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Platform as a Product

Or, taking the ops out of dev
Or, a platform strategy toolkit

Sep, 2019

@cote

" **In the 2019 Gartner DevOps Survey, 60% of respondents said that their organization is currently using the product and platform team structure for its DevOps efforts. Respondents who use the product and platform structure report a significantly higher level of average customer satisfaction (59% saying customers are 'highly satisfied'). They also reported a significantly higher degree of average success in scaling DevOps (59.5% saying 'very successful') as compared to those not using a product and platform structure."**

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Microsoft -> AWS

Heterogenous -> multi-cloud

Service desk -> backlog

ITIL -> ~~DevOps~~SRE

Biz/IT alignment -> Projects-to-products

Enterprise architecture -> Cloud Native Platform
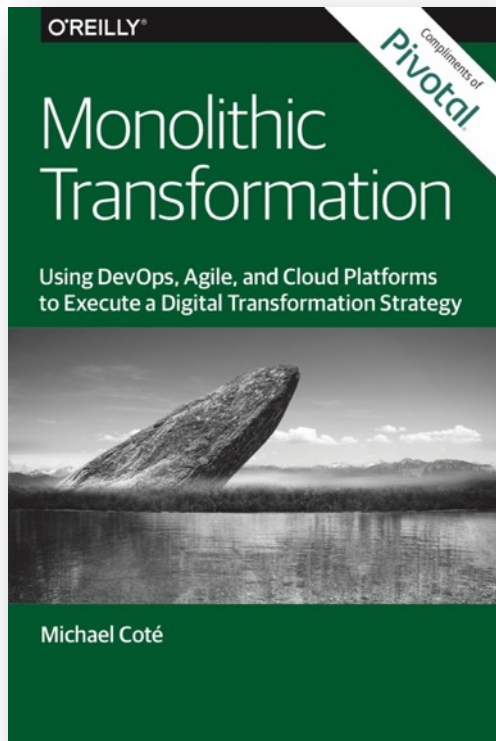
OO->~~SOA->ESB->microservices-~~>events

Scrum Master -> product manager

Automation->automation

->

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https://cote.io/books

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SOFTWARE DELIVERY & OPERATIONAL PERFORMANCE

Source: "Accelerate State of DevOps 2019," DORA.

6

THE
BEFORE TIMES   AGILE   DevOps   SRE

Prj Mgmt

Dev ——————→ "Dev" ——→ DevOp s. ←—— Dev

QA

Ops   Ops   SRE
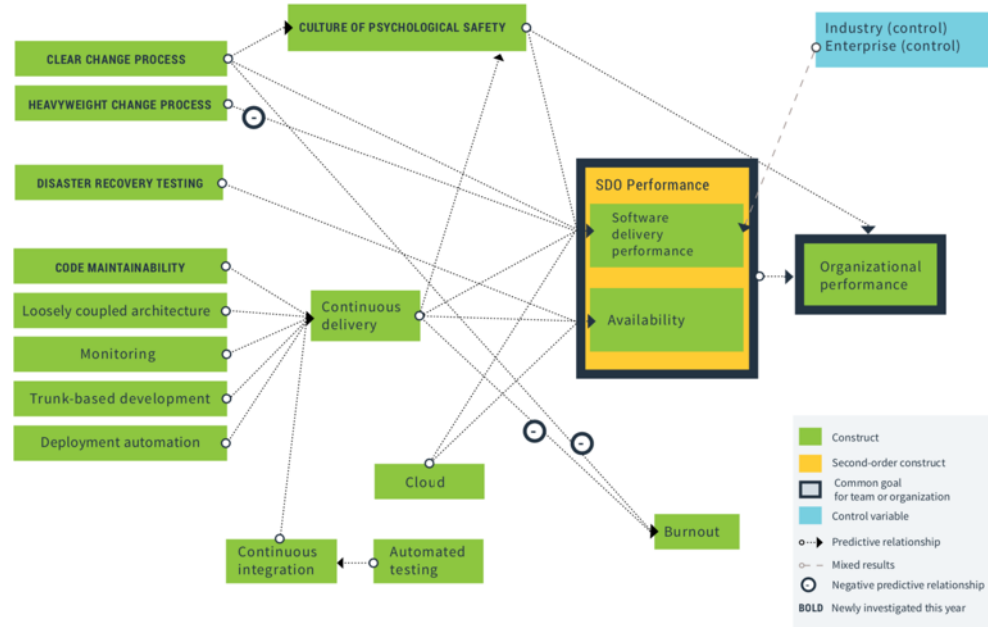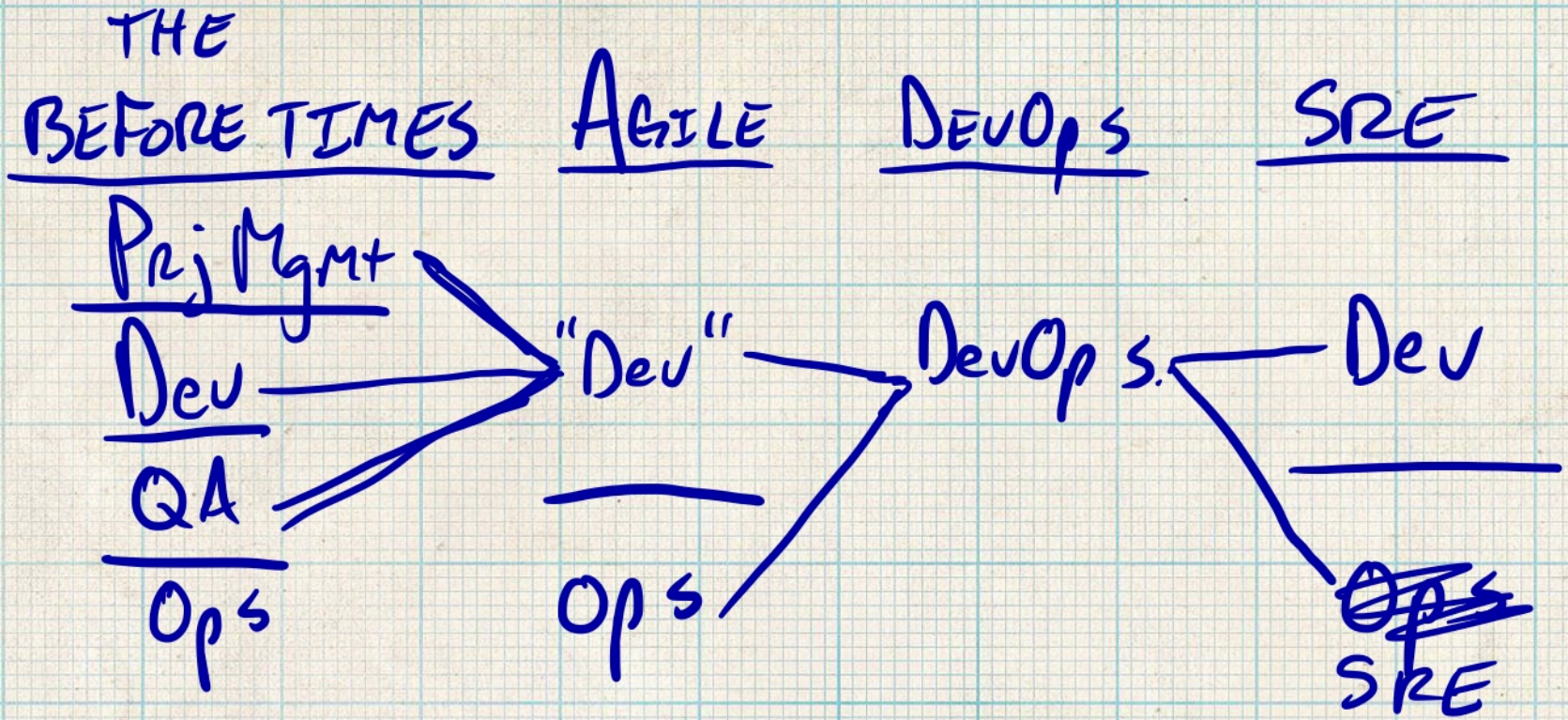
Shift from *Service* Delivery to *Product* Delivery

Sources: BMC's ITIL® Processes & Best Practices documents, 2011 to 2016; "Sky is the Limit for Cloud Foundry at AirFrance-KLM," Nathan Wattimena & Fabien Lebrere, AirFrance-KLM, Oct. 2018.; "Why Change? Small batch thinking," Coté, Sep. 2018.
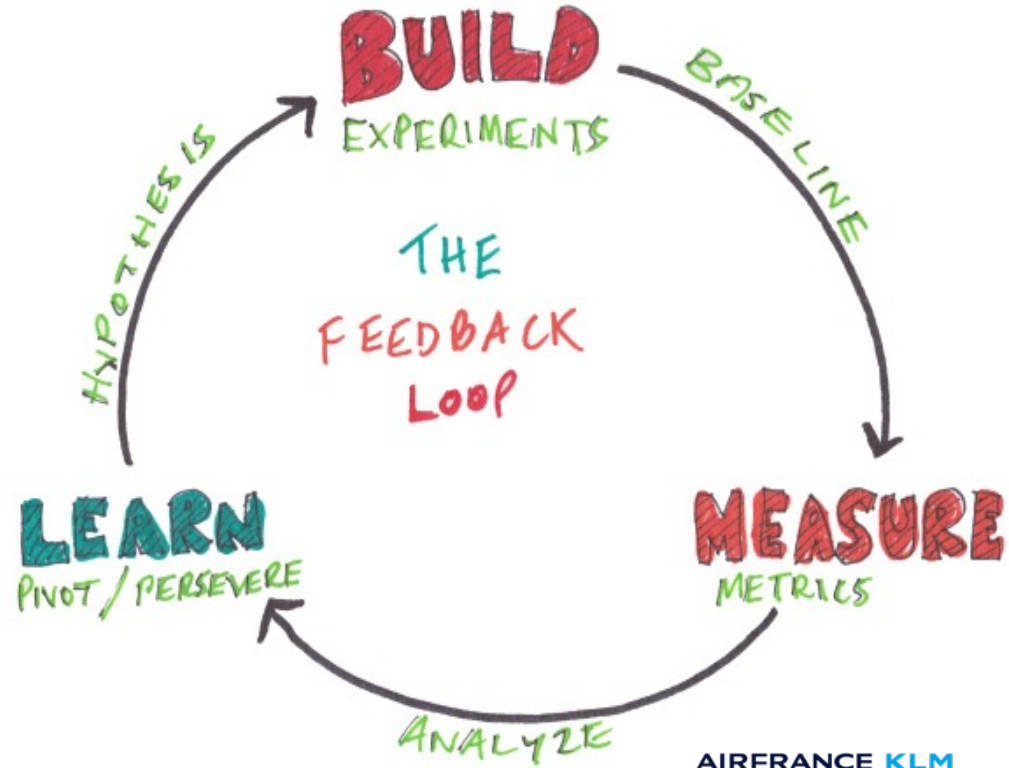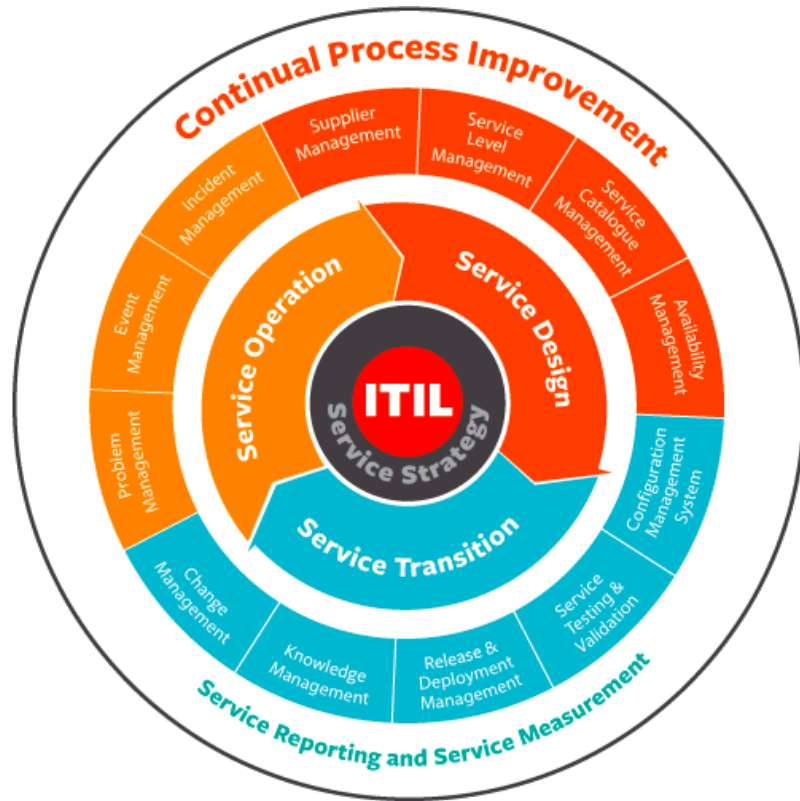
Product management for ops

..developer should have to do the least amount of work possible to deploy to the platform.

..just push from the CI tool without worrying about change tickets, security scanning, or approvals because it all happened through automation.

..Operational readiness, compliance, logging, monitoring, paging and notifications, etc should all be automatic.

..Developers want to focus on delivering value as much as anyone else in the company. Get them out of administrivia. I assure you that they will buy into an opinionated pattern if it means more time solving problems for customers.

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Automate -> self-service

"The code to accomplish these tasks might be dozens of lines of JavaScript, which would be a trivial amount of development compared to what it takes to set up the servers with the proper environment to run the code."

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Finding toil: what does it take to deploy one line of code?

OPTIMIZING DEVELOPMENT FLOW

PAST
INCEPTION Ideation, scoping etc.
REQUIREMENTS
ARCHITECTURE & DESIGN
Hardware provisioning & hosting configuration
waiting time
IMPLEMENTATION & CONTINUOUS TESTING
DEPLOYMENT & INTEGRATION
~30 DAYS

PRESENT
INCEPTION Ideation, scoping etc.
REQUIREMENTS
ARCHITECTURE & DESIGN
IMPLEMENTATION & CONT. TESTING
DEPLOYMENT & INTEGRATION
~2-3 DAYS
Setup of space, service skeletons, deployment pipeline and team permissions
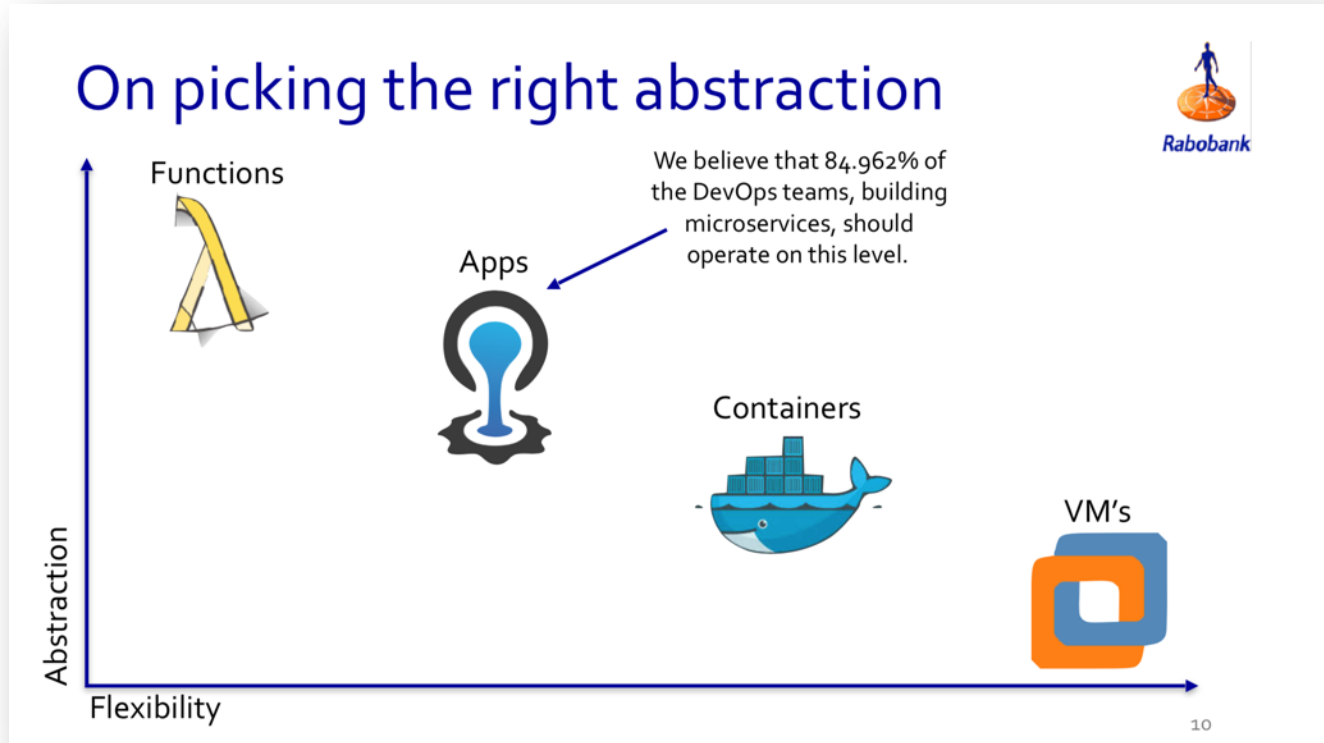
Mercedes-Benz.iO

DAIMLER

Functions

- Removes toil with automation & programming

- Stands up & manages the platform

- Creates shared services/middleware/etc.

Insane staff efficiency

- T-Mobile USA: 8 ops to 300 developers, 11k containers.

- Dick's Sporting Goods: 6 ops to 120 devs.

- Well Fargo: repaves production every 3 days

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Standardize on a platform

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PoC w/devs, choose, govern, & garden the right platform

Source: CF Summit Europe 2018, Vincent Oostindië, Rabobank.

Enterprise architecture -> platform & pipeline

Over time, tools that helped us scale are now obstacles

CompoZed
Accelerated Delivery

GOVERNANCE COMMITTEE
GOVERNANCE
COMMITTEE COMMITTEE

Govern process & platform

Automate governance

Don't let developers build platforms

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Rolling it out, ongoing management
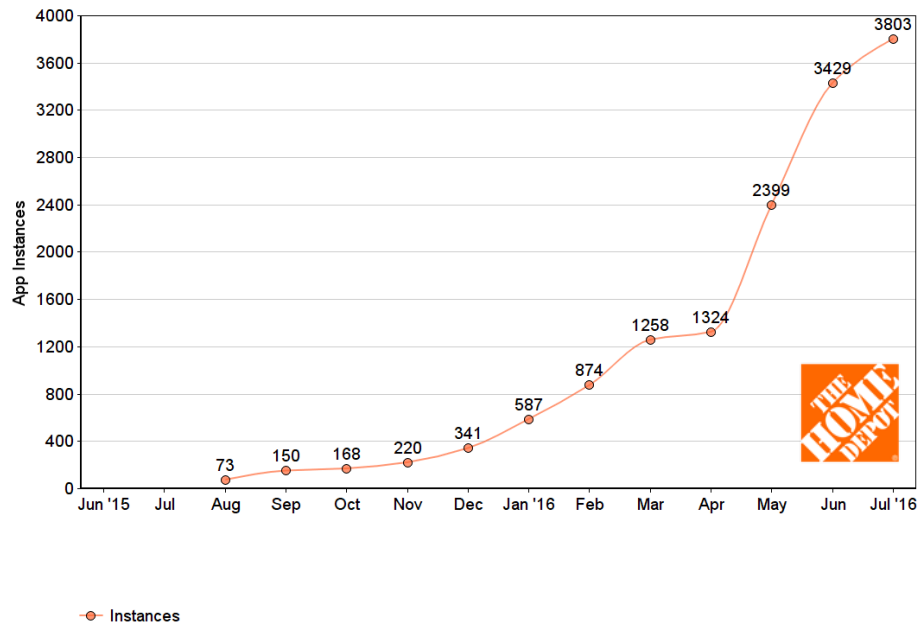
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By 2019, estimated 4,000 apps and services, from Tony. Sources: Home Depot meetup, Oct 2015; Humana at CF Summit 2015; "Getting started," Coté, Oct 2016; Comcast's Christopher Tretina at SP1 2016; "Cloud-Native at Home Depot, With Tony McCulley"; "Bottom Up Enterprise Transformation," Kyle Campos, CSAA Insurance, CF Summit EU, Oct 2017. Number of AI's equates to ~130 apps composed on ~900 services.

Budget for initial consulting

Organizational Learning

- **Spend lots of time initially working with product teams**

- **You're often the most qualified to know the platform and even how to program for it**

- **Budget this time and staffing in, don't get shocked by actuals versus long-term dev:ops ratios.**

What a successful platform as a product look like

Strong Executive Sponsorship with a well communicated vision

**A Fully Dedicated and Balanced Team
(Product Owner/Product Manager, Platform Engineers)**

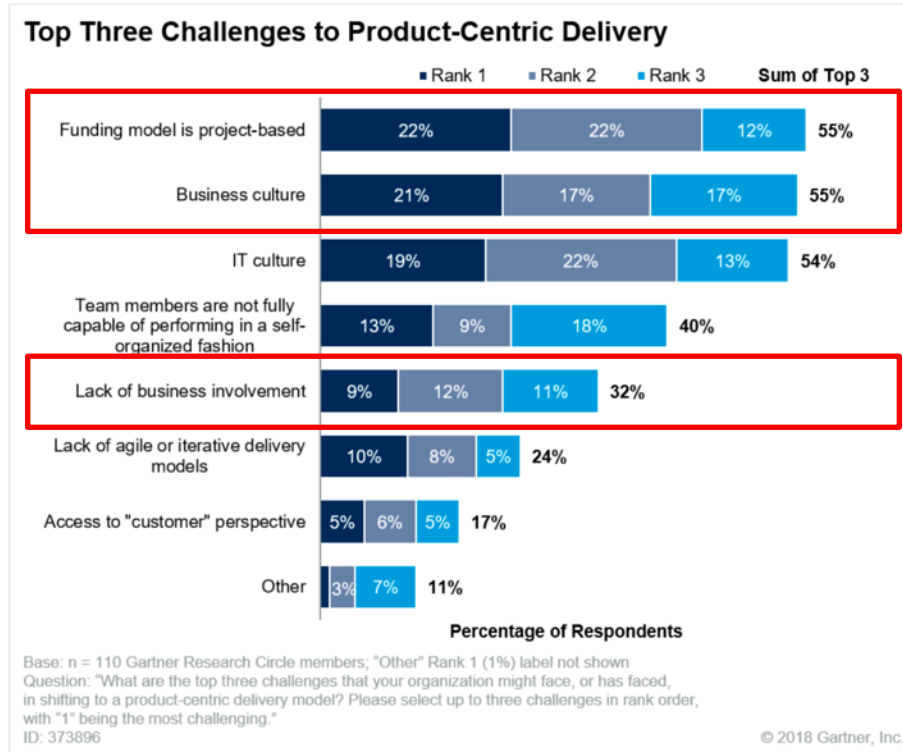| Empowered to:	By:	Resulting In:
- Define Product Strategy - Prioritize Backlog - Release Updates & Patches to Platform - Challenge Legacy Processes - Focus on Reliability	- Speaking Directly to Developers - Conducting Hypothesis Driven Experiments - Using Quick Feedback Loops - Making Metric Driven Decisions	- Solutions to Real Business & Customer Problems - Minimizing Waste - Increased Velocity - Maximized ROI - Good Product/Market Fit

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"The Business" is now the bottleneck

Top Three Challenges to Product-Centric Delivery

■ Rank 1   ■ Rank 2   ■ Rank 3   **Sum of Top 3**

Challenge	Rank 1	Rank 2	Rank 3	Sum of Top 3
Funding model is project-based	22%	22%	12%	**55%**
Business culture	21%	17%	17%	**55%**
IT culture	19%	22%	13%	**54%**
Team members are not fully capable of performing in a self-organized fashion	13%	9%	18%	**40%**
Lack of business involvement	9%	12%	11%	**32%**
Lack of agile or iterative delivery models	10%	8%	5%	**24%**
Access to "customer" perspective	5%	6%	5%	**17%**
Other		3%	7%	**11%**

Percentage of Respondents

Base: n = 110 Gartner Research Circle members; "Other" Rank 1 (1%) label not shown
Question: "What are the top three challenges that your organization might face, or has faced, in shifting to a product-centric delivery model? Please select up to three challenges in rank order, with "1" being the most challenging."
ID: 373896

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Note: Due to rounding, numbers may not add up precisely to the totals shown.

Source: Gartner (October 2018)