

## Working on DevSecOps Culture A team centric view

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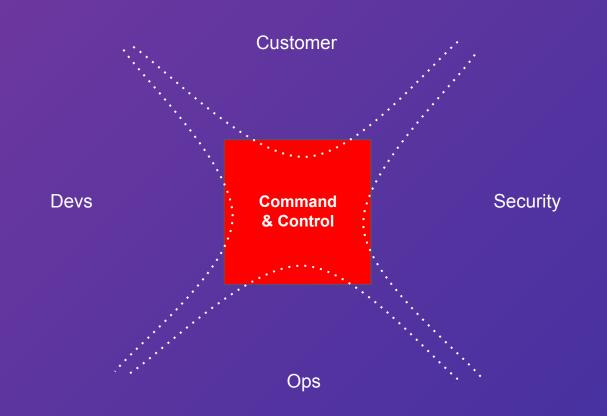
## **Tools & Culture**



## Patrick Debois - #thinktogether

Dev(sec)Ops: everything you do to overcome the friction created by silos ... All the rest is plain engineering

## **Dev(Sec)Ops Friction Points**



#### **Know your pains**

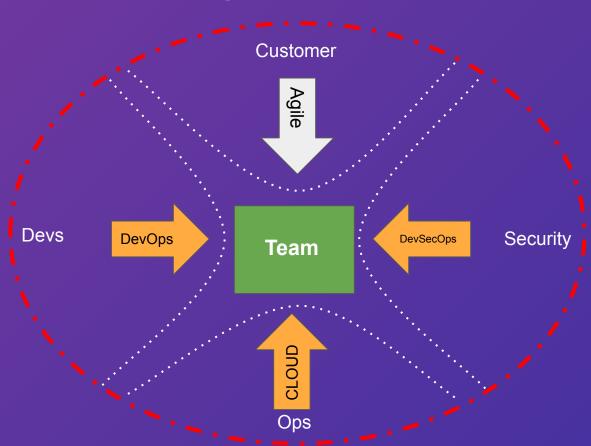
Understand the **bottlenecks** introduced by **Silos** you need to overcome.

## **Technical** *stack, environment, tools*

**Management**prioritisation, budget , authority,
hiring , incentives

## **Personal** *education, knowledge, motivation*

## Pressure / Shifts



#### **Forces At Work**

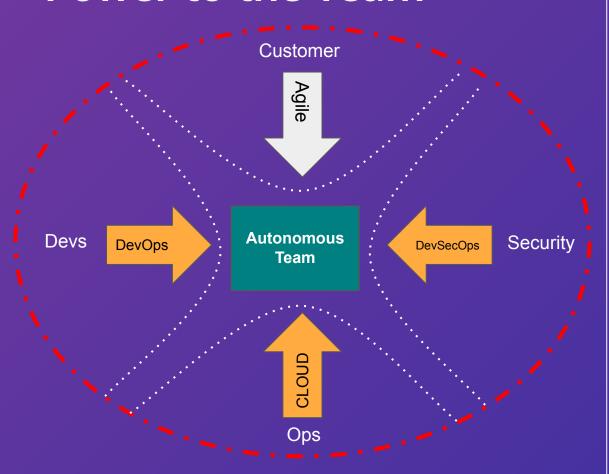
Different forces at work will cause movement.

Shift Down - **Agile**Shift Right - **DevOps**Shift Left - **DevSecOps**Shift Up - **Cloud** 



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

## Power to the Team



#### Focus on team

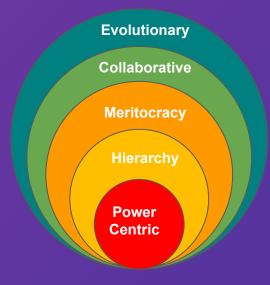
Empower the people doing the work to make the right decisions. **Delegation of authority** does not happen magically overnight.

Management becomes supportive vs control.



https://davidmarquet.com/books/

## **Company Collaboration Culture**



Autonomy - Meaning

**Empower - Customer Centric** 

Measure - Scientific & KPIs

Automation - Order & Stability

**Command & Control** 

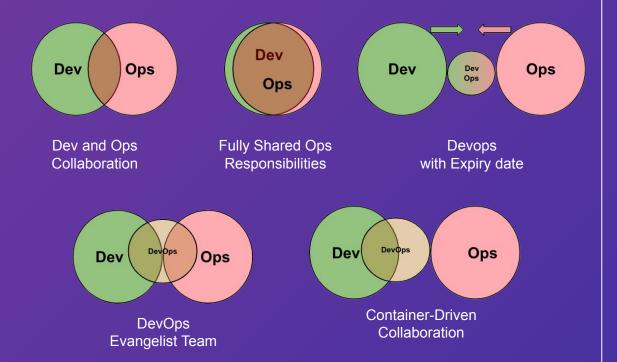
#### Your CEO will set the tone

Organization have different cultures. Depending on your context you will focus more on automation, metrics, empowerment or command and control. You need to work on ALL layers to embed it in the organization.



https://www.reinventingorganizations.com/

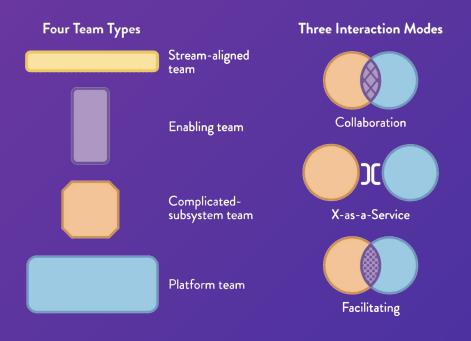
## **Dev(Sec)Ops Team Patterns**



#### How will security interact?

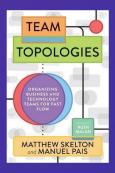
Different topologies exist, some are more efficient than others but it depends on your organization's culture.

## **Team Interaction Modes**

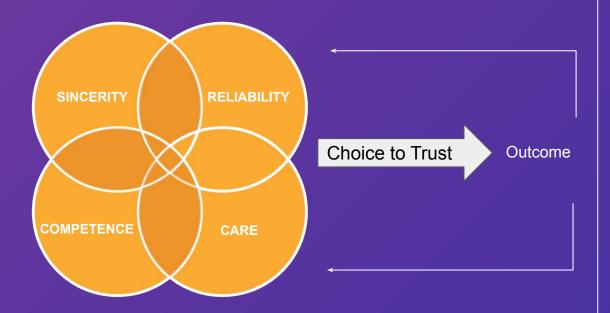


## How will your security team collaborate?

Interaction will happen through automation, abstraction **AND collaboration** 



## **Building & Gaining Trust**



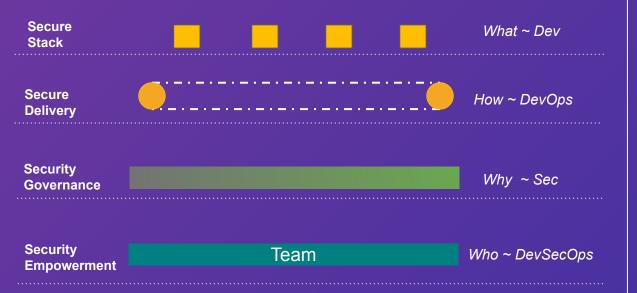
#### Trust is a Choice

Trust is **Bi-Directional** 

Asking for Trust vs being **Trustworthy** 



## 4 DevSecOps Areas



#### Areas influence each other

Is **what** we are delivering secure? Is **how** we are delivering it secure? Do we understand **why** we are securing it?

Do we trust **who** is delivering it?

## **Secure Stack**

As a developer we want to make sure that the application is secure and can be operated securely.





Development "Features"

Security Frameworks Operational Frameworks

**Business** 

https://www.manning.com/books/secure-by-design

## Secure Delivery

As a developer we want to make sure we can build, deliver & operate the service in a secure way

Secure Code

Secure Code Environment

Secure Toolchain

Secure Repositories

Secure Build Environment

**Secure Testing** 

Secure Artifacts

Secure Deployment

Secure Inventory
Asset Mgmt

Secure Logging & Monitoring

**Security Controls** 

Secure Execution Debugging

Secure Patch Mgmt

**Development** 

CI/Test

**Production** 

**Operations** 



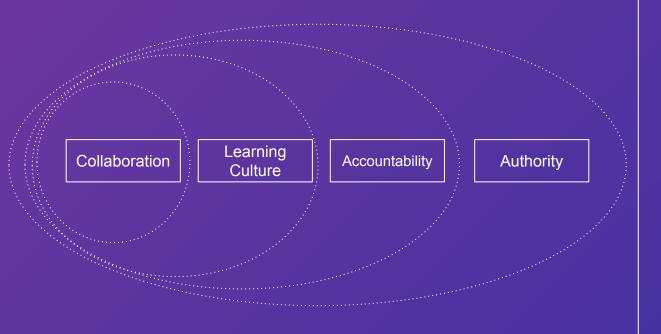
## **Secure Governance**

Security Service Level Management Vulnerability Management Compliance & Legal Security Incident Management Requirements **Threat Management** Security Continuity **Backlog Prioritisation** Risk Management **Supplier Management** 

As a developer we want to participate in the processes for managing security better



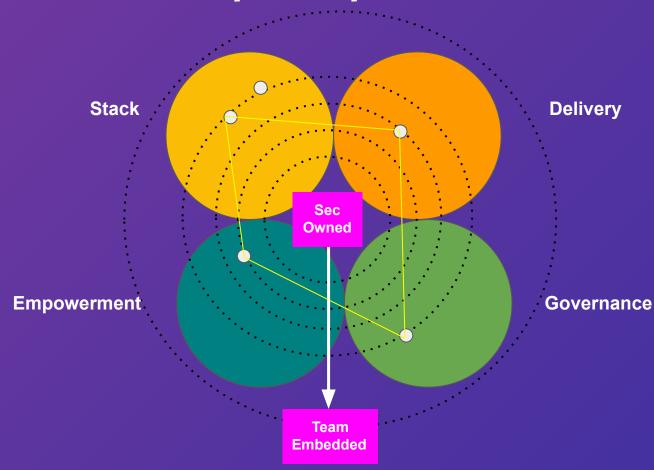
## Secure Empowerment



As a developer we want to take ownership of the security of our application



## DevSecOps Inspiration

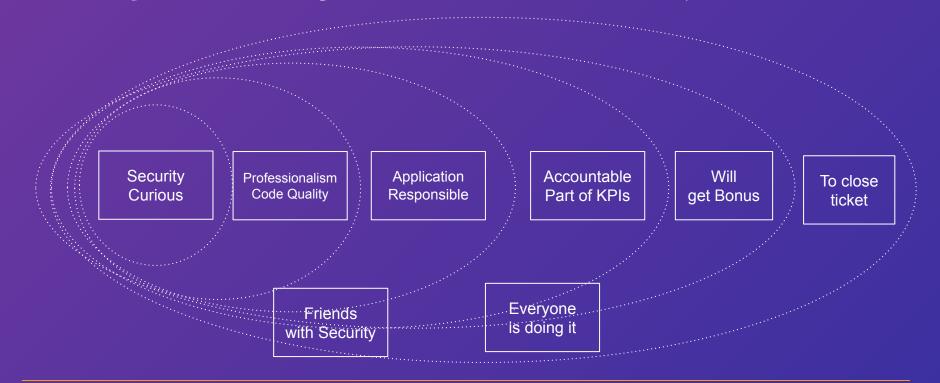


Level up each of the aspects gradually - they all influence the progress of the ownership handover

## **Developer Security Motivation**

#### Inspiration is not enough

"It's good for business is rarely a personal motivation"

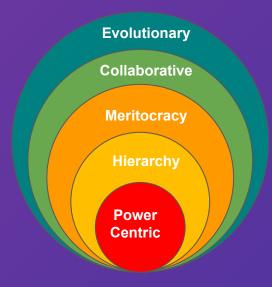


I want to (broad interest)

They want different things

I have to (narrow interest)

## **Paradoxes**



Autonomy - Meaning

Empower - Customer Centric

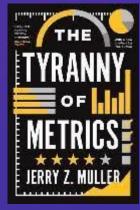
Measure - Scientific & KPIs

Automation - Order & Stability

Command & Control

#### You are never done

Each of these improvements will be countered by a paradox. You will need to keep investing.



https://www.amazon.com/Tyranny-Metrics -Jerry-Z-Muller/dp/0691174954

## **Tools & Culture**



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# Love to hear your feedback! patrick.debois@snyk.io @patrickdebois

#ThinkingTogether