



# Be water, my friend: Agile + DevOps

Leonardo Bittencourt

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# About me:

*Principal Lean/Agile Consultant at Ammeon Solutions*

*Professional Scrum Trainer Candidate*

*Kanban Management Professional*

*SAFe Program Consultant*

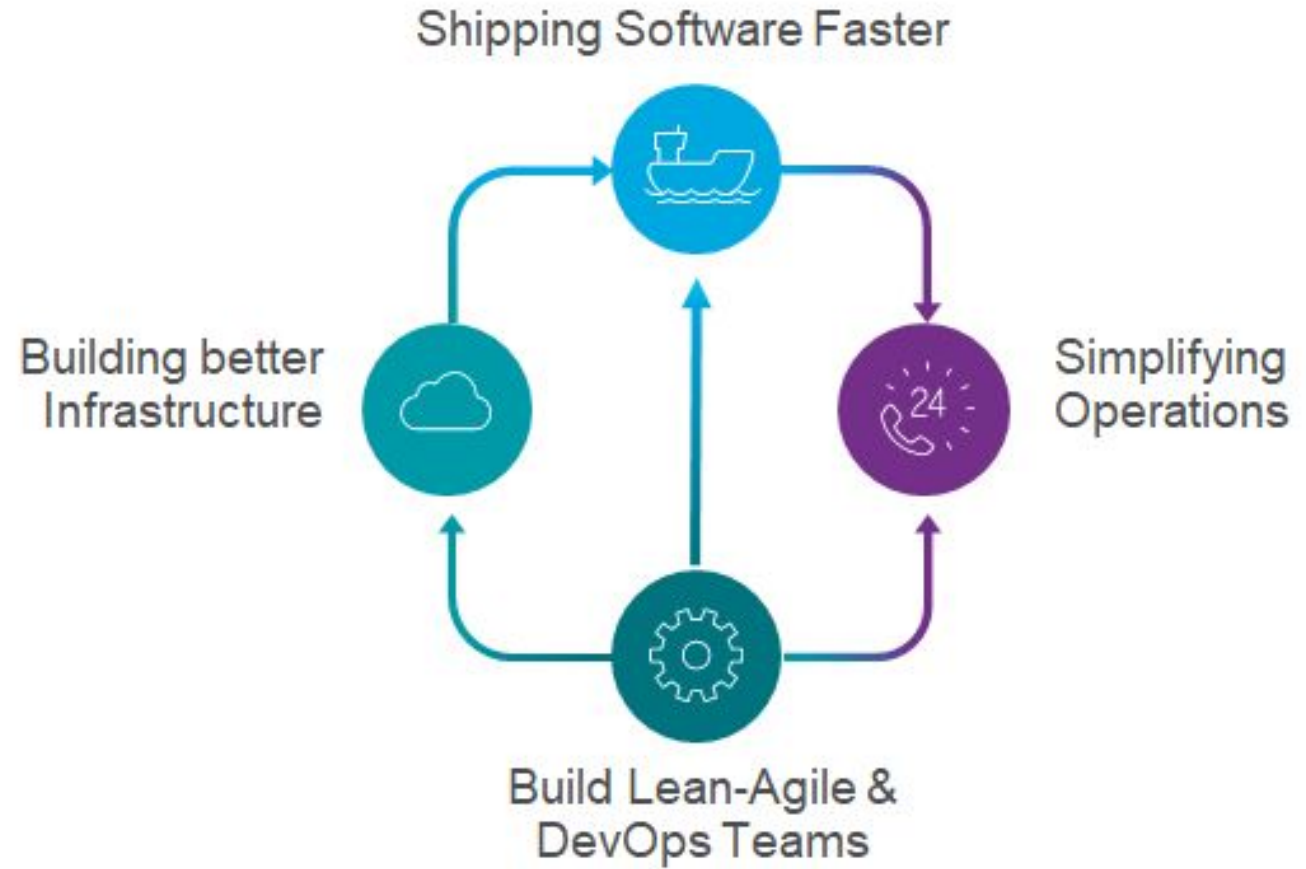
*Speaker at conferences and meetups*

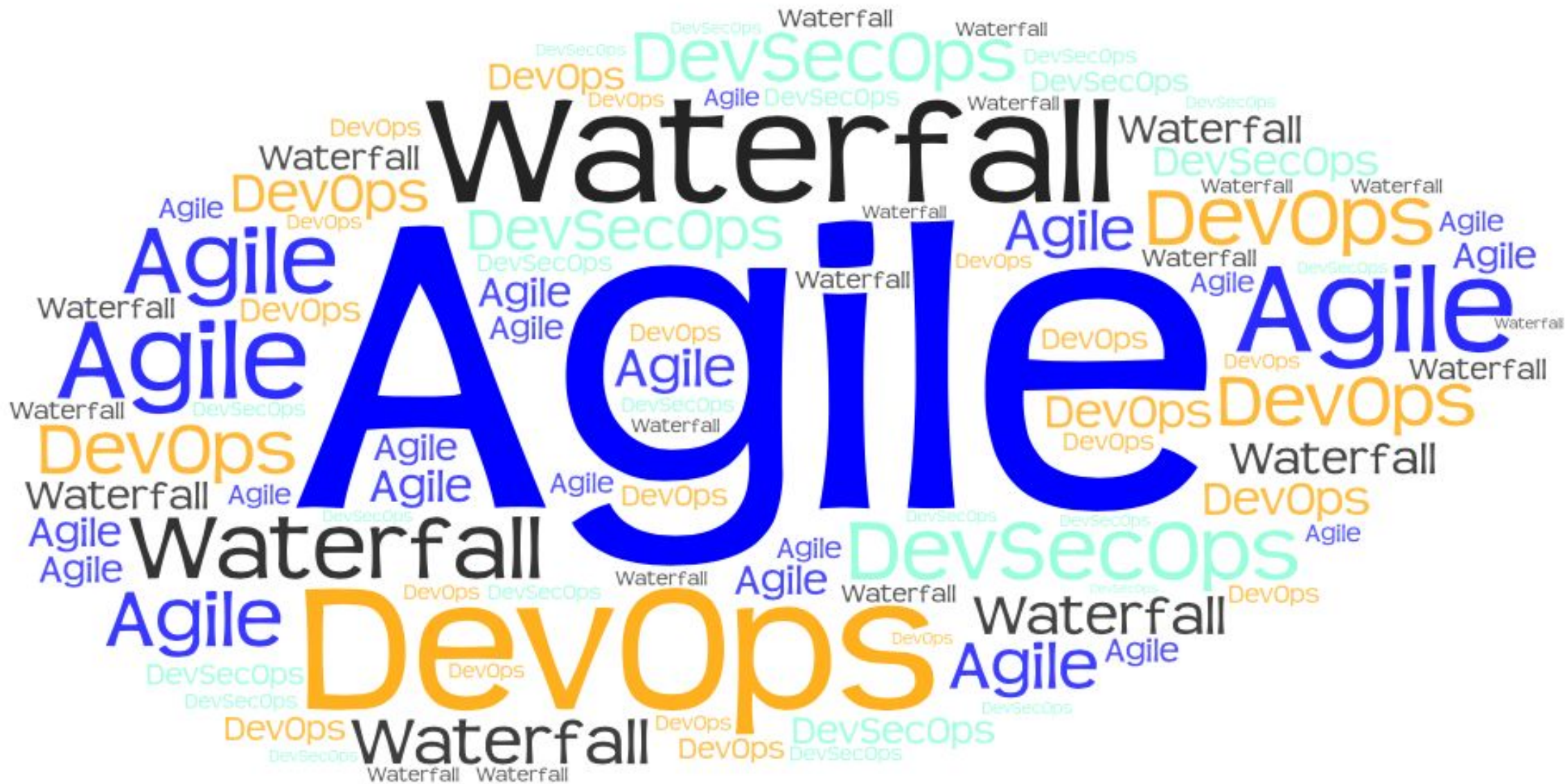
- *Agile Tours: London, Vilnius, Kaunas*
- *Agile Lean Ireland*
- *Conference Agile Spain*
- *PM Summit*

*Translated the book “Scrum - A Pocket Guide” to Portuguese*



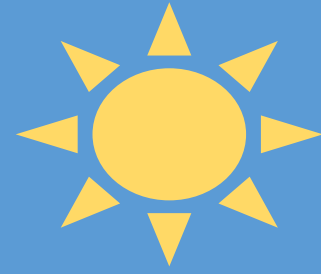
# About Ammeon Solutions:







Problems



Solutions



Upstream

Analysis

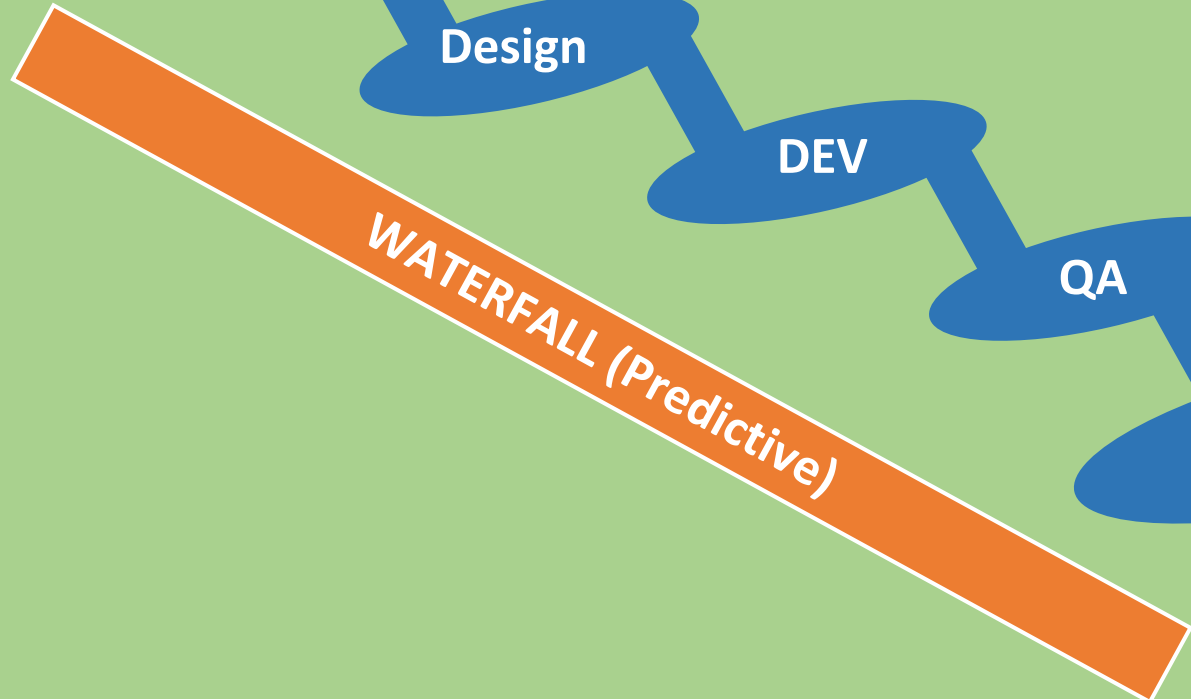
Design

DEV

QA

OPS

Downstream



WATERFALL (Predictive)

User

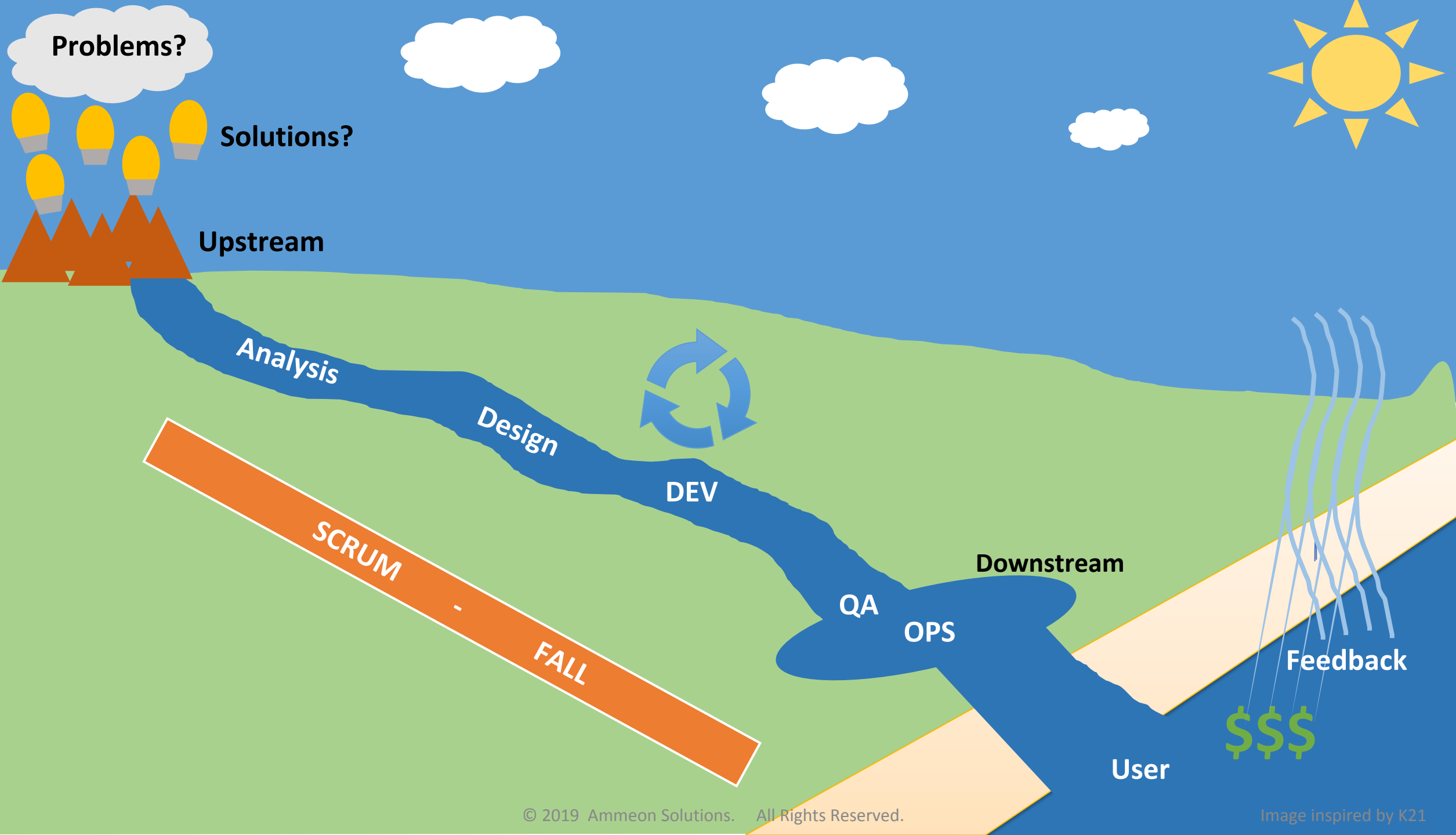
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## FEATURES USED



The Standish Group estimate of features used in custom applications.

*In complex environments like software development, we need to assume that we cannot not plan everything upfront*





# Dev x Ops



**Dev:**  
**Small and Frequent  
Releases !!!**



**Ops:**  
**Stable  
environments !!!**

**Business:**  
**We need both !!!**

Wall of Confusion

***DevOps is the practice of operations and development engineers participating together in the entire service lifecycle, from design through the development process to production support***

Source: <https://theagileadmin.com/what-is-devops/>

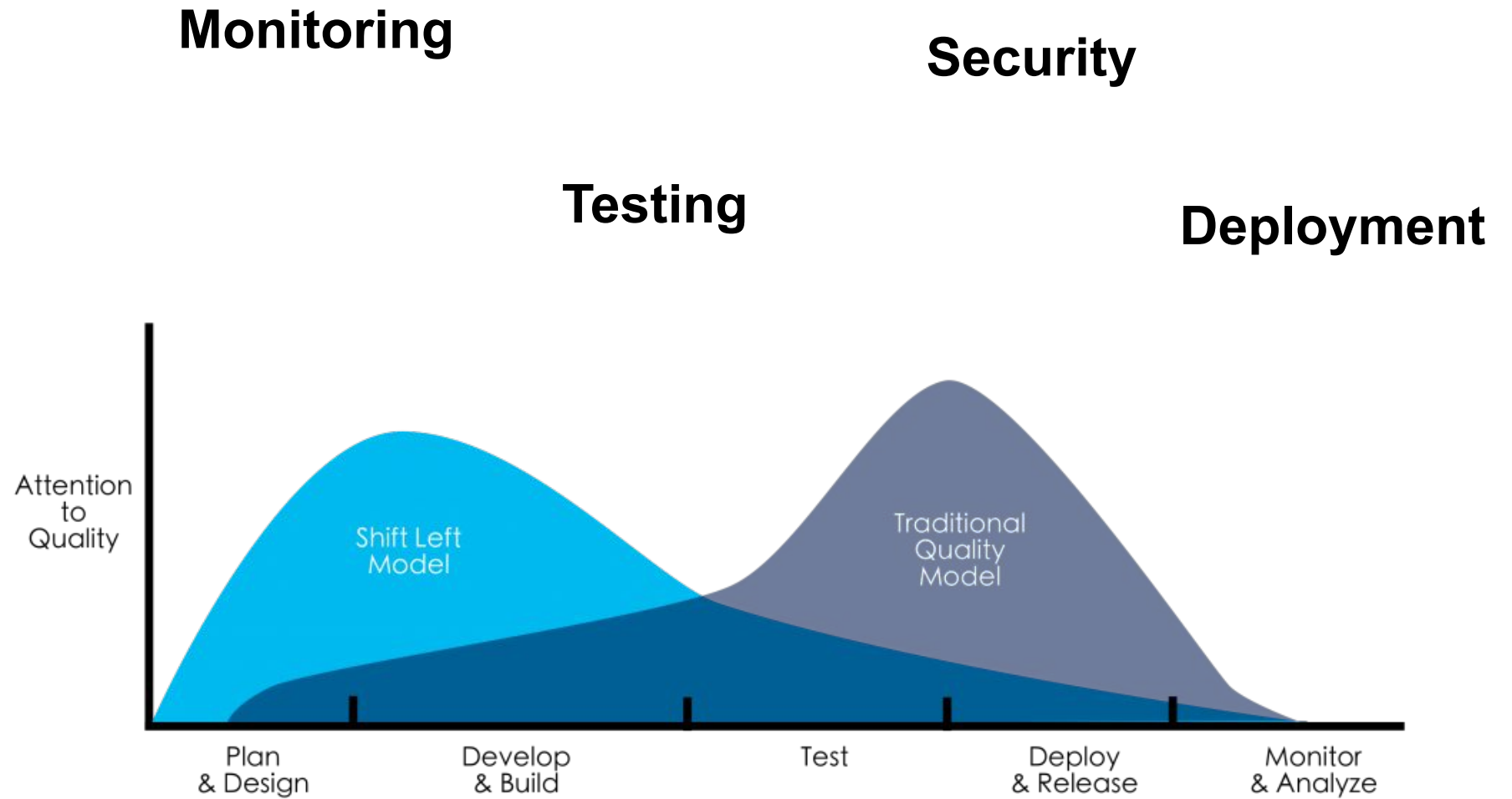


**ONE**

**WAY**



# Predictive X Shift Left

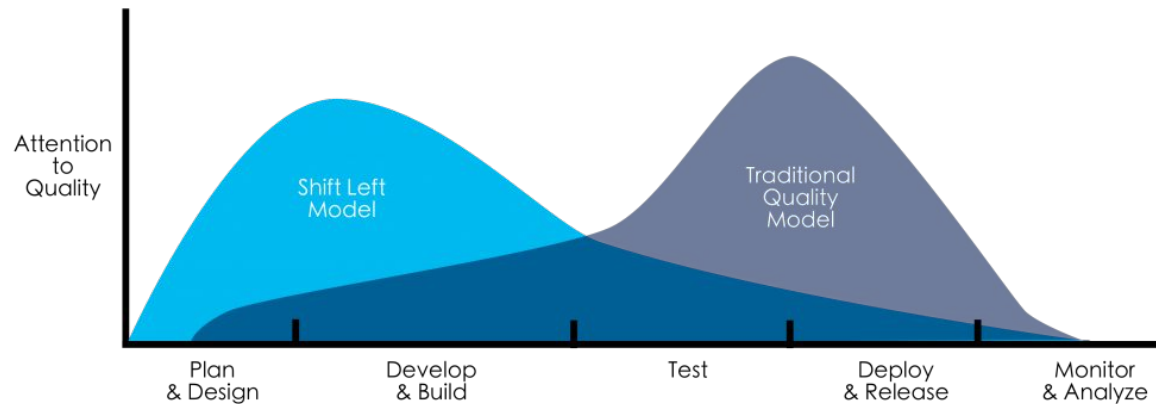
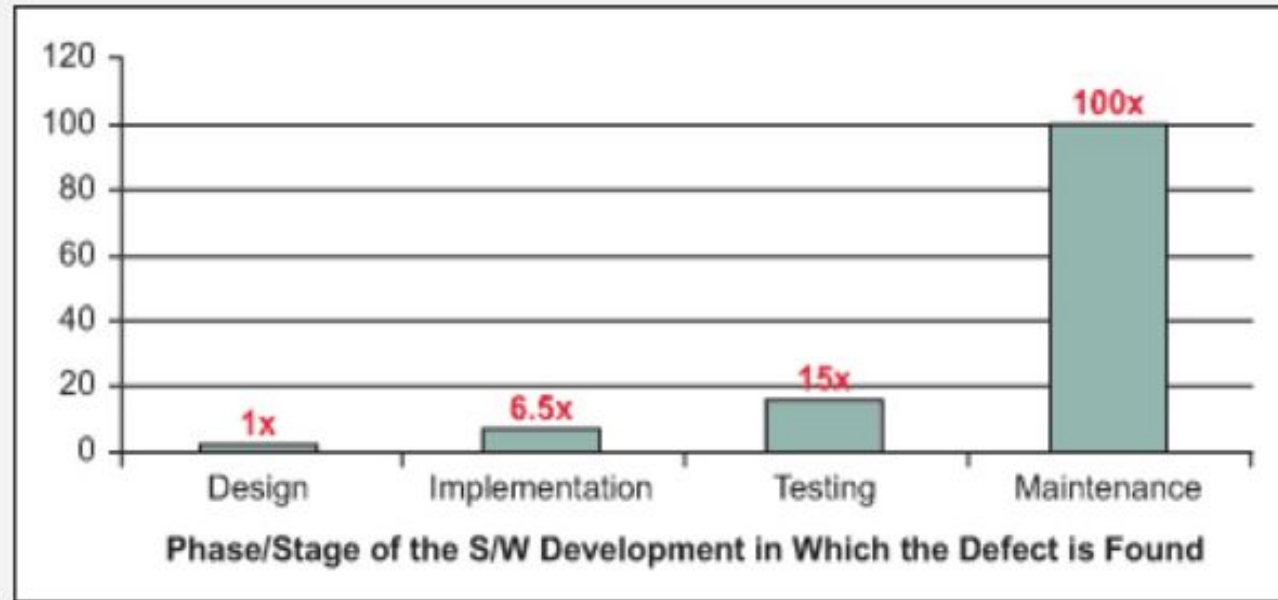


Source: <https://devopedia.org/shift-left>

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# Predictive X Shift Left

Figure 1: Relative Costs to Fix Software Defects (Source: IBM Systems Sciences Institute)



Source: <https://www.bmc.com/blogs/what-is-shift-left-shift-left-testing-explained/>  
<https://devopedia.org/shift-left>

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A photograph of five black, cylindrical silos with conical roofs, standing in a row in a vast, flat, golden-brown field under a clear, light blue sky. The silos are positioned in the middle ground, and the field extends to the horizon. The overall scene is serene and open.

**Break silos and exploit constraints to  
improve flow and outcomes**

**Build a delivery pipeline that leverages tools-as-services to enable Dev to commit, test, deploy to users as soon as possible**



**Containers**

**Continuous Integration**

**Virtualisation**

**A/B Testing**

**Automated Testing**

**Vulnerability Scan**

**Continuous Deployment**

**Continuous Delivery**

**Blue/Green Deployment**





# Questions to be asked

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- Accelerate time to market?
- Ability to build the right product?
- Improve productivity and efficiency (and effectiveness)?
- Reliable releases?
- Improve product quality?
- Improve customer satisfaction?

***30x more frequent code deployments***  
***200x faster lead time from commit to deploy***  
***168x faster mean time to restore service***  
***60x higher success on production deployments***

Source: State of DevOps Report (2013 - 2016)



***46x more frequent code deployments***  
***440x faster lead time from commit to deploy***  
***170x faster mean time to recover from downtimes***  
***1/5 as likely for a change to fail***

**Source:** Accelerate – The Science of Lean Software and DevOps (2017)



*Agile without DevOps is flaccid*

*Technical excellence is vital for quick feedback,  
understanding our customers and optimising  
business outcomes*



Hypothesis

Solutions?

Upstream

DevOps

DevOps

DevOps

DevOps

Downstream

User

Feedback

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BUSINESS AGILITY

CUSTOMER LEAD TIME



# Final Notes

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- DevOps is not a role.
- Culture of collaboration.
- Shift left.
- Improve flow focusing on business outcomes.
- Shorten feedback cycles.
- Continuous learning & improvement.

# Ammeon Solutions and Red Hat

- ✓ For the second year running, Red Hat have awarded us with premier business partner status
- ✓ Ammeon Solutions have been working with Red Hat customers in the Banking, Finance, Insurance and Telecommunications sectors
- ✓ DevOps engineers from Ammeon Solutions' Cloud and Agile IT team work as Red Hat Consultants, with the following technologies:



Hypothesis

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Upstream



Downstream

Feedback

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User

**Be water,  
my friend!!!**

**Agile +  
DevOps**



# Thank you!

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