



# Platform Engineering Day

## EUROPE



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# Product Thinking for Cloud Native Engineers

*Stéphane Di Cesare, DKB  
Cat Morris, Syntasso*

# A DevOps performance review...

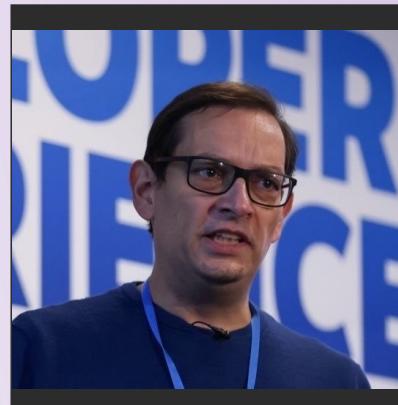


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# Speakers



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**Stéphane Di Cesare**  
Platform Experience  
*Deutsche Kreditbank*



**Cat Morris**  
Staff Product Manager  
*Syntasso*

# In this talk...



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- **The What and Why of Product Thinking for Engineers**
- **Identifying problems before solutions**
- **Choosing the right metrics**
- **Bringing Product Thinking to your role**

# IT: from cost center to business critical



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IT went from cost center to being critical to providing value  
– but it is often still treated as a cost centre

# Why is product thinking important?



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As engineers, we sometimes focus more on the solution than the user value...

## xlskubectl — a spreadsheet to control your Kubernetes cluster

xlskubectl integrates Google Spreadsheet with K

You can finally administer your cluster from the s

	A	B	C
1	Deployment	Desired	Actual
2	rss-site		2
3	nginx-deployment		1
4	busybox-deployment		1
5	learnk8s-fe	2	2
6	learnk8s-be		1
7	fluentd		1
8	prometheus	6	6
9	graphana		1
10			

## Frequently Asked Questions

### Q: What!?

A: The following quote best summarises this project:

They were so preoccupied with whether or not they could, they didn't stop to think if they should.

<https://github.com/learnk8s/xlskubectl>, Daniele Polencic  
(thanks to Boris Petersen for mentioning the project!)

# Why is product thinking important?



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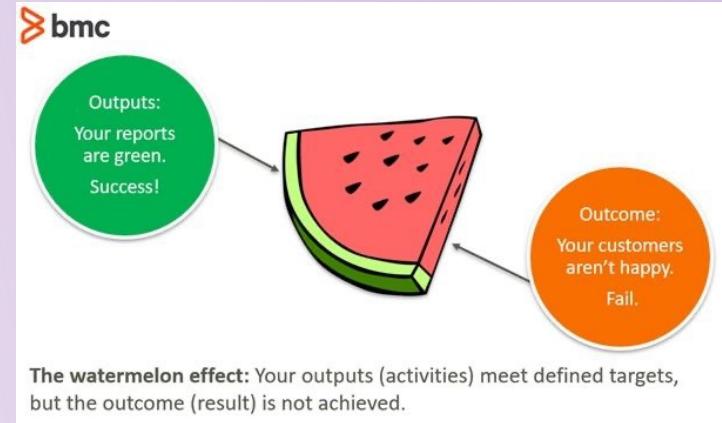
what is important:

**show the value** of your work

we need to focus on **outcome rather than output**

we need to focus on **visibility**

**operations** and **coordination** work (“glue”) is not easily visible



good read about “glue work”:  
Tanya Reilly, Being Glue  
<https://www.noidea.dog/glue>



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# Product thinking principles

focus on **user value**

## **user problems before solutions**

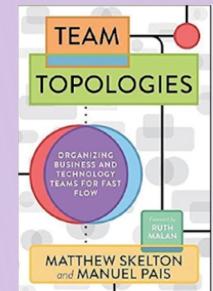
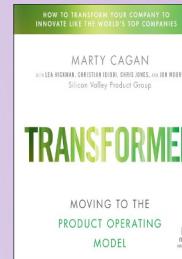
a team with a product mindset is tasked with problems to solve and decides how to solve them

## **outcome before output**

a team with a product mindset is accountable for the outcome, not the output

## **products before projects**

think about lifecycle and ownership



Marty Cagan – Empowered + Transformed  
Matthew Skelton & Manuel Pais – Team Topologies  
Melissa Perri – Escaping the Build Trap

# Platform engineering – User value



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who is the user for platform engineering?

- builders (external, internal)
- enablers
- regulatory
- “viewers”

value

- make the organization more efficient
- avoid risks

## recommended reading

<https://tag-app-delivery.cncf.io/blog/composable/#how-do-the-different-personas-view-a-platform>

<https://thenewstack.io/the-missing-piece-in-platform-engineering-recognizing-producers>

**Problems before solutions...**

**How many teams  
actually do this?**

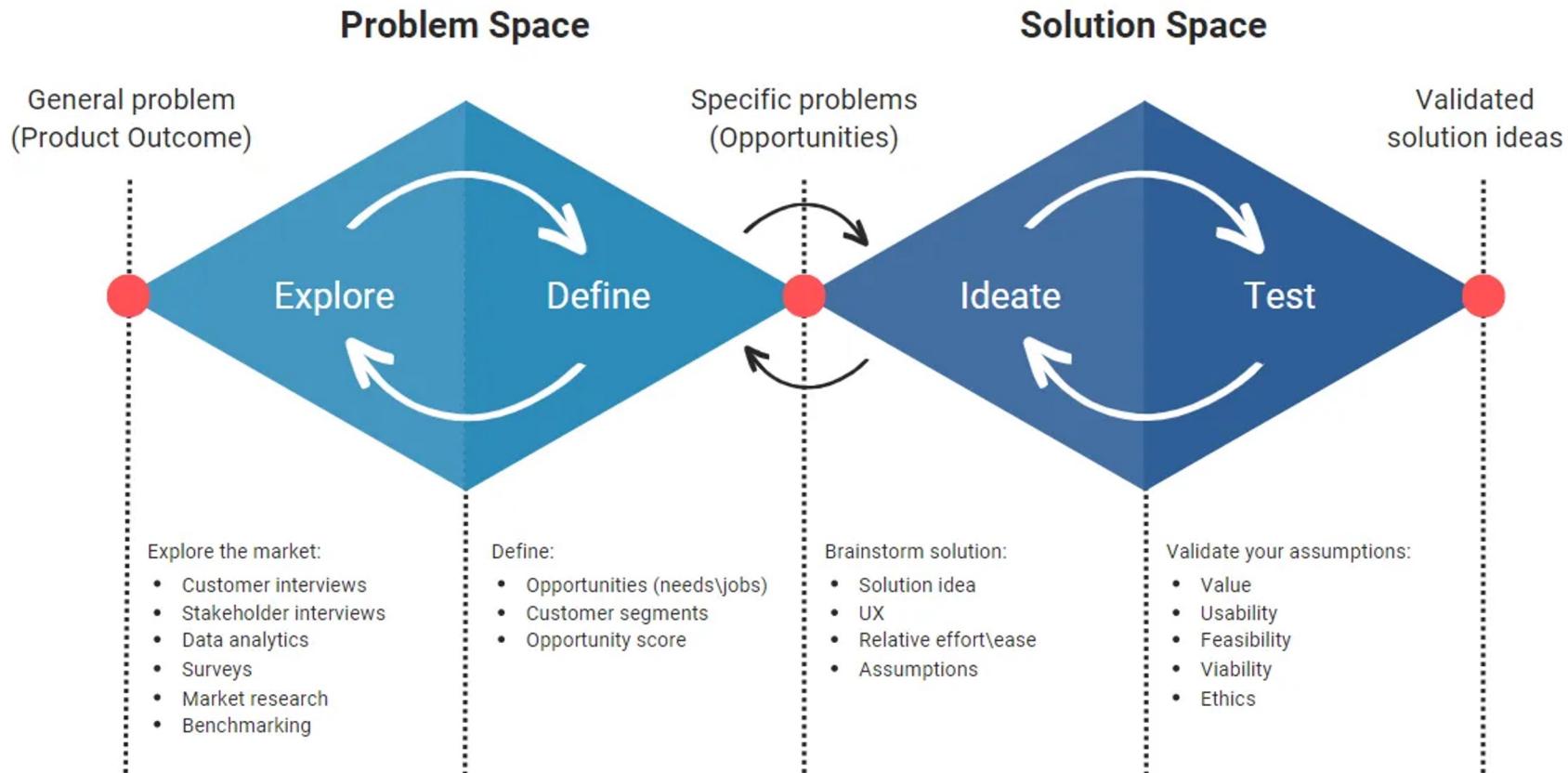
**Before thinking of solutions, you have two jobs:**

1. Find the **problem that is most important** to solve
2. Deeply **understand the problem** to figure out how to solve it

# Product Thinking techniques for Platform teams



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Source: Paweł Huryn @ [The Product Compass](#)

# Quick story break...





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# Exploring the Problem Space

## Goals

- Identify top customer pains
- Build customer empathy & understanding
- Investigate key business aims



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# Exploring the Problem Space

## Goals

- Identify top customer pains
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## Techniques

- Customer & stakeholder interviews
- Data/process analysis
- Shadowing

# ... back to my pipelines...



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# Defining the Problem Space

## Goals

- Identifying opportunities
- Prioritising specific problems to solve
- Gathering insights & data to inform the solution space



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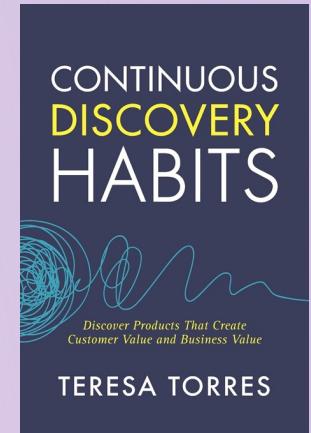
# Defining the Problem Space

## Goals

- Identifying opportunities
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## Techniques

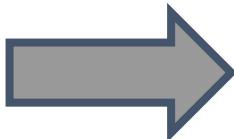
- Value stream mapping/Jobs-to-be-done modelling
- RICE/Value vs Effort/Opportunity solution tree
- Analysis on your “Exploring the problem space” work



# ...and once more, the pipelines...



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**Reduce  
engineering  
toil by 50%**

...and once more, the pipelines...



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# Reduce engineering toil by 50%



...and once more, the pipelines...



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# Reduce engineering toil by 50%





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**Exploring** the  
problem  
space



**Defining** the  
problem  
space



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# PRODUCT DISCOVERY



# Product metrics – why?



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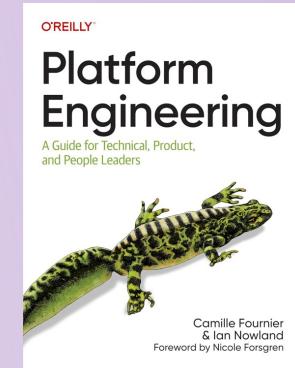
“if you don’t measure the value of your work –  
someone else will”

**Product metrics** help measuring **product outcome**

(not how much output is achieved)

the desired outcome should be clear first!

don't confuse product metrics with  
performance measurement



good section on platform product metrics in **Camille Fournier's Platform Engineering**  
(thanks to Daniel Bryant for the reference!)

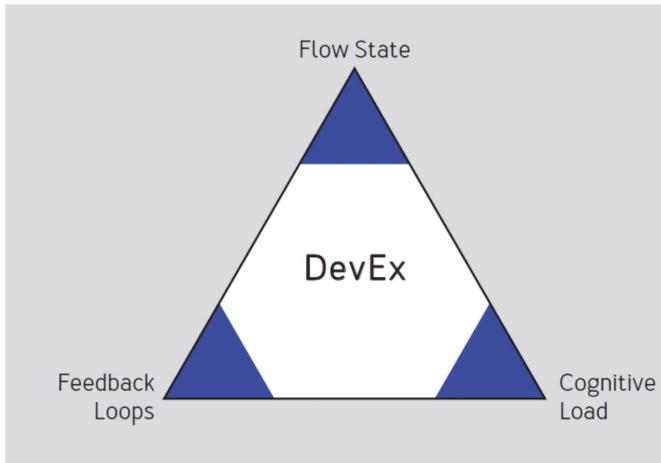
# Product metrics – the DevEx framework



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developer efficiency metrics are your platform **product metrics**

FIGURE 1: THREE CORE DIMENSIONS OF DEVELOPER EXPERIENCE



read more about the DevEx  
framework at  
<https://www.infoq.com/articles/devex-metrics-framework/>

# Product metrics – the DevEx framework



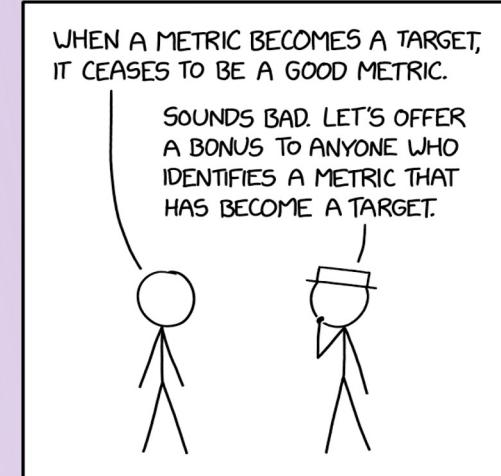
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Use product discovery to find out which metrics correspond to your users' pain points

Dimension	Perceptions	Workflows
<b>Feedback loops</b>	Build & test speed, time to deploy	Build times, review waits, deployment frequency
<b>Cognitive load</b>	Code complexity, debugging, docs clarity	Manual steps in deployment, response time for questions
<b>Flow state</b>	Focus, interruptions, task clarity	Meeting-free time, incident rate, unplanned tasks

WHEN A METRIC BECOMES A TARGET,  
IT CEASES TO BE A GOOD METRIC.

SOUNDS BAD. LET'S OFFER  
A BONUS TO ANYONE WHO  
IDENTIFIES A METRIC THAT  
HAS BECOME A TARGET.



<https://xkcd.wtf/2899/>

# Product metrics – other frameworks



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DORA

<https://dora.dev/guides/dora-metrics-four-keys/>

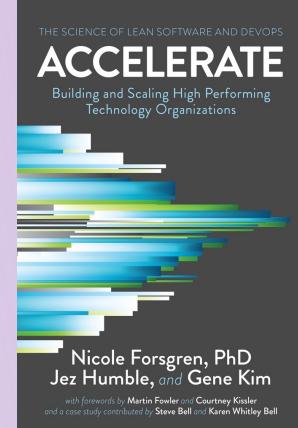
SPACE

<https://octopus.com/devops/metrics/space-framework/>

DX Core 4

<https://getdx.com/research/measuring-developer-productivity-with-the-dx-core-4/>

in-depth comparison of relevant metrics frameworks at Octopus Deploy: <https://octopus.com/devops/metrics/>



Panel about metrics on Thursday 16:45!  
**How do you measure developer productivity?**  
with Jennifer Riggins, Laura Tacho, Akshaya Aradhya and Cat Morris  
ICC Capital Hall | Room J



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# Metrics – also at engineer level

you can also use product metrics at the engineer level

which outcomes do **you** want to reach?

added benefit: helps when setting goals with your management

**But Stéphane and Cat, I'm a  
Cloud Native Engineer - not a  
Product Manager!**

**What can I do with Product  
Thinking?**

# Shadowing



# Ask Why



# Read the business updates



# Implement instrumentation



Product thinking for  
cloud native engineers  
in a nutshell...



Product thinking means:

Focusing on **user value**

Thinking **problem** before solution

Choosing **outcomes** over outputs

Considering the product **lifecycle**

**Explore** and **Define** problems to maximise user & business value

Measure **product metrics** to show results

Use product thinking to earn big bucks £££

Please give us feedback!



Thank you!  
Any questions?

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