness

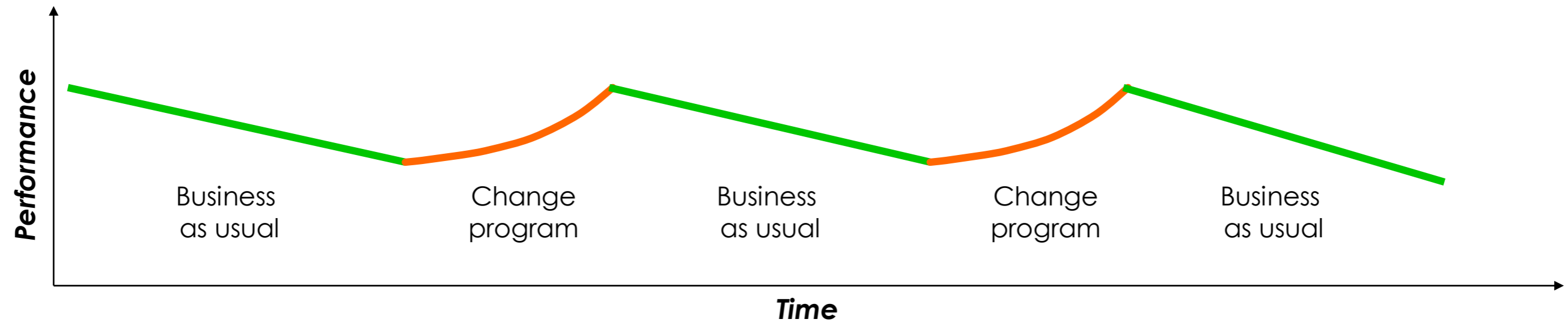




Transformation

SO ... HOW TO GET THERE?

Do not treat this as a 'change program'



Do not transform in isolation

“Business” Transformation 1 **value:**
“new scope of work!”
“new culture!”

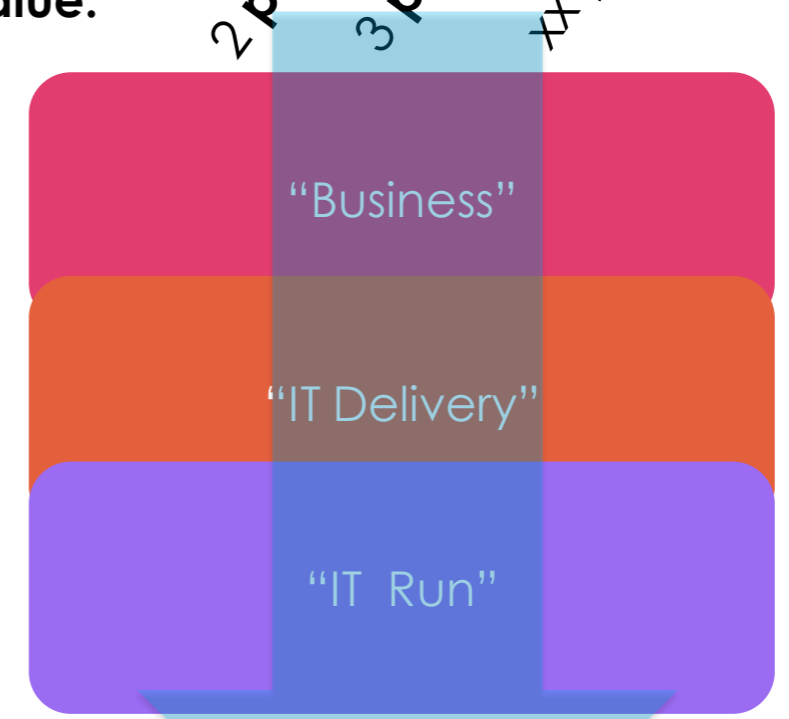
“IT Delivery” Transformation 2 **value:**
“new processes!”
“new architecture!”

“IT Run” Transformation 3 **value:**
“new systems!”
“new platform!”



Separated organizations
-> This drives three **local** KPIs

Value:



2 products delivered faster
3 products even faster
xx products fast!

Organization with shared objectives
-> This drives **end-2-end** KPIs



Starting point: (ambitious) KPIs



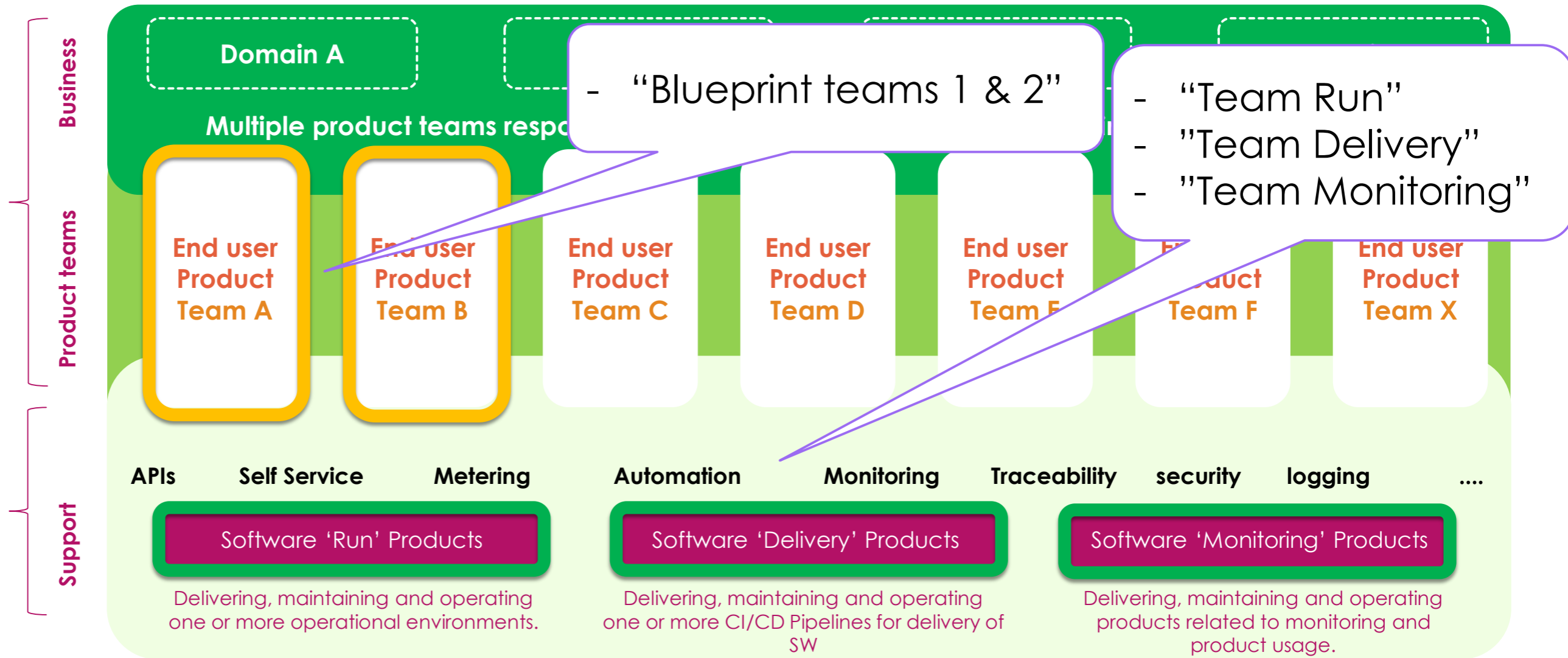
Category	What to measure	High Performer	Low Performer
Speed (SW to Ops)	Deployment frequency	“On demand”	1/wk. – 1/month
	Lead time for changes	Less than an hour	1 month – 6 months
Stability (when live)	Mean time to Repair (MTTR)	Less than an hour	1 week – 1 month
	Change failure rate	Between 0% and 15%	± 60%

* DORA, DevOps Research and Assessment “state of DevOps” report: <https://devops-research.com/>

Target – end 2 end responsible teams

Business teams with core goal to support the customer

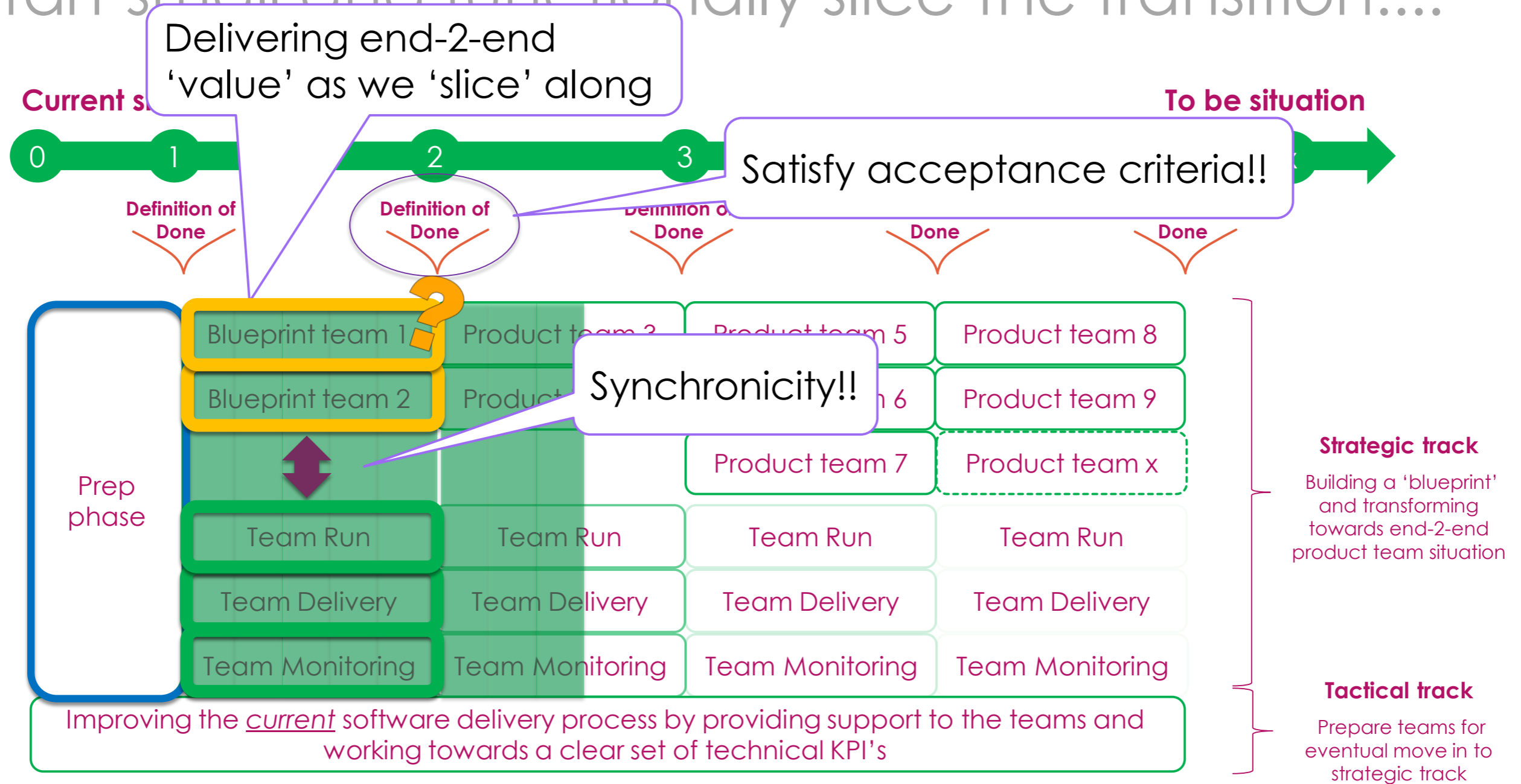
Platform teams with core goal to support the product teams



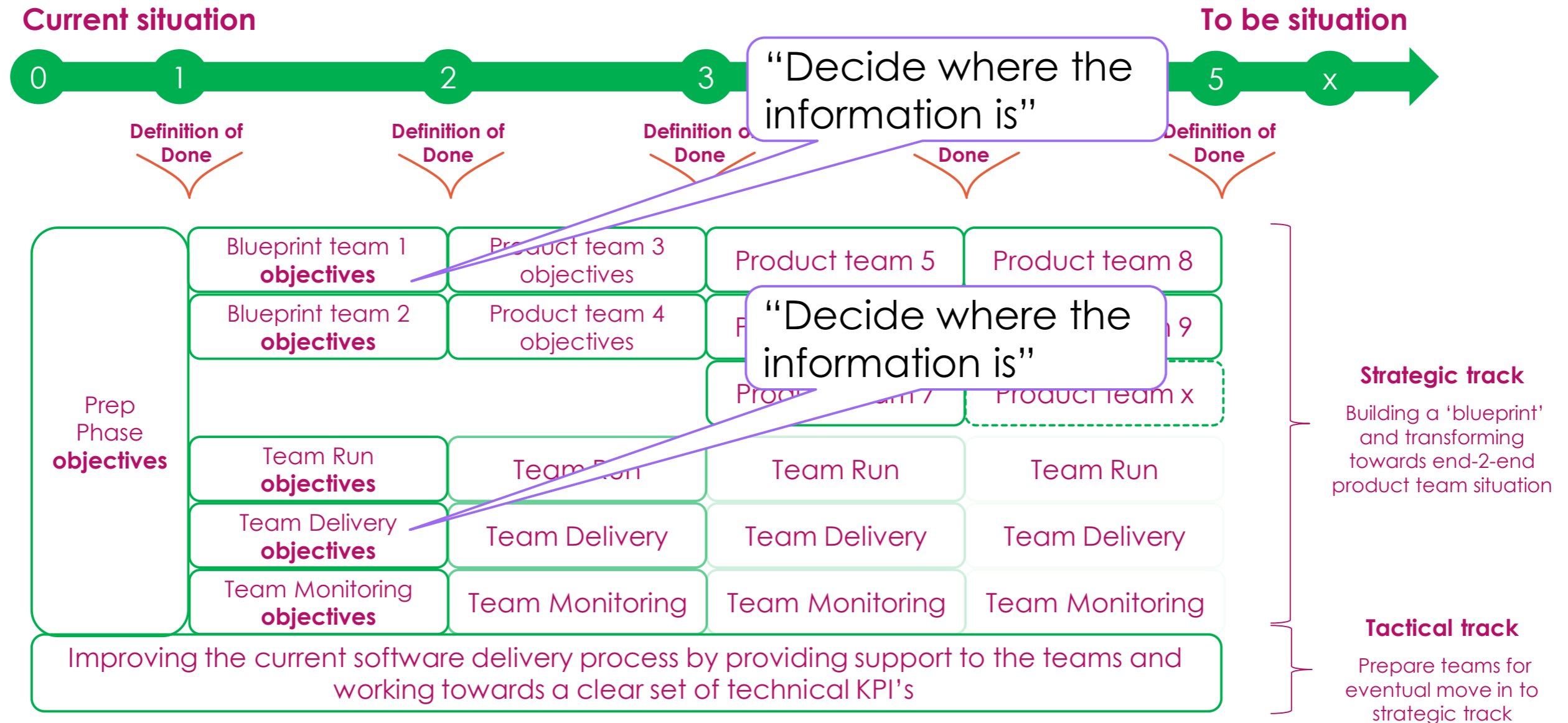
Where each Product Team ...

- ✓ Is End to End responsible,
- ✓ Is cross-functional in nature
- ✓ Operates *value* driven (mission command),
- ✓ Strives for autonomy,
- ✓ Focusses on automation, everything as code!
- ✓ Applies measurements to improve **product** and **process**

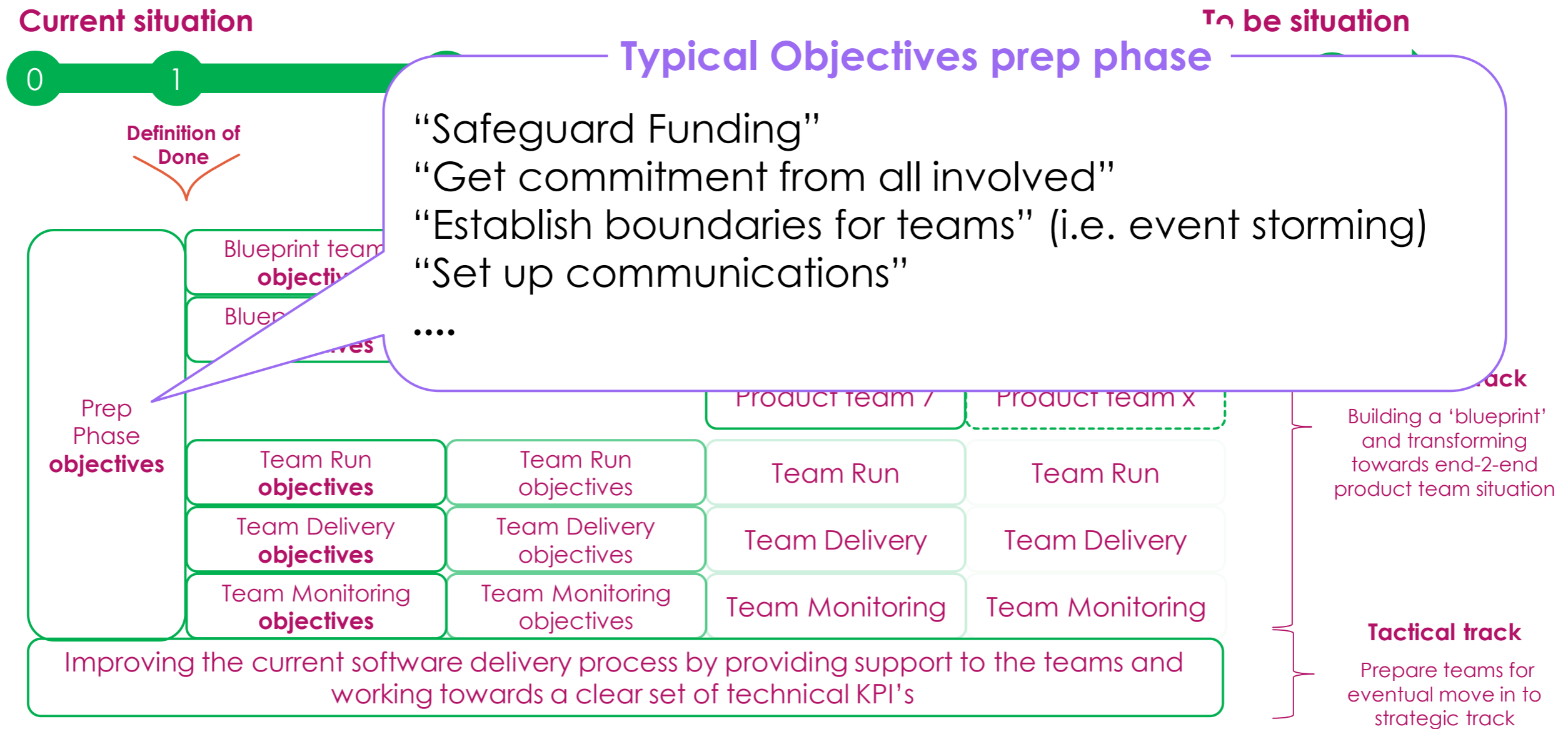
Start small and functionally slice the transition....



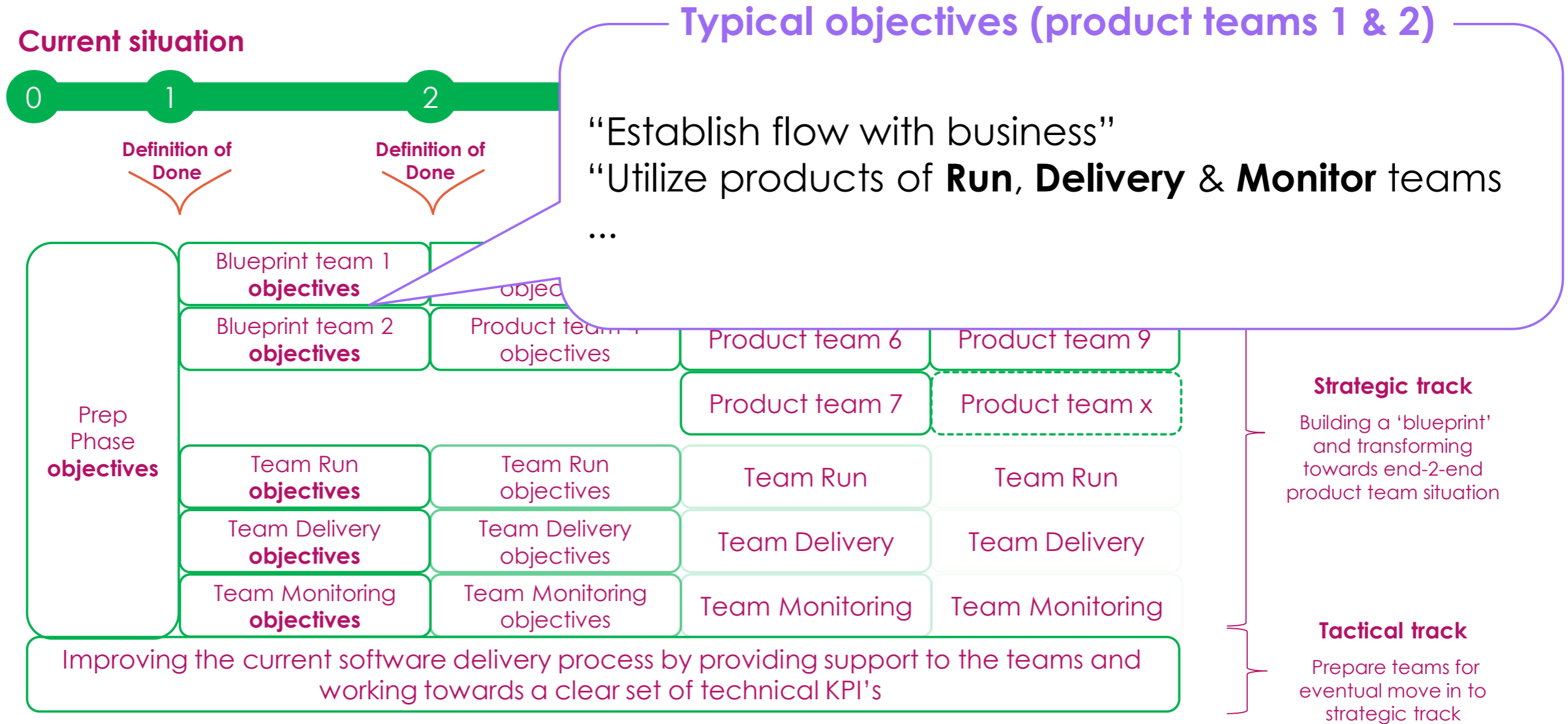
Steer by objectives - mission command



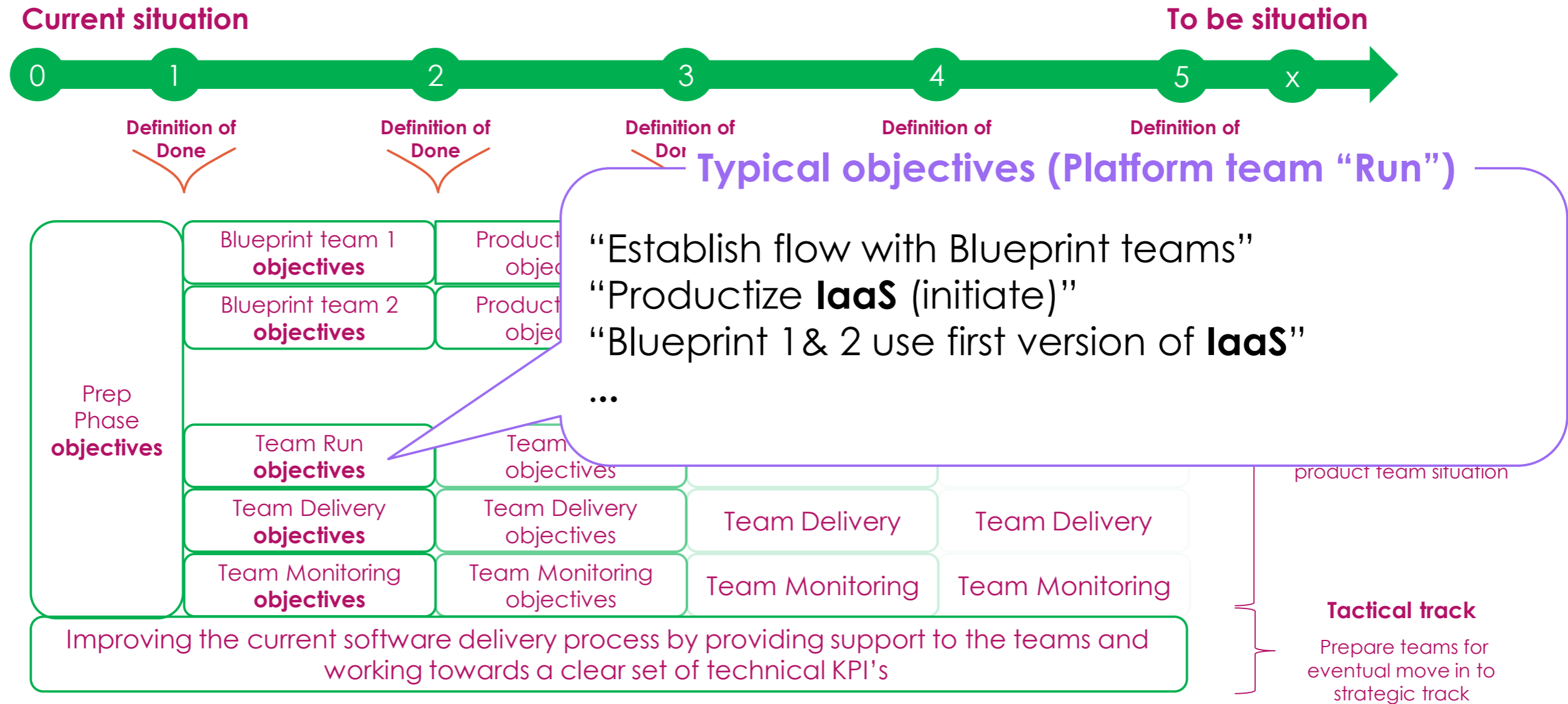
Steer by objectives - mission command



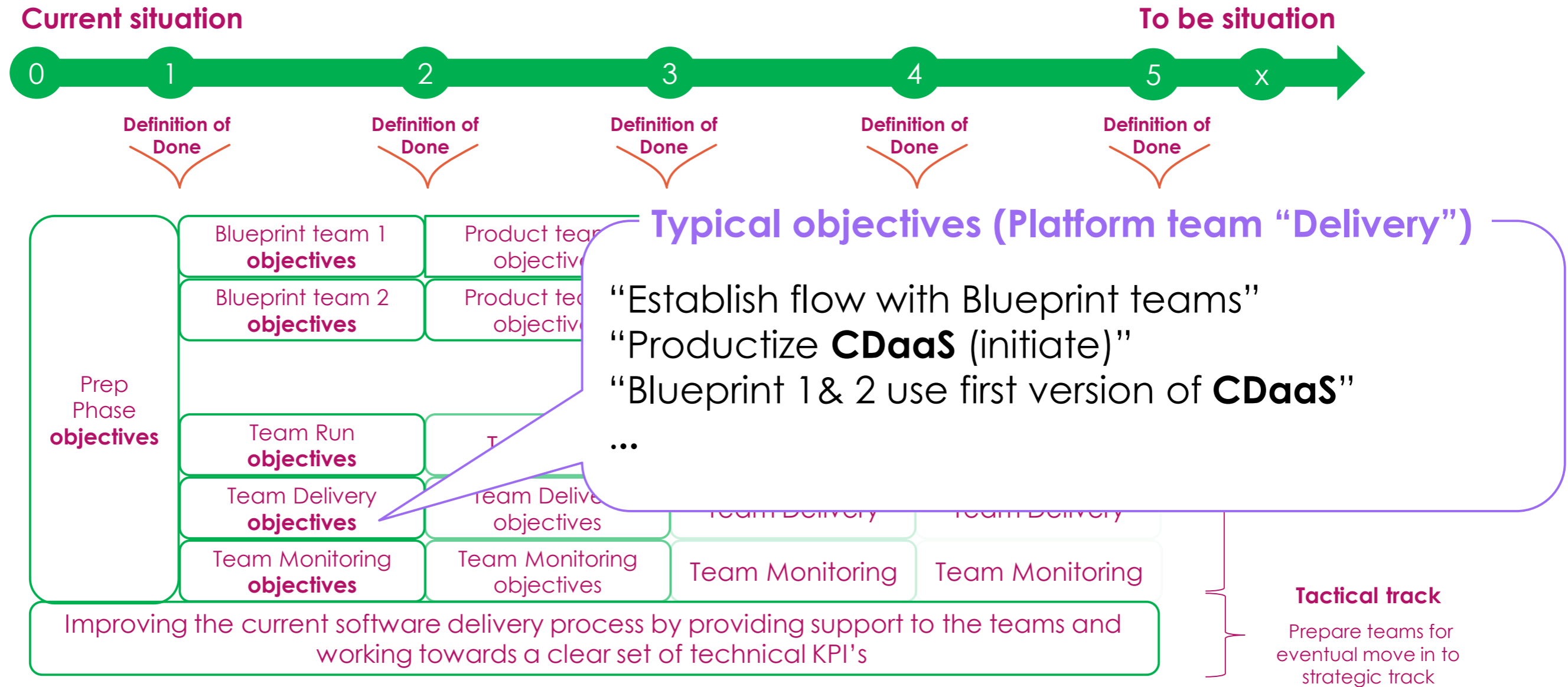
Steer by objectives - mission command



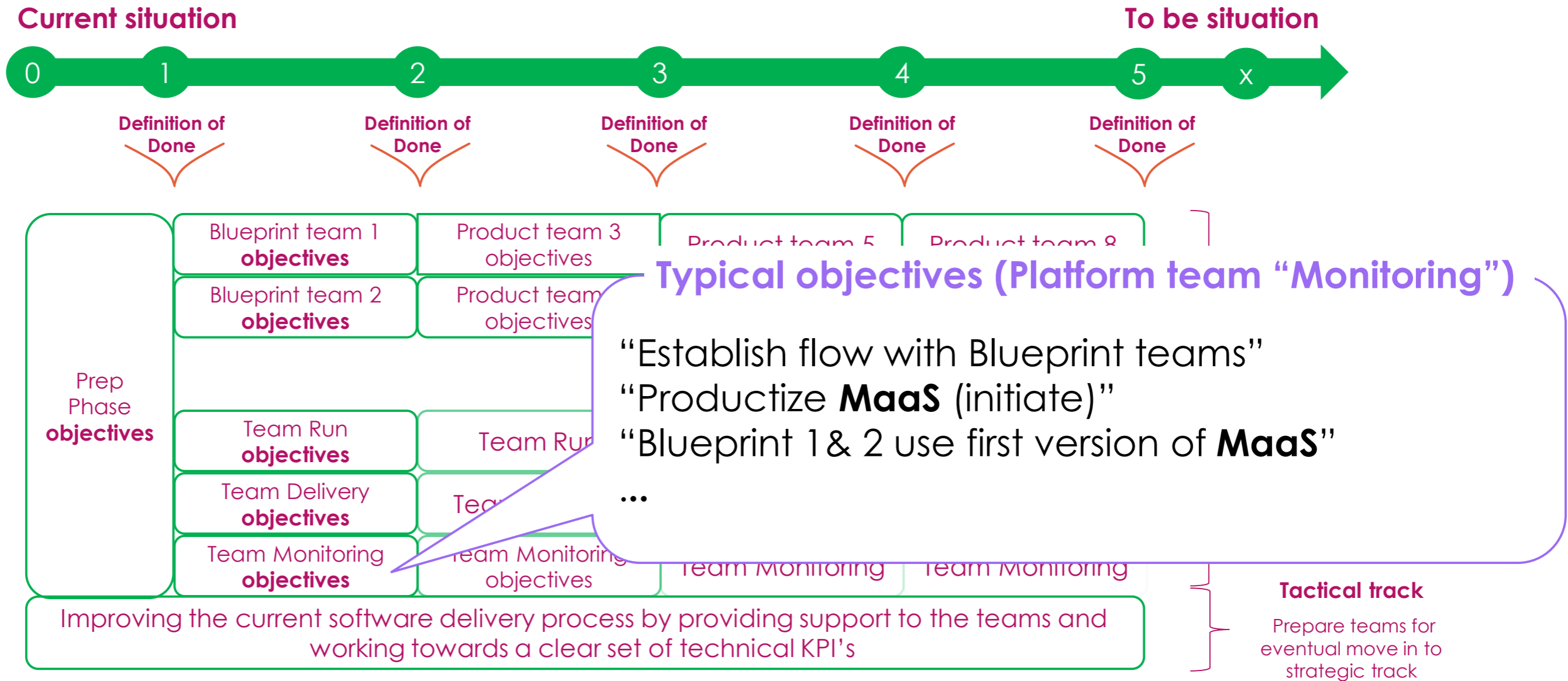
Steer by objectives - mission command



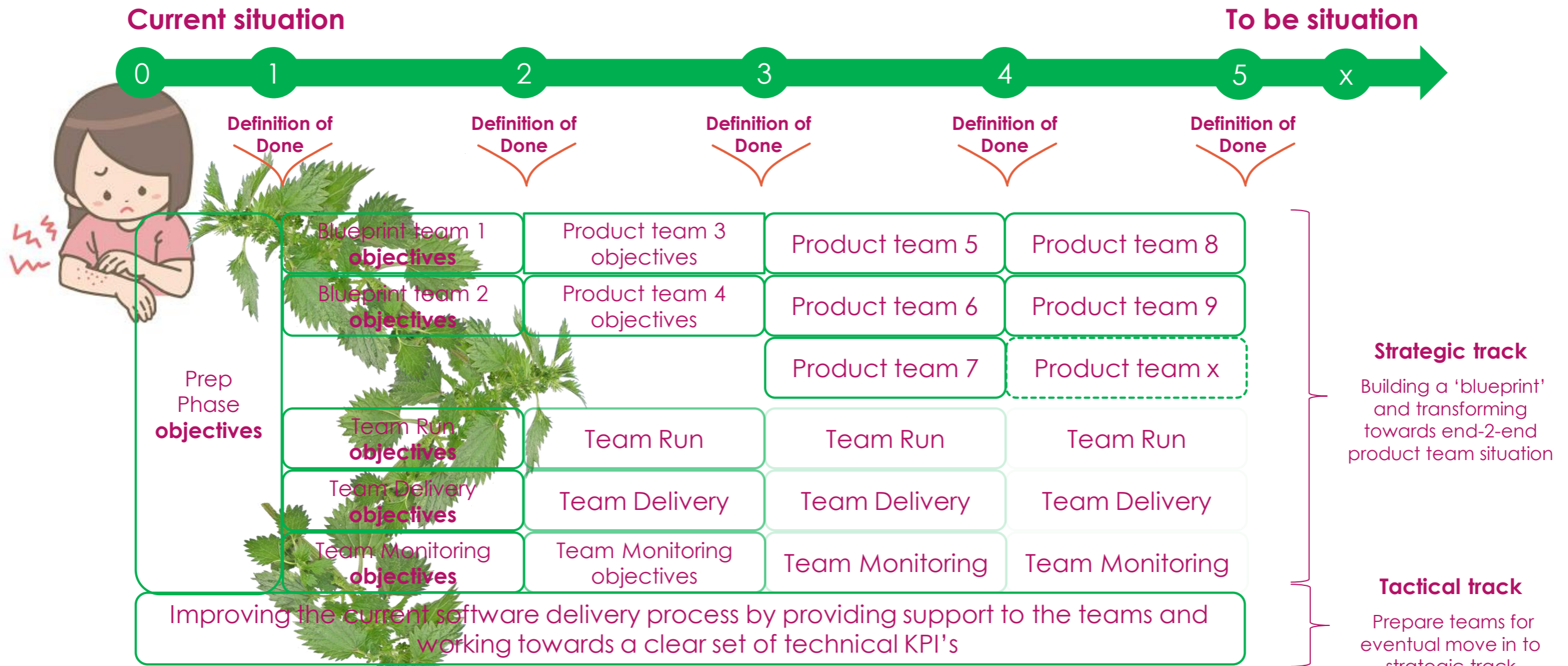
Steer by objectives - mission command



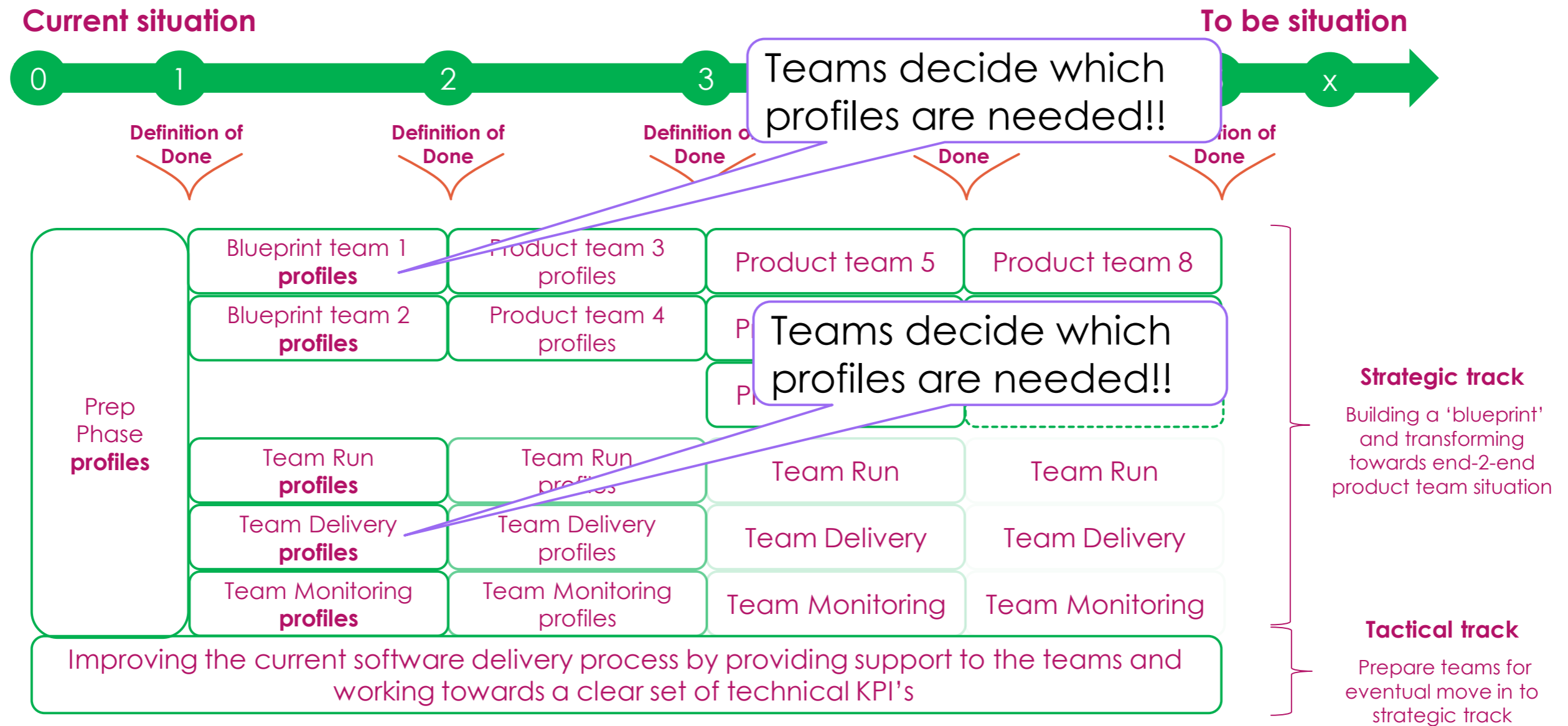
Steer by objectives - mission command



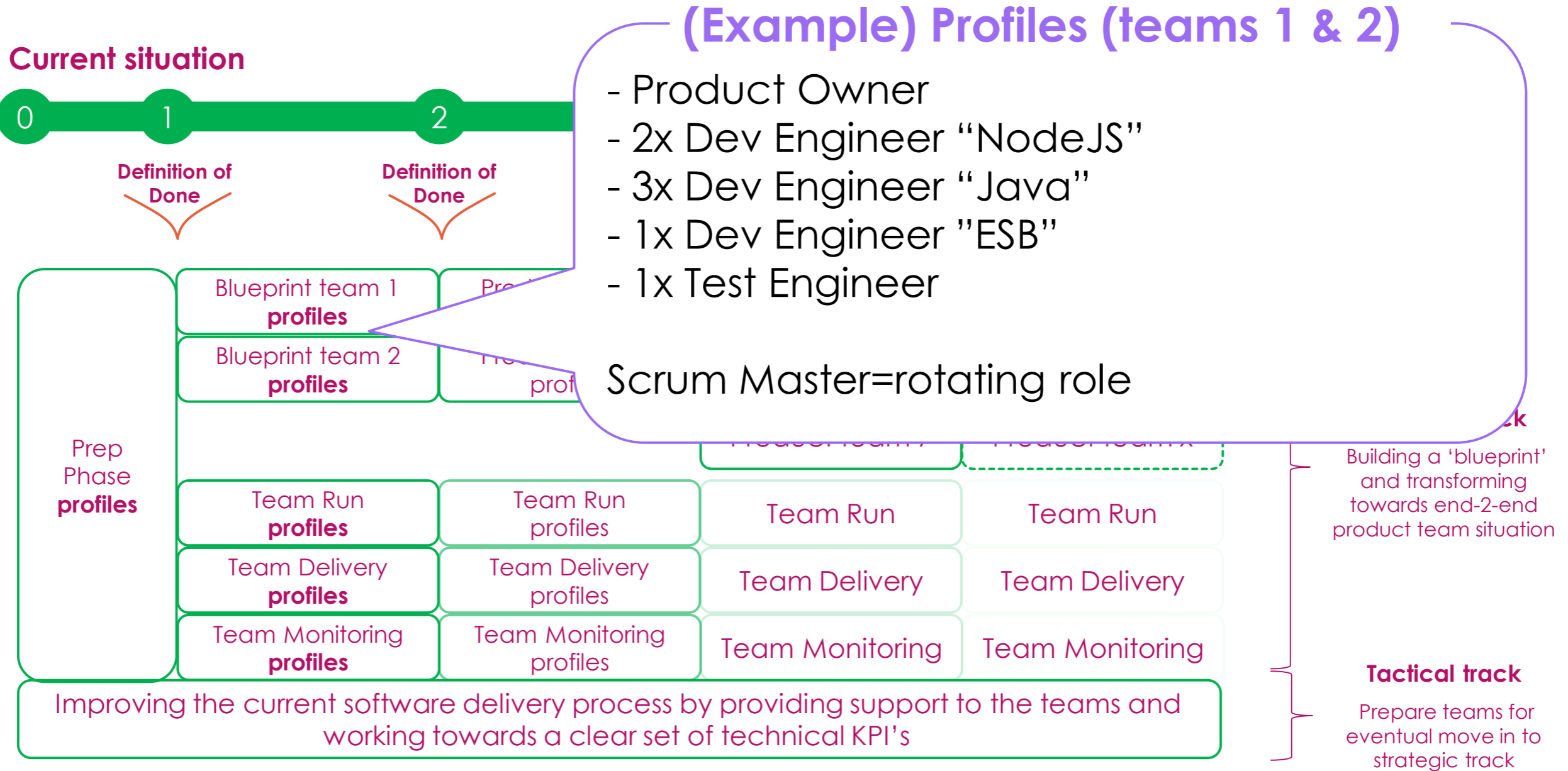
Talking about “pulling the pain forward”



Team profiles



Team profiles



Team profiles

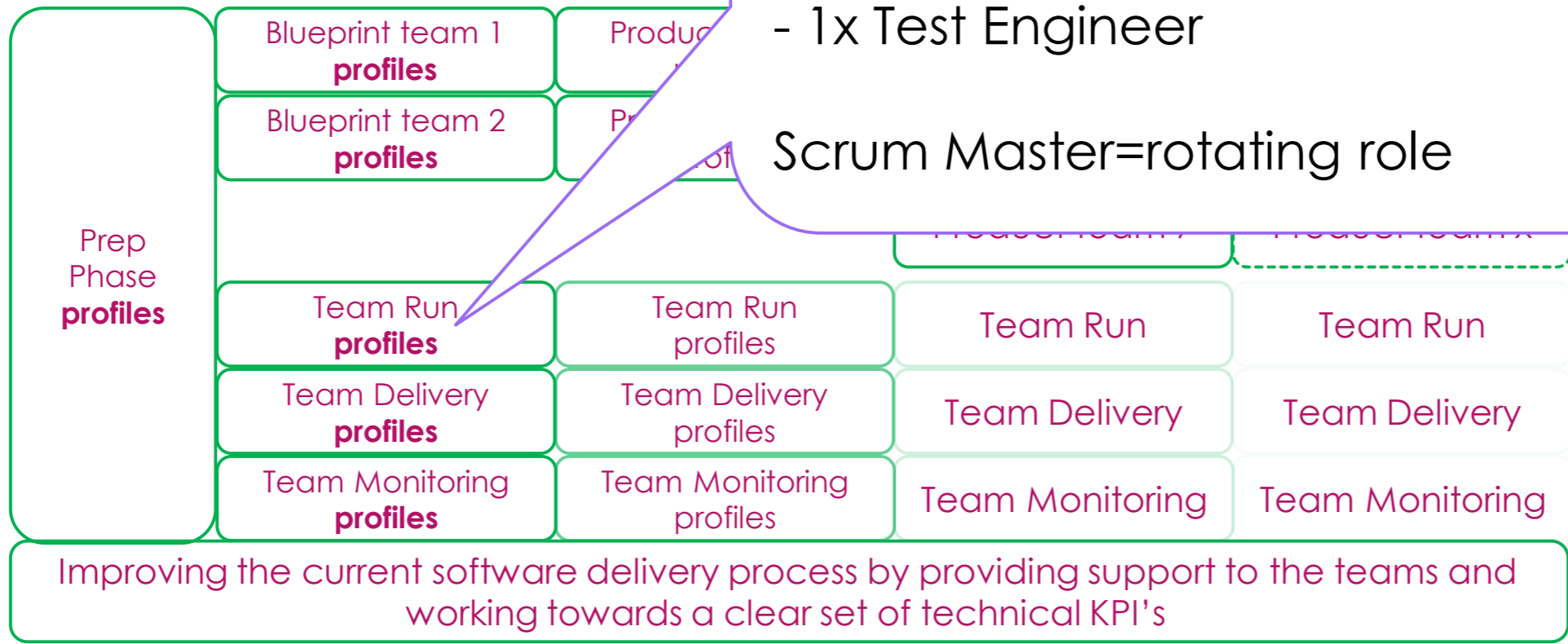
Current situation



(Example) Profiles (team Run)

- Product Owner
- 3x Ops Engineer "Ansibe"
- 2x Ops Engineer "Linux"
- 1x Ops Engineer "K8S"
- 1x Test Engineer

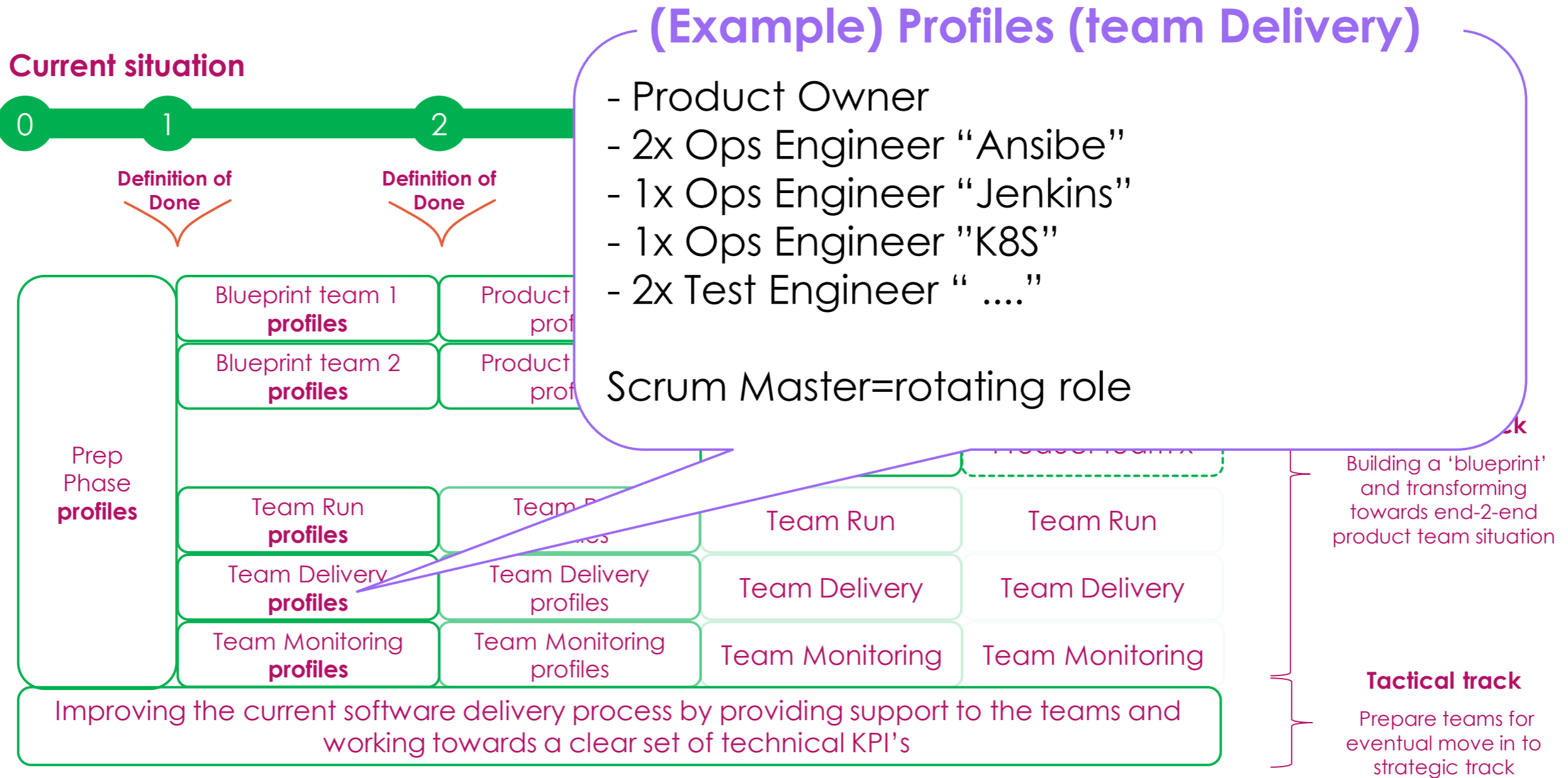
Scrum Master=rotating role



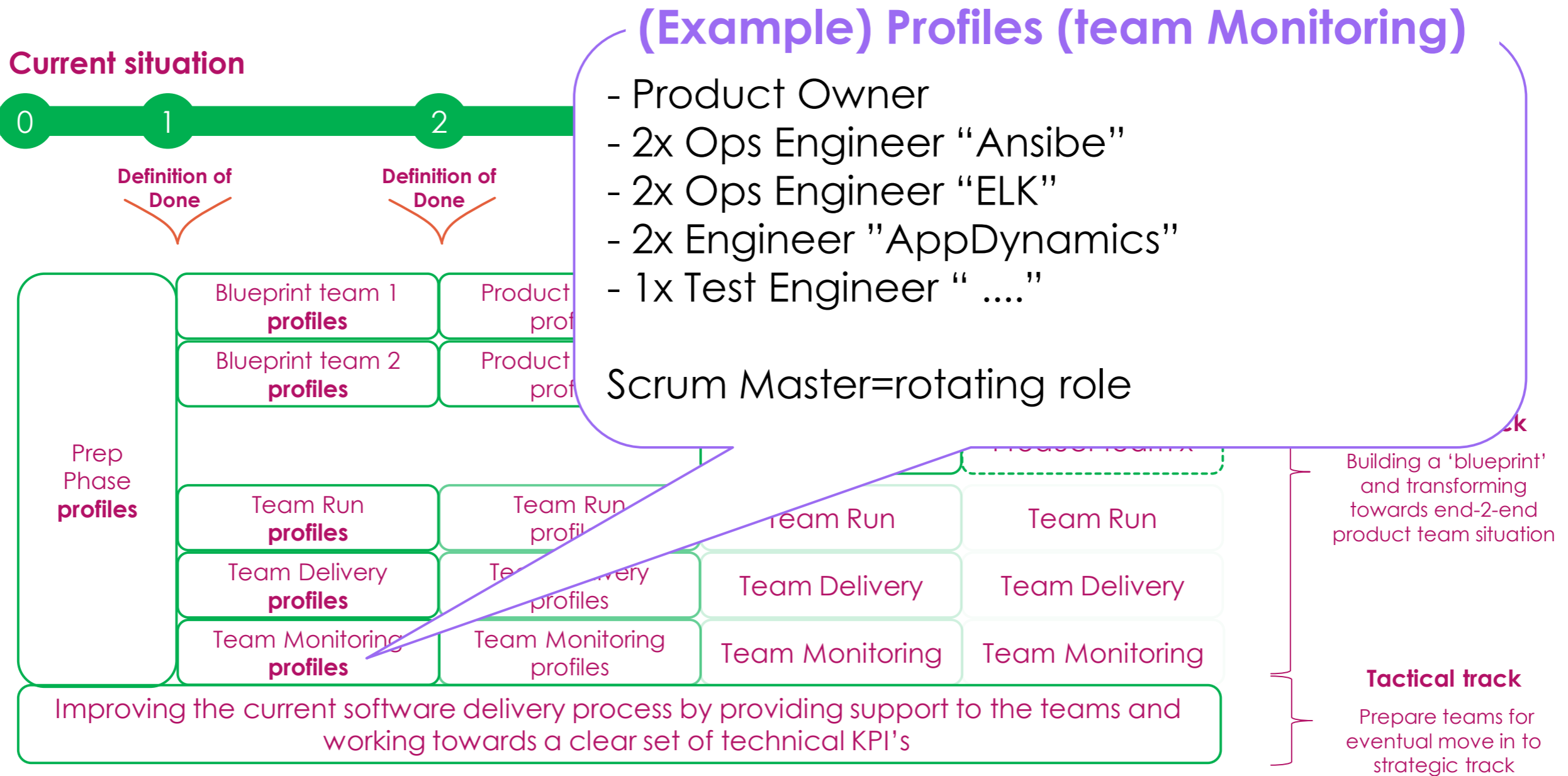
Building a 'blueprint' and transforming towards end-2-end product team situation

Tactical track
Prepare teams for eventual move in to strategic track

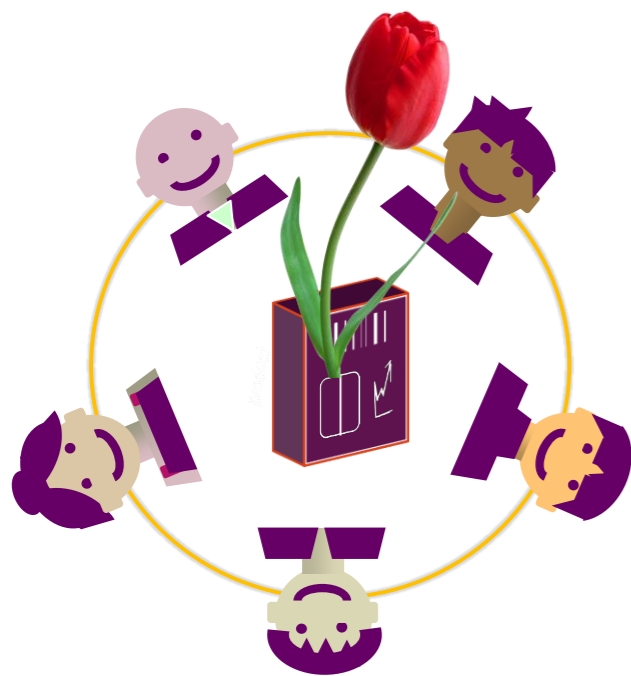
Team profiles



Team profiles



In the process, each product team aims to establish “the right” team dynamics



DASA Principle 1:
Customer-centric action (Courage to act, innovate)

DASA Principle 3:
End-to-End Responsibility
(Live your accountability, concept to grave, performance support)

DASA Principle 5:
Continuous Improvement (If it hurts do it more often, experiment fail fast)

DASA Principle 2:
Create with the end in mind
(Product & Service thinking, Engineering mindset, Collaborate)

DASA Principle 4:
Cross-functional autonomous teams (T-shaped profiles, complementary skills)

DASA Principle 6:
Automate everything you can
(Enhance quality, maximize flow)

Source, DASA. For more information on DASA: <https://www.devopsagileskills.org/>

Now what I like about the approach...



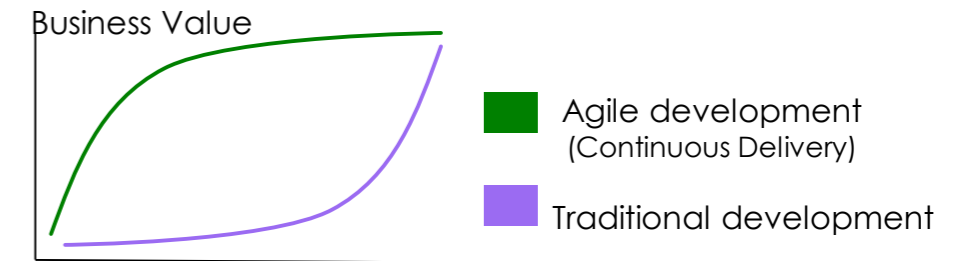
Approach from multiple angles

(process, culture, Organization, architecture, automation, measuring)



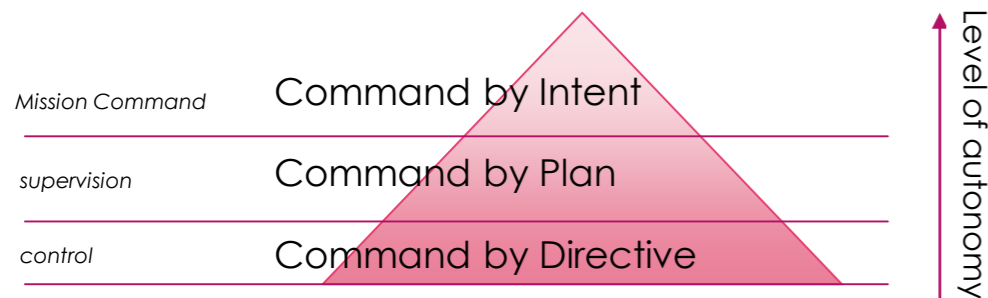
Low risk, by starting small

(allowing the organization to learn!)



Delivers value straight away

(by applying vertical slicing of initiatives)



Taking responsibility as of day 1

(mission command, decide where the information is, concentrate on the objectives instead of mechanics of how to achieve it)



Synchronicity helps collaboration

(takes a critical success factor like the alignment of requirements from business for defining a platform as a prerequisite)



Small enough to be treated as innovation

(can be started separately and be funded separately from day to day operational budget (BCG horizon 2/3)

And as always ... there are pitfalls as well !!



A lot to absorb for one team

(process, culture, Organization, architecture, automation, measuring)



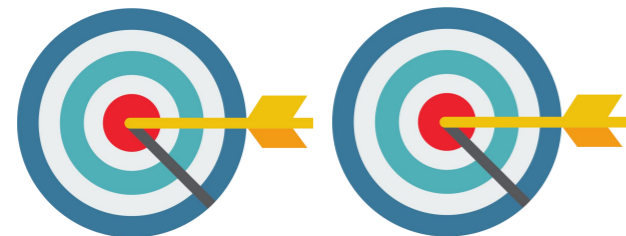
Uncertainty for teams not part of first batches

(teams not part of first batch might feel left out)



Initial teams might grow large

(as initially we need to work with I-profiles, not yet being T-Profiles)



Investment in team & process will slow down "regular" product development

(changing way of working, investing in process will slow down regular product development for team)



A certain level of seniority required

(As a starting point seniority in teams is required to induce and spark a new way of working)



Collaboration as of day 1

(blueprint teams 1 & 2 + Platform teams might not be used to working alongside one another)

A final thought

The aim for DevOps is about establishing a “**garden**” in which products can come and go at a healthy and controllable pace...

For this garden we need **technology**, but also the **people** and **attitude** that respects and treats the soil of this **garden** as a **first class citizen** as well.



Thank you!
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