




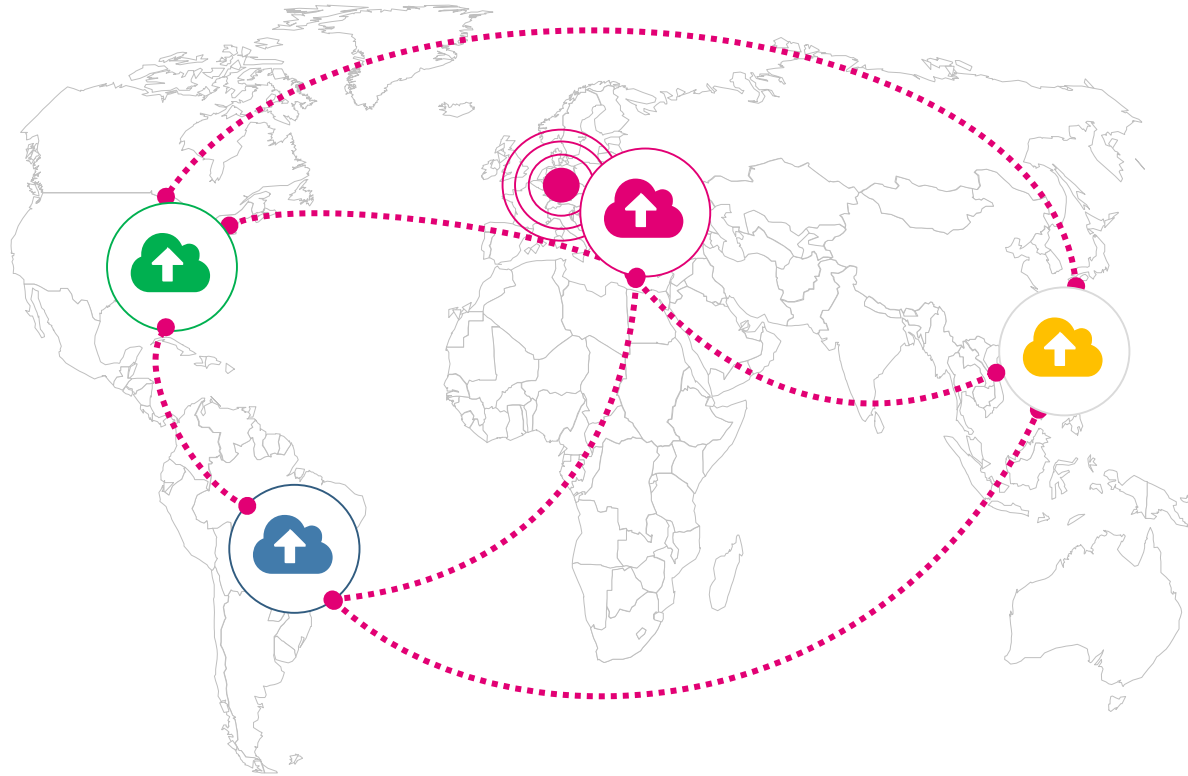
AppAgile from Deutsche Telekom  
Managed Cloud Services on Openshift

T - Systems



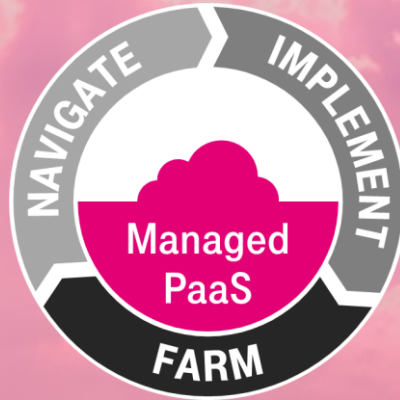
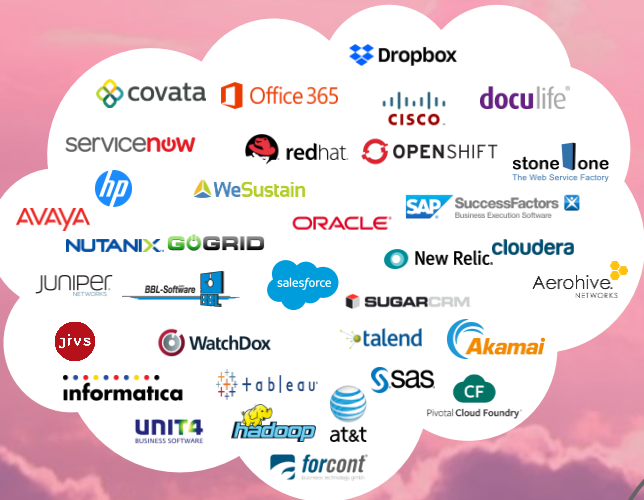
<http://AppAgile.io>  
 @appagile

# Deutsche Telekom



- German Telco – >90 bn\$ Rev 2017, 217K employees across globe
- T-Systems – IT Service Provider of Deutsche Telekom
- Peer of T-Mobile US
- The **MAGENTA** Company

# APPAGILE MANAGED CLOUD IN A NUTSHELL



- MANAGED CLOUD SERVICES
- SECURITY APPROVED OPERATION
- OPENSIFT FOR ENTERPRISES



# Microservices for Automotive

## Time-2-Market for Smart car Services



Global Platform  
to develop new  
services/applikations  
- Managed by AppAgile



Flexibility for approx.  
2.000 developers –  
globally distributed



## Microservices for Logistics

Efficient And Flexibel  
Optimize daily business



Massive daily  
Volatility



Delopment of mobile  
App to track delivery

# That's us:

Stefan  
Head of Global Sales & Marketing



Jeremiah  
Director of Sales Americas



- That's me
- The German Guy
- I know how it works in Europe

- That's Jeremiah
- The US Guy
- He knows how it works in Amerika

# What's the difference?

	<ul style="list-style-type: none"> <li>24 x 7 attended operations – End2End</li> <li>Managed Services – FULL Stack</li> <li>Security certifications (like GDPR)</li> <li>DevOps / ITIL Based Ops</li> <li>Binding SLA's</li> <li>Long term lifecycle</li> </ul>	<ul style="list-style-type: none"> <li>Pre-Build and battletested</li> <li>Ready to start</li> <li>Multi-Cloud (Privat+Public, onPremise)</li> <li>Enterprise-Grade processes</li> <li>Monitoring, Backup, etc. – All In!</li> <li>LOB User Experience</li> </ul>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Managed Service</p>
	<ul style="list-style-type: none"> <li>SDN, CNS, SDS, RBAC</li> <li>Persistent Storage</li> <li>Monitoring, Telemetry</li> <li>Capacity Management</li> <li>Router</li> <li>Multi-Tenancy</li> </ul>	<ul style="list-style-type: none"> <li>Registry</li> <li>Auto-Deployments</li> <li>CI/CD Toolchain</li> <li>AB Testing</li> <li>Stateful Sets</li> <li>Dev User Experience</li> </ul>	
	<ul style="list-style-type: none"> <li>Container scheduling</li> <li>Self healing</li> <li>Scaling</li> </ul>	<ul style="list-style-type: none"> <li>Service Discovery</li> <li>Rolling Deployments</li> </ul>	
	<ul style="list-style-type: none"> <li>Capacity across the globe</li> <li>Plenty functions</li> <li>Best price</li> </ul>	<ul style="list-style-type: none"> <li>Partner Ecosystem</li> <li>IaaS</li> <li>VM's and Containers</li> </ul>	

# Typical Challenges

My Corporate IT process is too slow

Need to go live in 2 month

Damn – I forgot security-approval

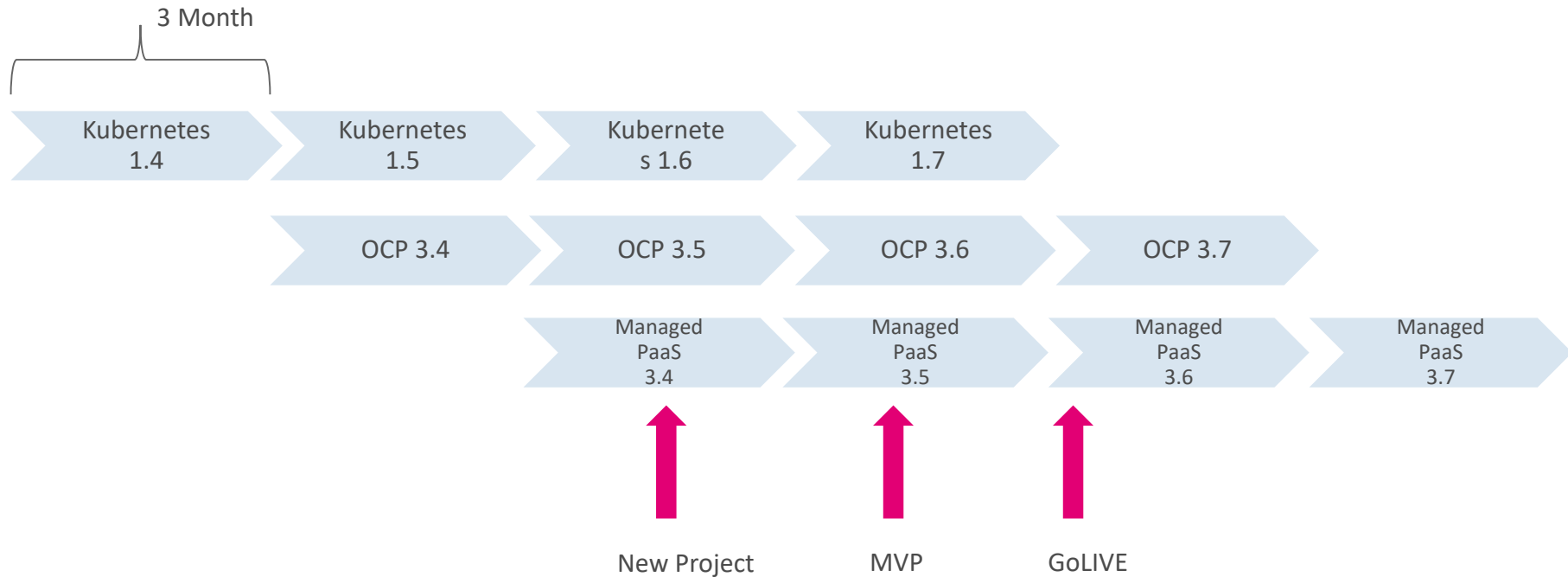
How can I actually scale this....

Dont have expertise in platform

Installing OCP is easy, but ...

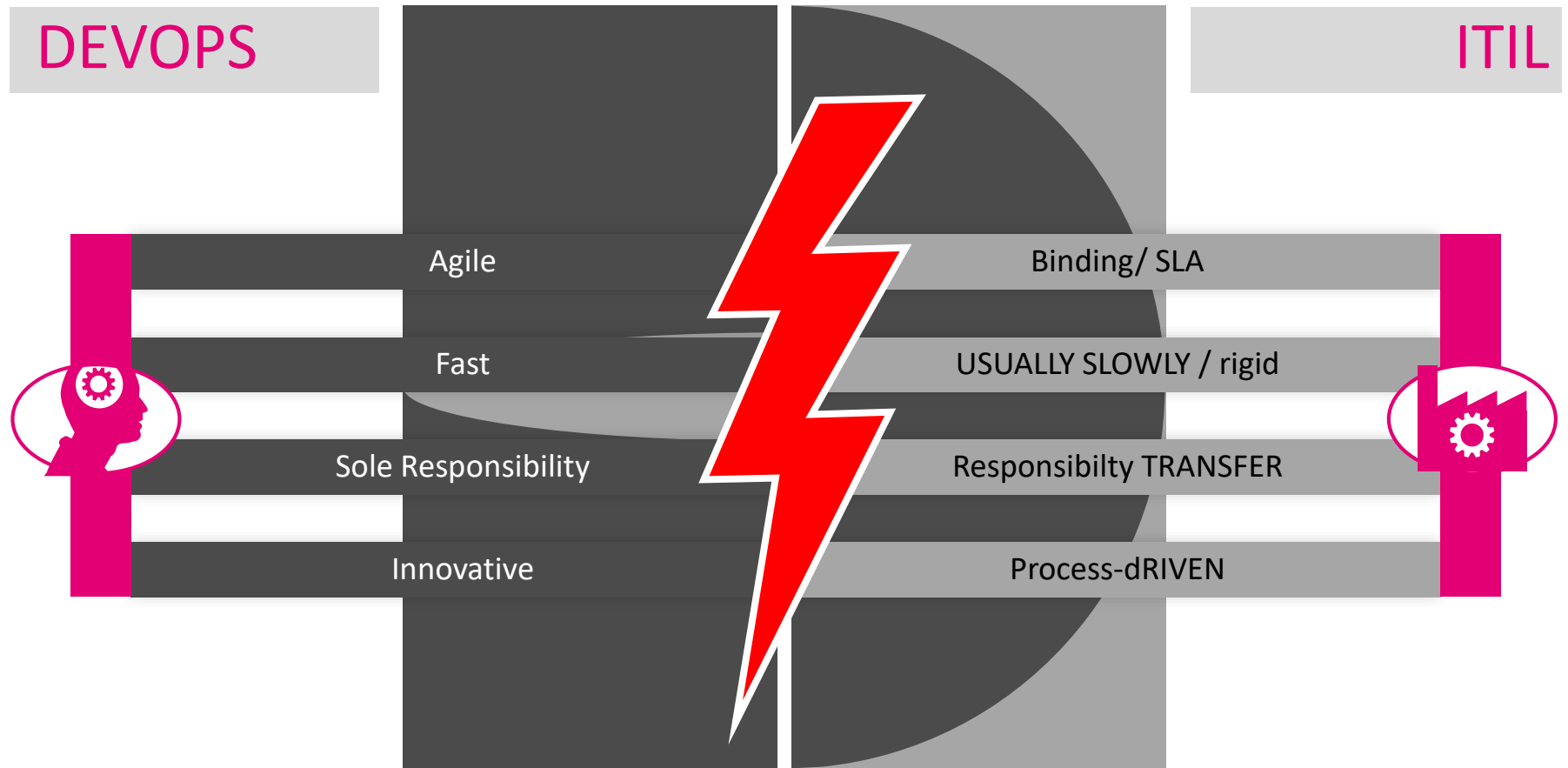
My staff is not working 24x7

# UpgradE cycles



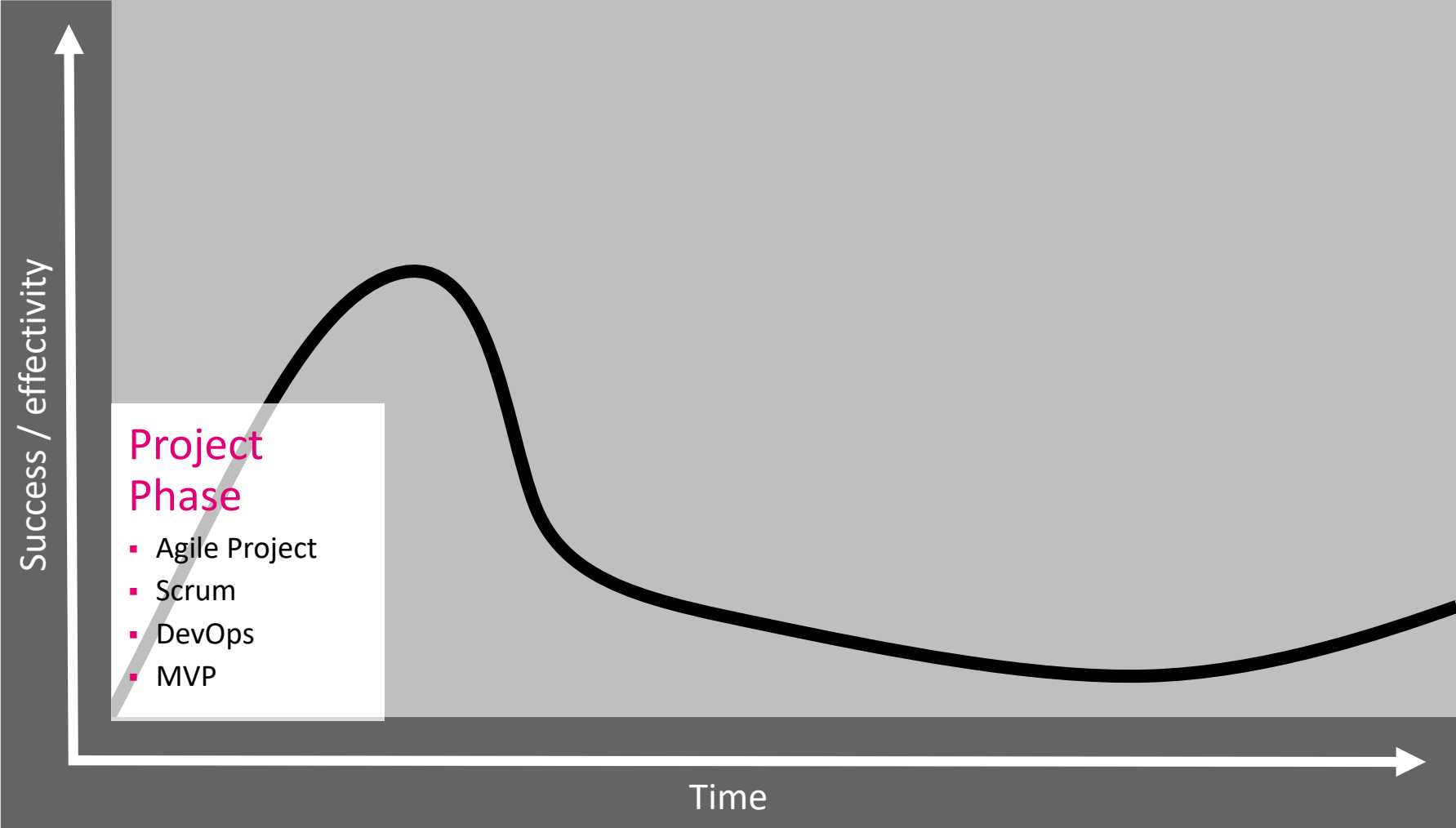
- Project can easily cross several versions
- Each version needs security approval
- Each version adds services/processes
- Each version needs developer/engineer attention – taken away from project
- That's hard to deal with for Enterprises

# DevOps vs. ITIL – Squaring THE CIRCLE

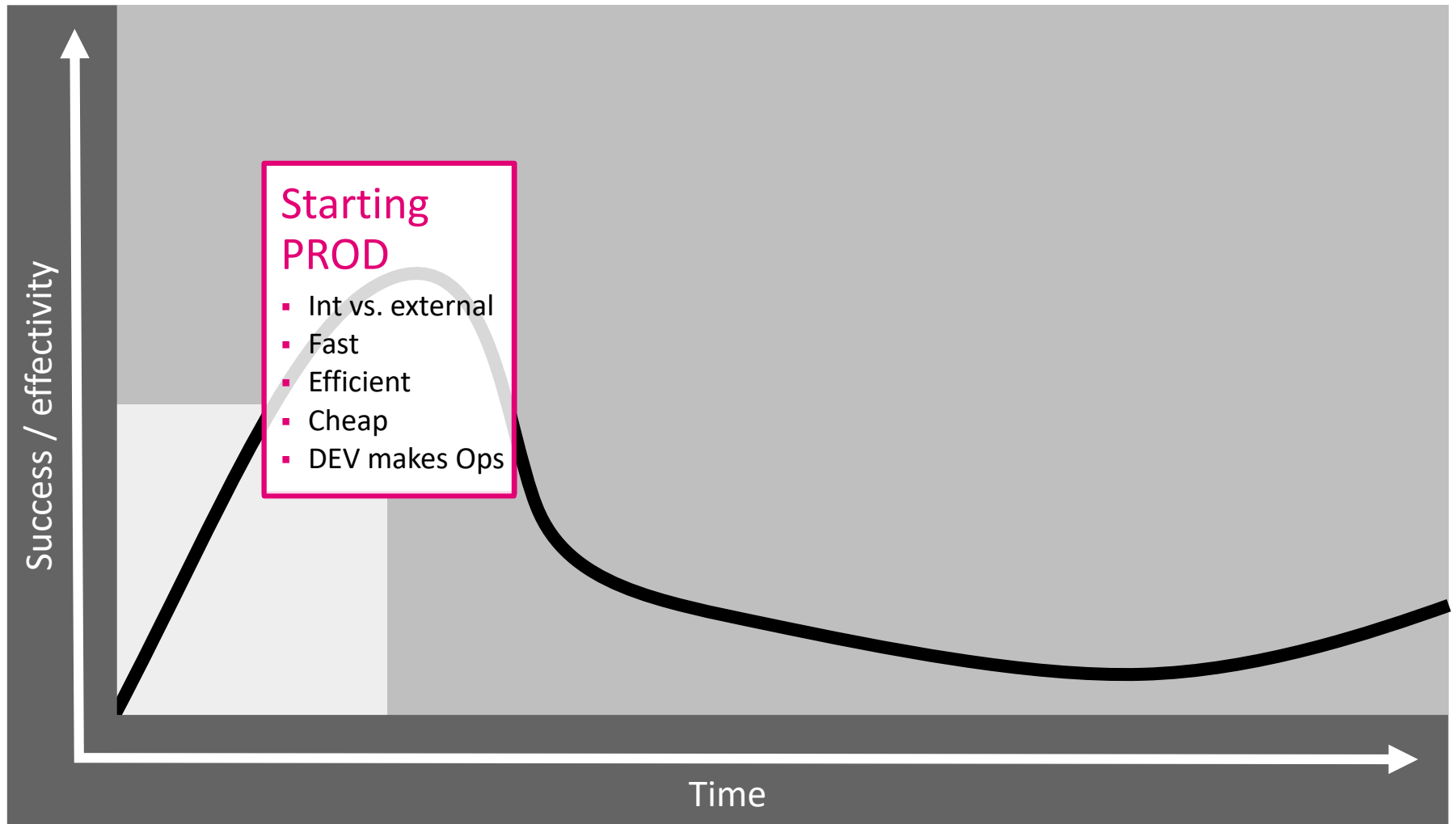


Actually THE CUSTOMER WANTS Both – Must He MAKE A DECISION?

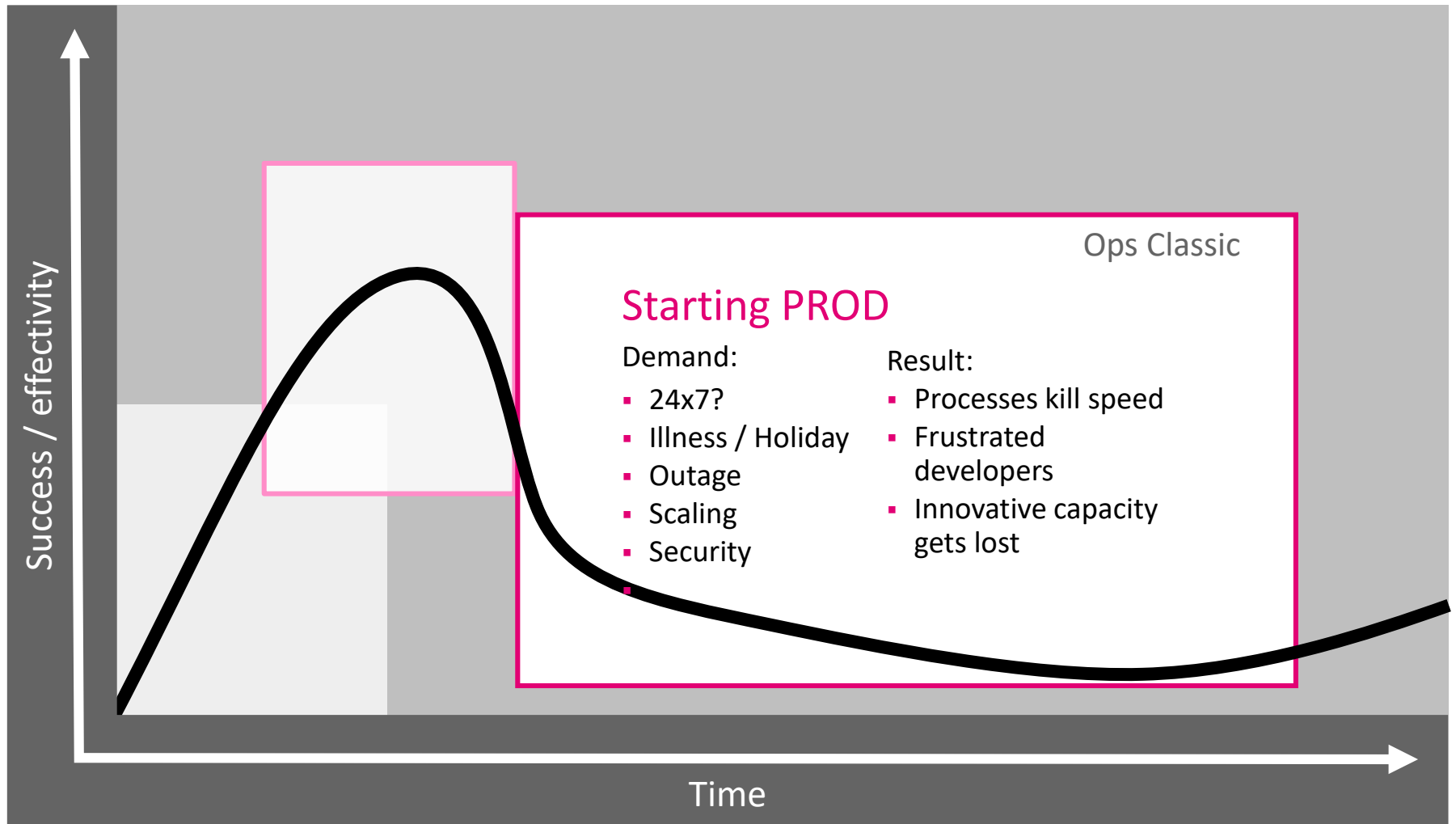
# The Enterprise DevOps Journey



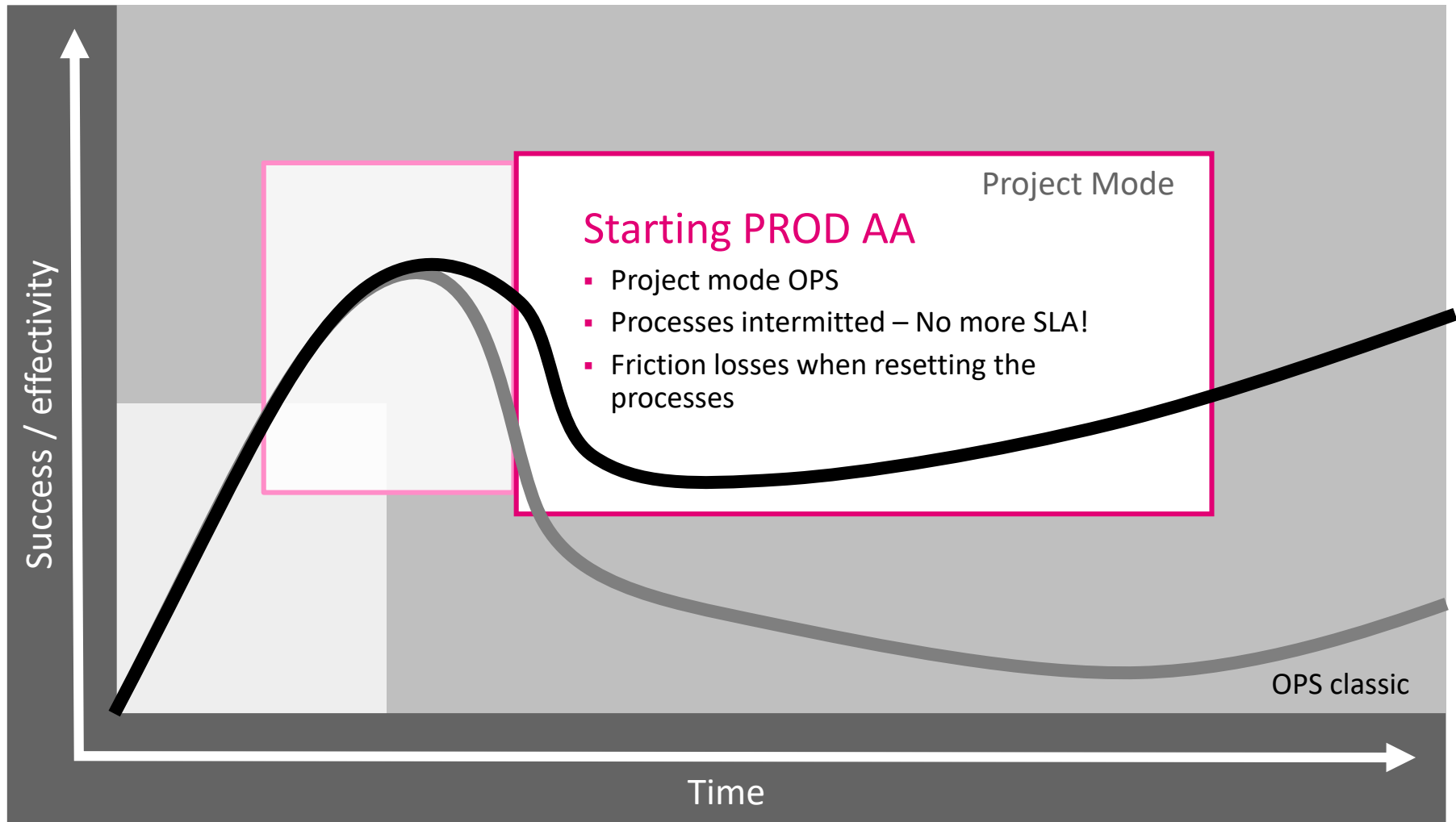
# The Enterprise DevOps Journey



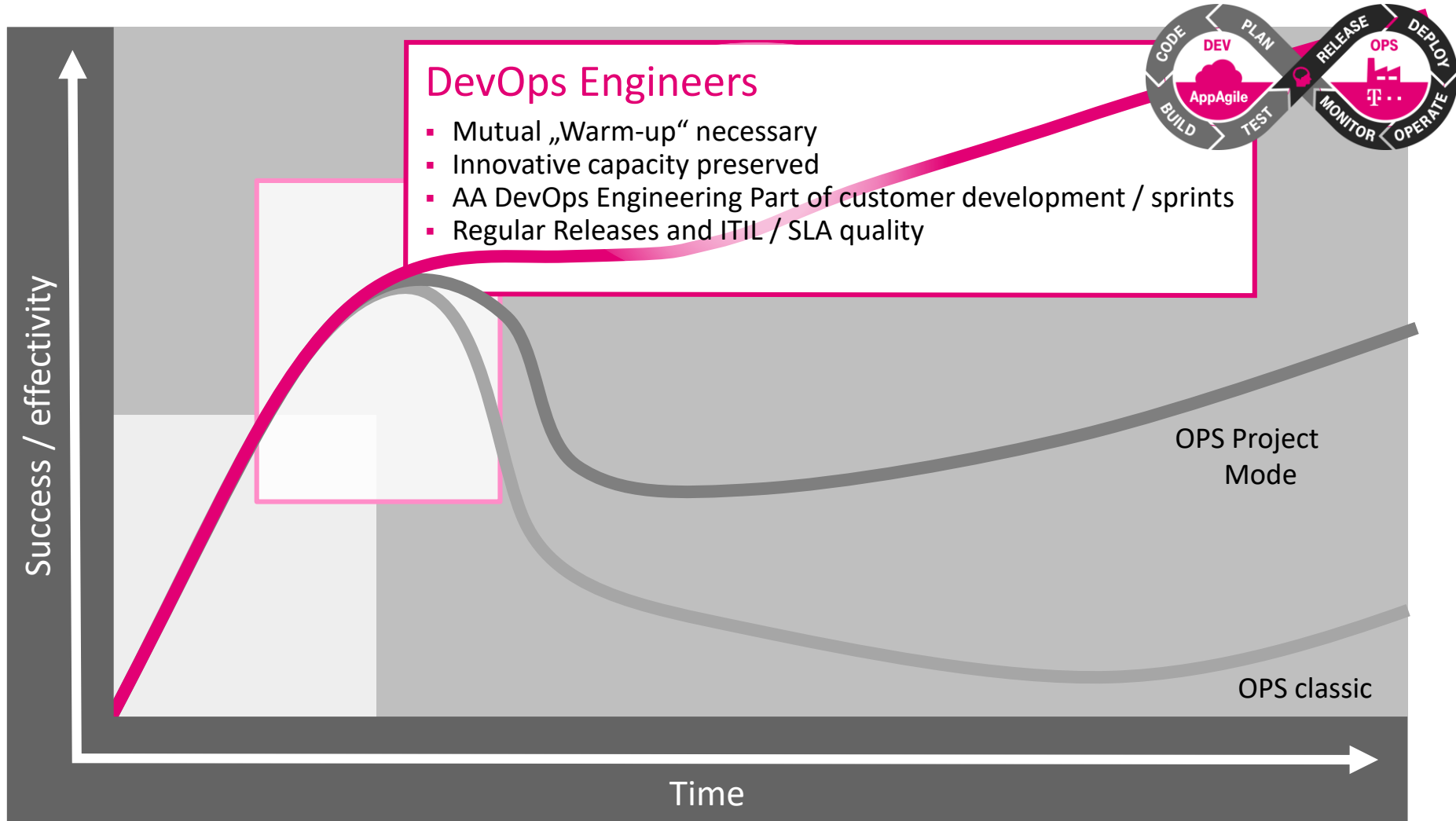
# The Enterprise DevOps Journey – Classic



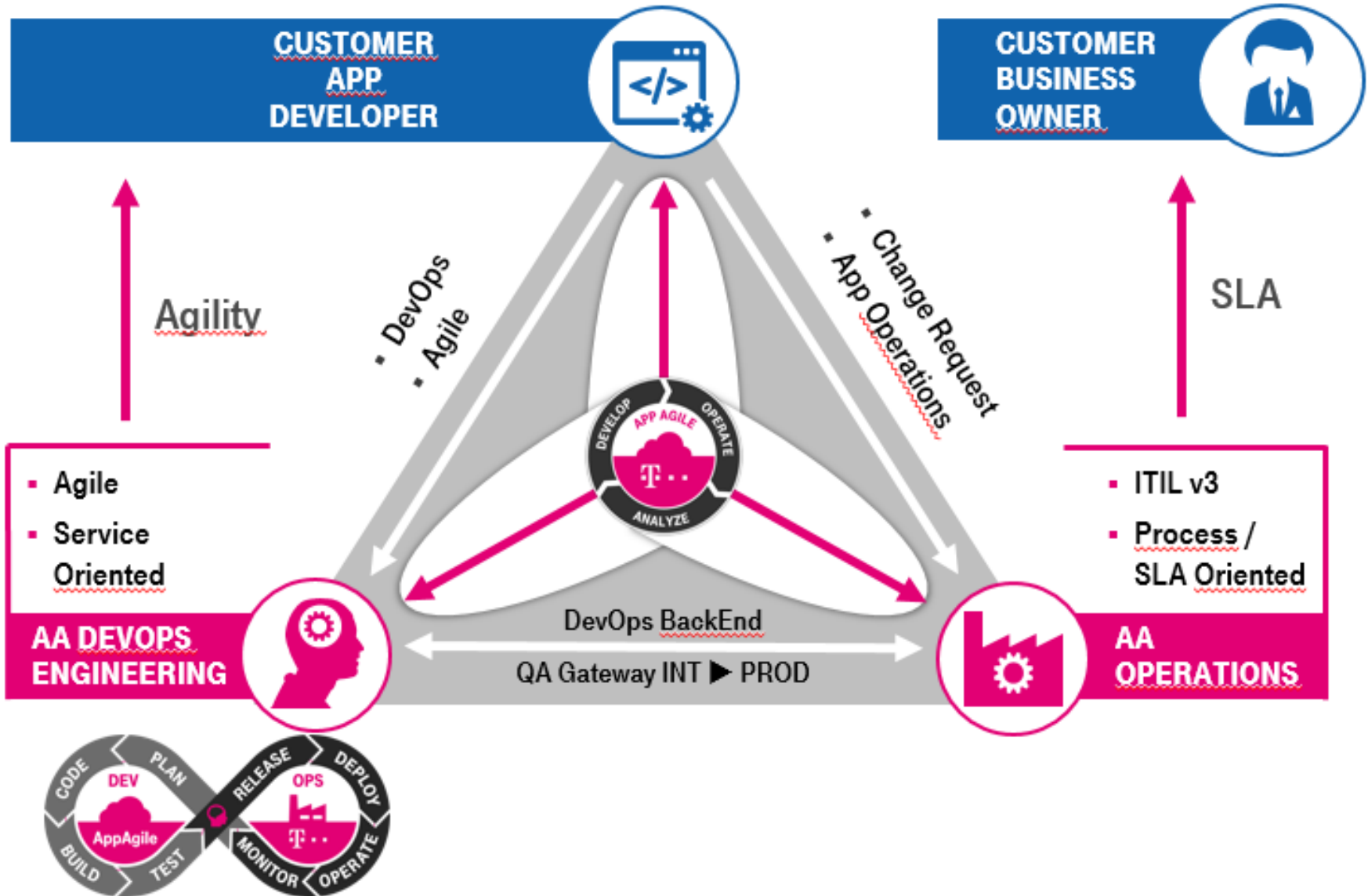
# The Enterprise DevOps Journey – Project Mode



# The Enterprise DevOps Journey – TODAY



# The sOLUTION: Enterprise DevOps



# GDPR – Holy Shit – What does it mean to my Service?

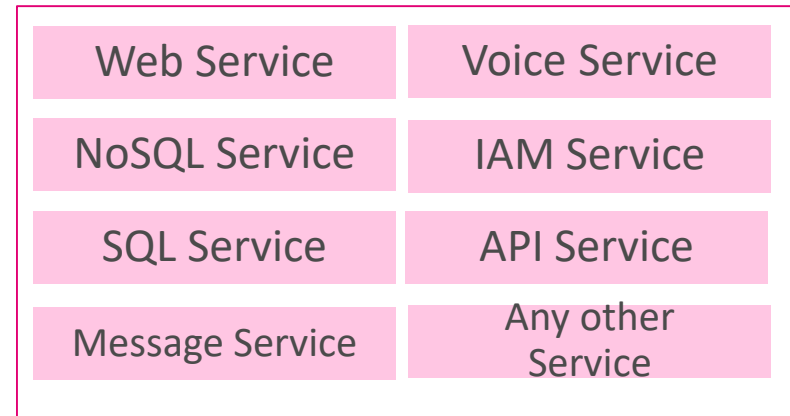
- EU General Data Protection Regulation
- Nobody likes it – but everybody needs to take care of it
- It will be active from 25th may 2018
- *"personal data is any **information relating to an individual**, whether it relates to his or her private, professional or public life. It can be anything from a name, a home address, a photo, an email address, bank details, posts on social networking websites, medical information, or a computer's IP address."*
- Username and Password already fits to that definition!
- How to work with/see customer data, notification, sub-contractors, deletion
- Right to forget
- We take care!

# Managed Services WraPPER

Standard Building Blocks



Managed Function's



User Experience vs. Functions and Versio

# Example : Sea Hero Quest

Customer Need:  
„We need an autoscaling environment, docker based, like Amazon with the offer for managed services.“

My Answer:  
„That`s what I have!“



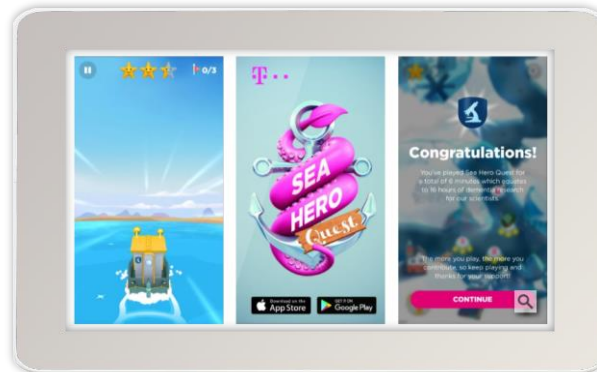
- Performance tests within live environment
- Continuous, agile development with 3<sup>rd</sup>-party developers

- Capacity / budget planning:  
ca. 50.000 User at Release
- → BestCase 500 K User EOY

- Provisioning of Environment
- Move into production
- Sea Hero Release 1 day before „Fathers`s Day“



- AppAgile development environment
- 3<sup>rd</sup>-party-developer in UK, New Zealand and AppAgile-experts



- 1 Million User within 2 WEEKS !
- AppAgile scales automatic

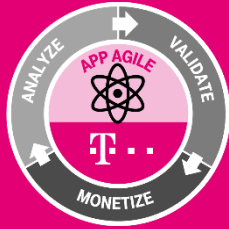


Release September 2016: 4 Mio. Users!

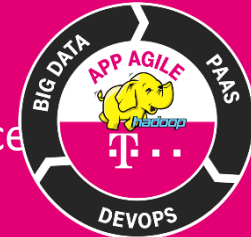
# Whats more in it?

AI, ML, GPU, BlockChain, Voice and other Functions as a Service

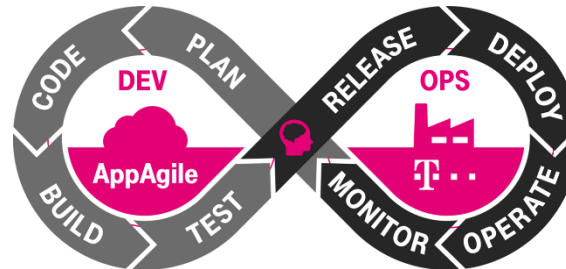
## Data Science Workstation



## BIG Data Analytics as a Service



DevOps Engineer



AppAgile managed PaaS

THANKS!

WHAT WOULD YOU LIKE IN  
YOUR BAG?

MAKE YOUR CHOICE.  
REALIZE BUSINESS  
INNOVATIONS.

NOW!

T · · Systems ·

Backup

# AppAgile Managed Services


## T-Systems takes Care OF:

one-time on boarding services...

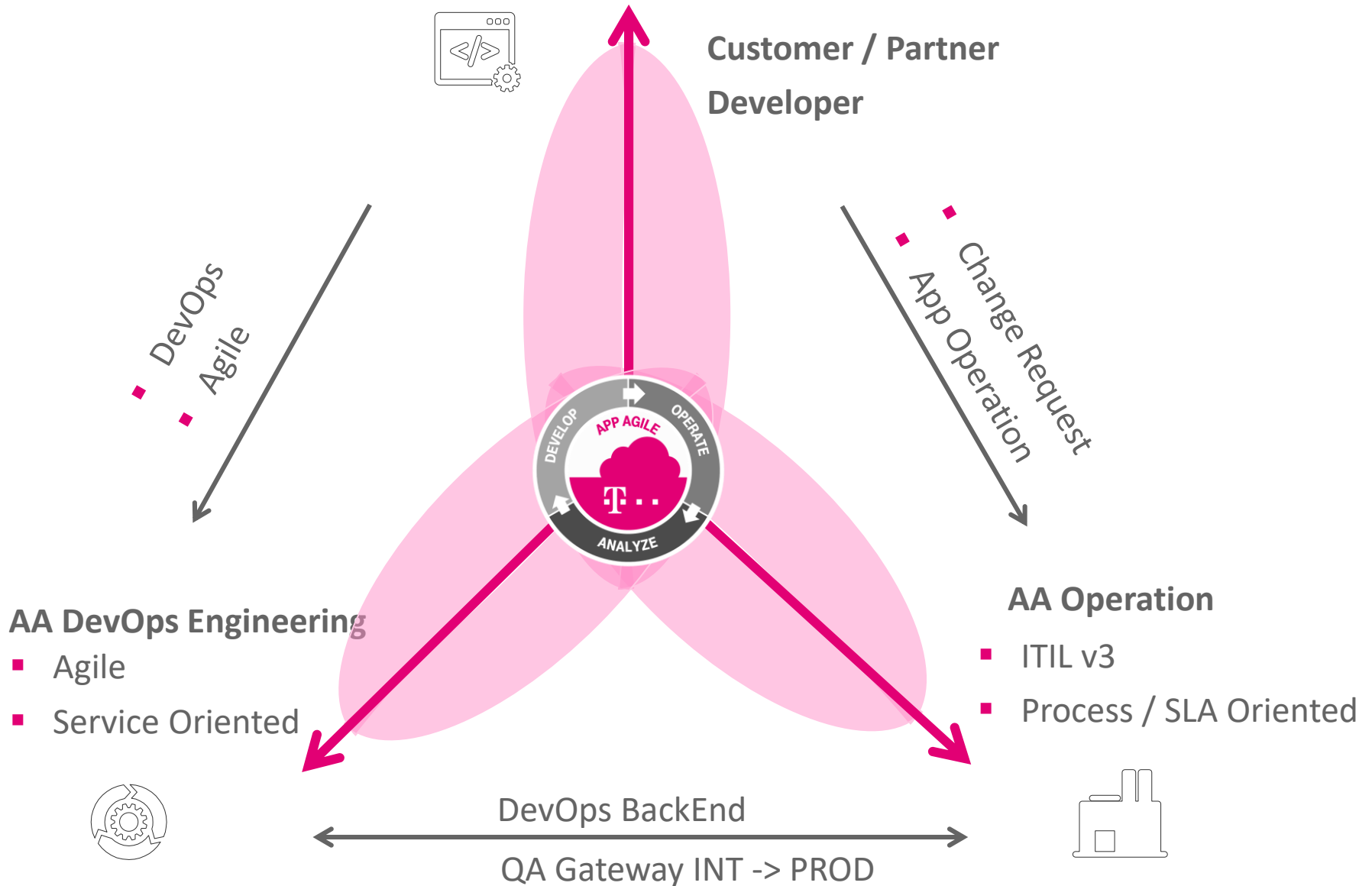
Examples:

- On boarding / Migration based on customer solutions
- Shipping-Service (transfer high data load to Data Centre TSI)
- Support customer in testing of data import/migration
- Potential Configuration of Data sources within vCloud, OTC or Microsoft Azure

... recurring managed services (12x5 or 24x7 Attended Operation Time)

Managed Azure Services (AO)	Provided by AppAgile Enterprise DevOps (DevOps Engineering) or Application Operation	
Application Lifecycle Management		
Application Scaling and Integration		
Application Disaster Recovery		
Application High Availability		
Application Backup & Monitoring		
Application Configuration		
Application Installation		
Middleware High Availability	Provided by Managed Services	
Middleware Backup & Monitoring		
Middleware Configuration		
Middleware Installation		
Administration of DB/MW-Services	Provided by AppAgile Platform	
Patches of DB/MW Services		
Backup & Monitoring of DB/MW-Services		
Installation of DB/MW-Services	Provided by Microsoft. Data trustee by T-Systems	
OS Patches		
OS Operation		
OS Installation		
Server Maintenance		
Rack & Stack		
Power, HVAC, Network		

# What does Enterprise DevOps mean?



# AppAgile PaaS At a Glance



## AppAgile Value Add at Azure

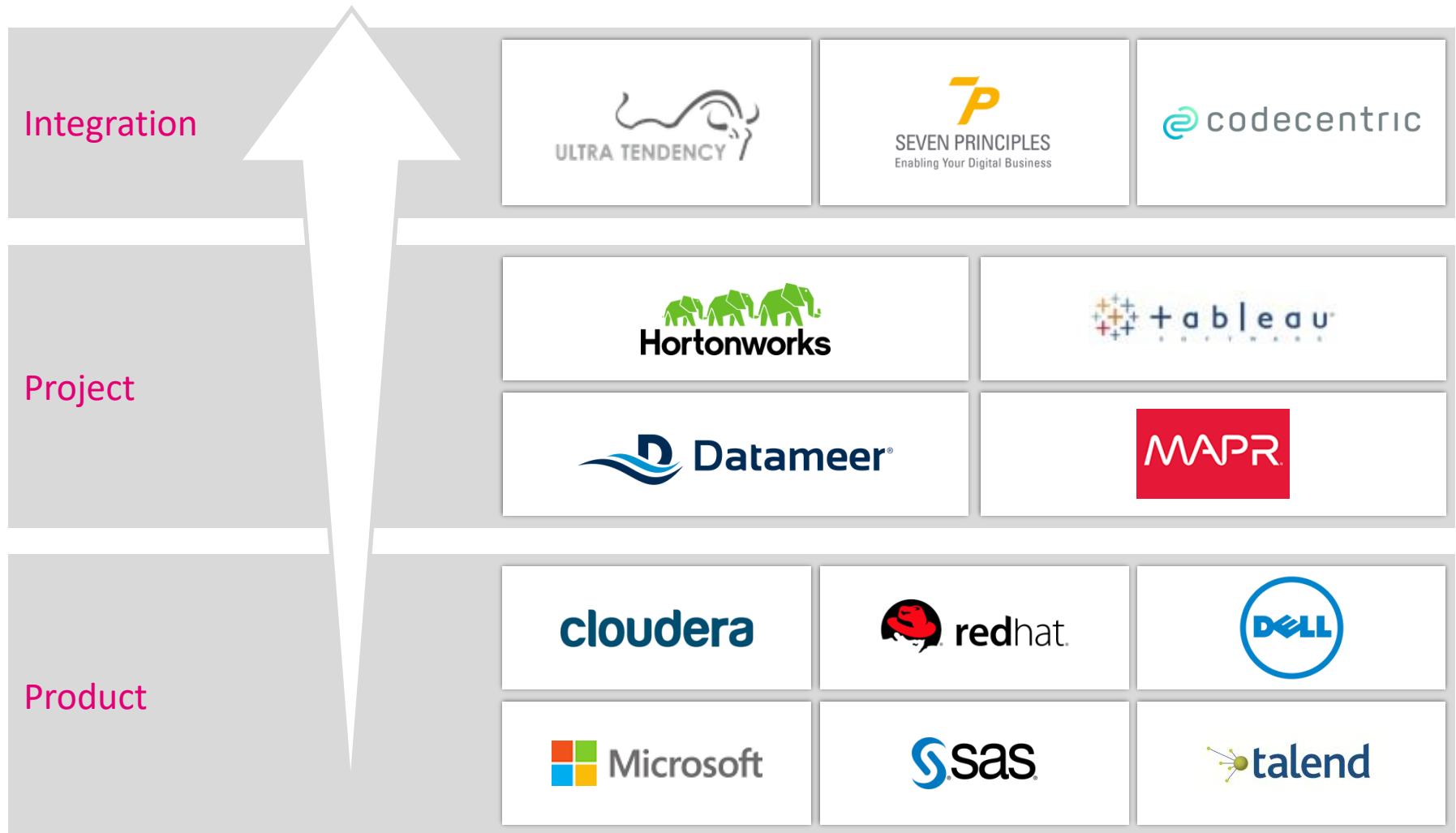
- ✓ 24x7 Attended Operations
- ✓ Service Desk
- ✓ ITILv3 Processes for Operations
  - ✓ High Availability, Backup, Disaster Recovery
  - ✓ Net-, and Infrastructure management
  - ✓ User management
  - ✓ Identity Management
  - ✓ SLA
- ✓ Hybrid Workloads – for Development and Production
  - ✓ Combine AppAgile Stacks with private and public cloud capabilities
- ✓ Pre-defined Use-Cases
- ✓ Best of Private + Public Workloads
  - ✓ One technology – one portal – various platforms!
- ✓ T-Systems as Prime for all Cloud Workloads
  - ✓ Single contract, single bill
  - ✓ E2E managed Service
- ✓ Highest Data Security through data trustee by T-

### Key facts

Professional Service  
management through T-  
Systems (Service  
Orchestration)

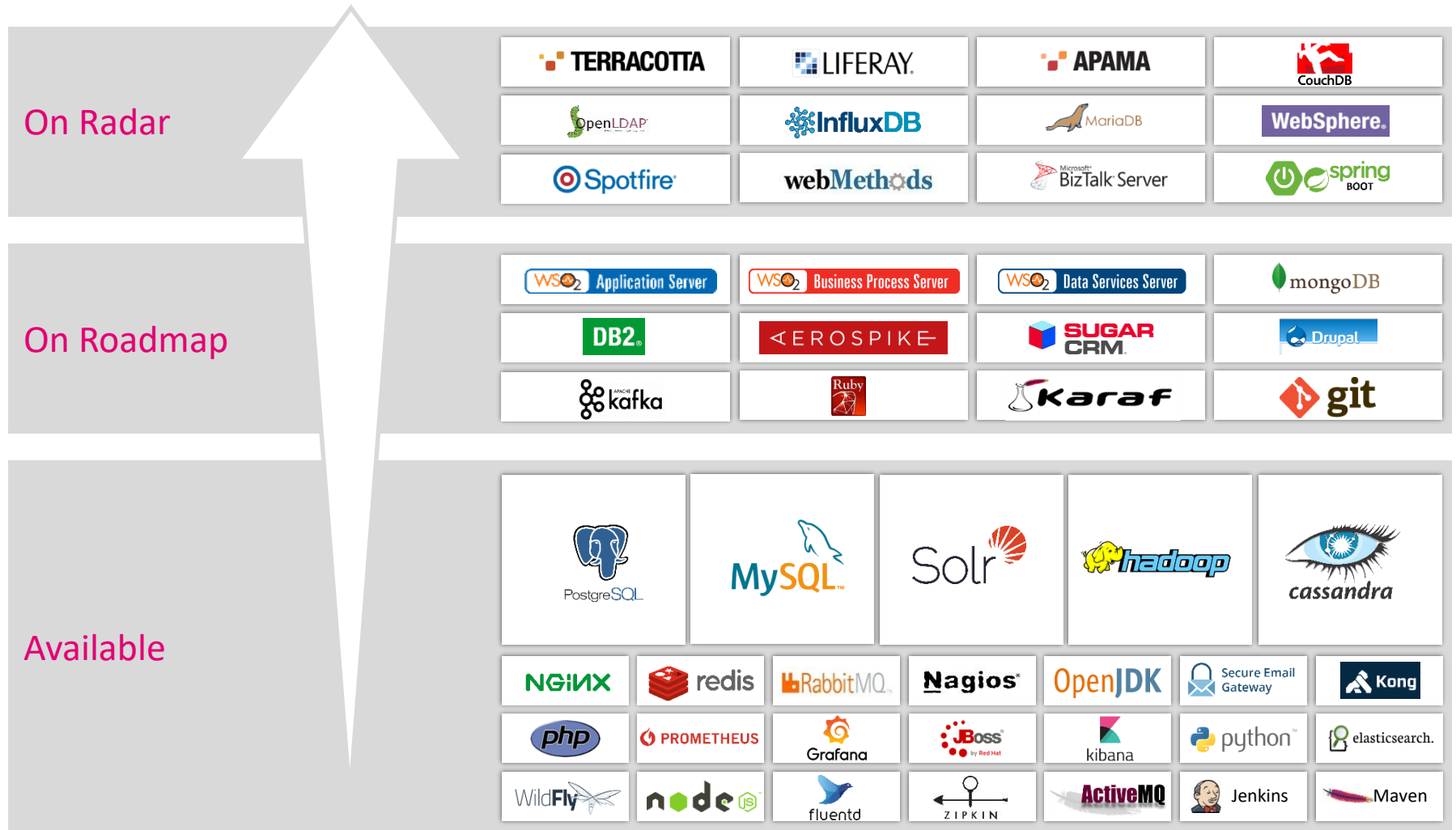
Delivered from Germany

# APPAGILE PaaS & BIG DATA PARTNER ECOSYSTEM



# APPAGILE EXPANSION STAGES

## GROWING CHOICE OF MIDDLEWARE



# Hybrid Services – Best of Breed Native Services - Azure Ecosystem

## Platform Services

<b>Security &amp; management</b> Portal Azure Active Directory Azure SB B2C Multi-Factor Authentication Automation Scheduler Key Vault Store/Marketplace VM Image Gallery & VM Depot	<b>Compute Services</b> Cloud Services Service Fabric Batch Remote App	<b>Web and mobile</b> Web Apps API Apps API Management Mobile Apps Logic Apps Notification Hubs	<b>Developer services</b> Visual Studio Azure SDK Team Project Application Insights	<b>Hybrid operations</b> Azure AD Health Monitoring AD Privileged Identity Management Domain Services Backup Operational insights Import/export Azure Site Recovery StorSimple
	<b>Integration</b> Storage Queues Biztalk Services Hybrid connections Service Bus	<b>Analytics &amp; IoT</b> HDInsight Machine Learning IoT Hub Data Factory Event Hubs Data Lake	<b>Data</b> SQL Database SQL Data Warehouse Redis Cache Search Document DB Storage Tables	
	<b>Media &amp; CDN</b> Media Services Content Delivery Network (CDN)	Stream Analytics Mobile Engagement Data Catalog		

## Infrastructure Services

<b>Compute</b> Virtual Machines Containers	<b>Storage</b> BLOB Storage Azure Files Premium Storage	<b>Networking</b> Virtual Network Load Balancer DNS Express Route Traffic Manager VPN Gateway Application Gateway
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Datacenter Infrastructure (40 Regions) + Microsoft Cloud Germany