

Lead Your DevOps Transformation

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Agenda

- Research Motivation and Aims
- Interview Series
- Survey Results

A photograph of two men in a heated argument. The man on the left, wearing a black shirt, is looking towards the man on the right. The man on the right, wearing a blue shirt and a grey tie, is pointing his finger at the first man. Both men have serious, almost angry expressions. The background is plain white.

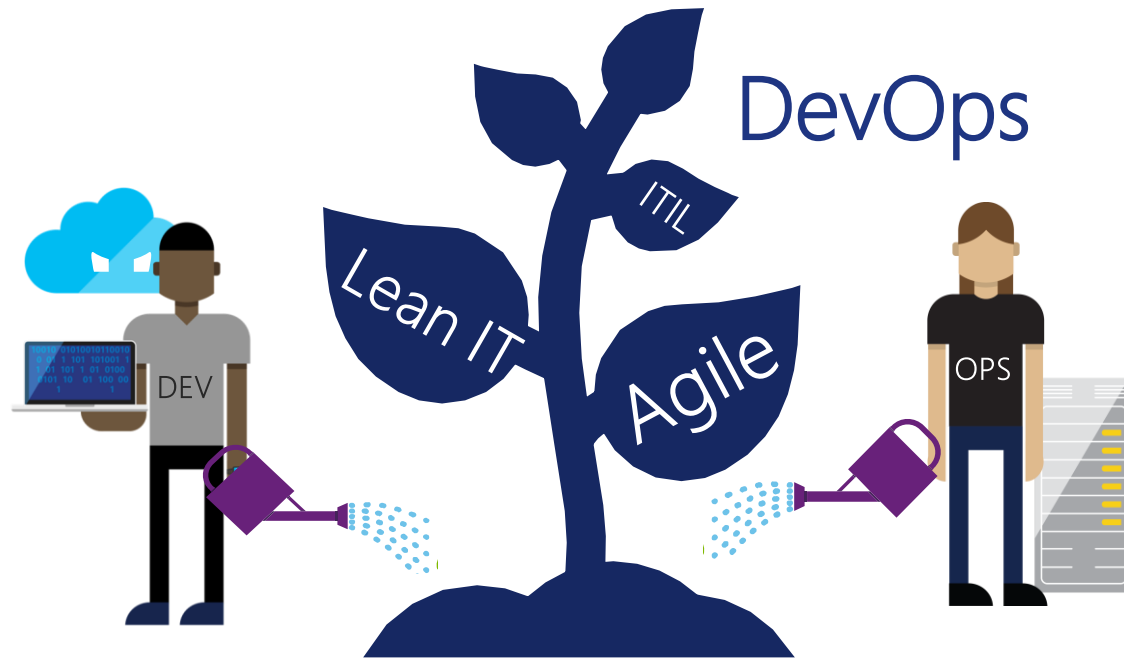
There is no problem with my code, you're either deploying wrong or there is a problem with your infrastructure.

Infrastructure looks good, must be a code problem.

DEV

OPS

“DevOps is the union of people, process, and products to enable continuous delivery of value to our end users”



1 People

2 Process

3 Products

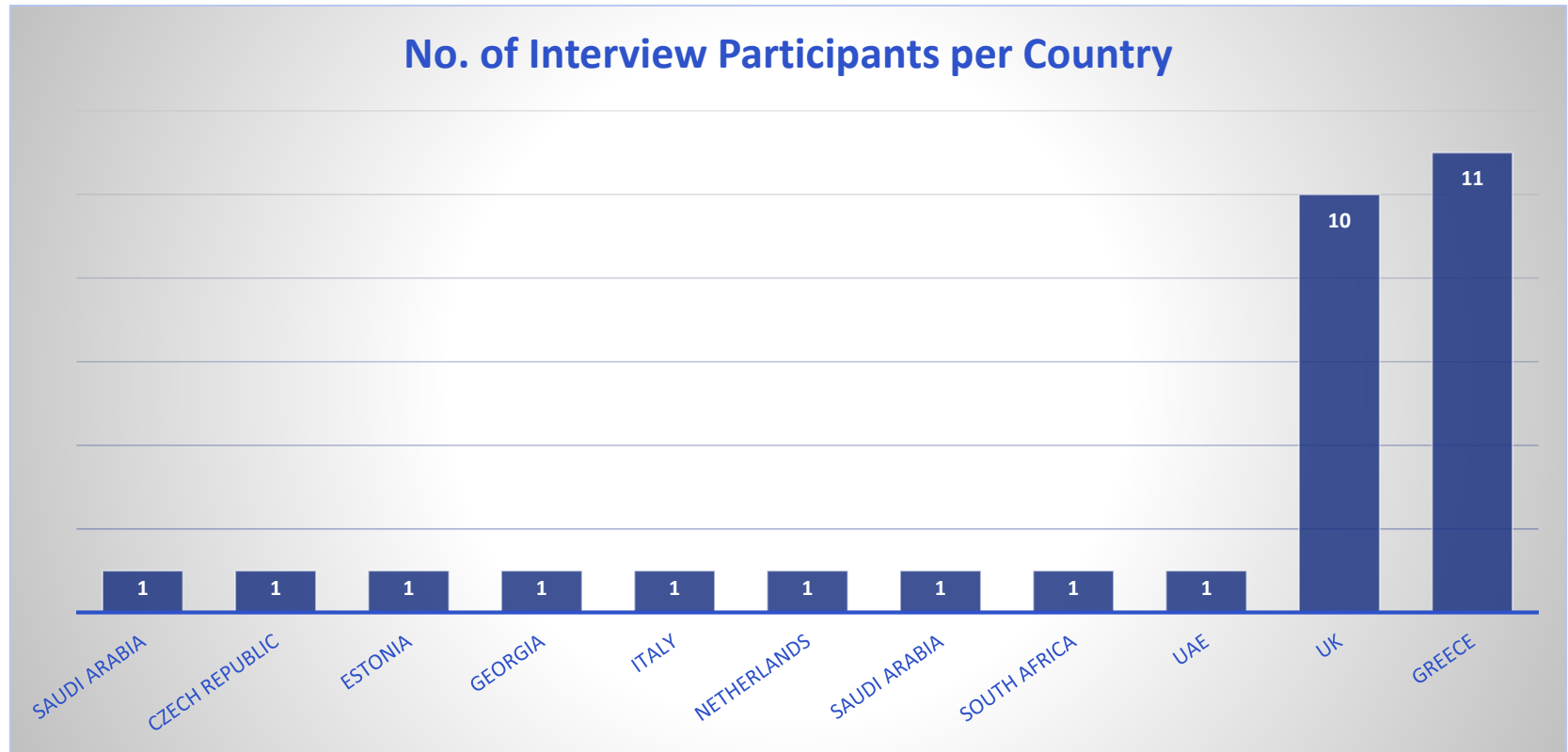
Academic Publication	Definition of DevOps	Focus on Definition
Bass et al. 2015	DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production while ensuring high quality	Goal-oriented (fast delivery of quality software)
Dyck et al. 2015	DevOps is an organisational approach that stresses empathy and cross-functional collaboration within and between teams – especially development and IT operations – in software development organisations, in order to operate resilient systems and accelerate the delivery of changes	Means-oriented (empathy, cross-functional collaboration); and goal-oriented (operate resilient systems, accelerate change delivery)
Penners & Dyck 2015	DevOps is a mindset, encouraging cross-functional collaboration between teams – especially development and IT operations – within a software development organisation, in order to operate resilient systems and accelerate the delivery of changes	Means-oriented (attitude, cross-functional collaboration)
Smeds et al. 2015	A set of engineering process capabilities supported by certain cultural and technological enablers	Means-oriented (engineering capabilities)
De Franca et al. 2016	DevOps is a neologism, representing a movement of ICT professionals addressing a different attitude regarding software delivery through the collaboration between software systems development and operations functions, based on a set of principles and practices, such as culture, automation, measurement and sharing'	Means-oriented (attitude, cross-functional collaboration)
Jabbari et al. 2016	DevOps is a development methodology aimed at bridging the gap between Development and Operations, emphasising communication and collaboration, continuous integration, quality assurance and delivery with automated deployment, utilising a set of development practices	Means-oriented (cross-functional collaboration, automated deployment)

Agile, Lean and DevOps – A Comparison of Publication Keywords

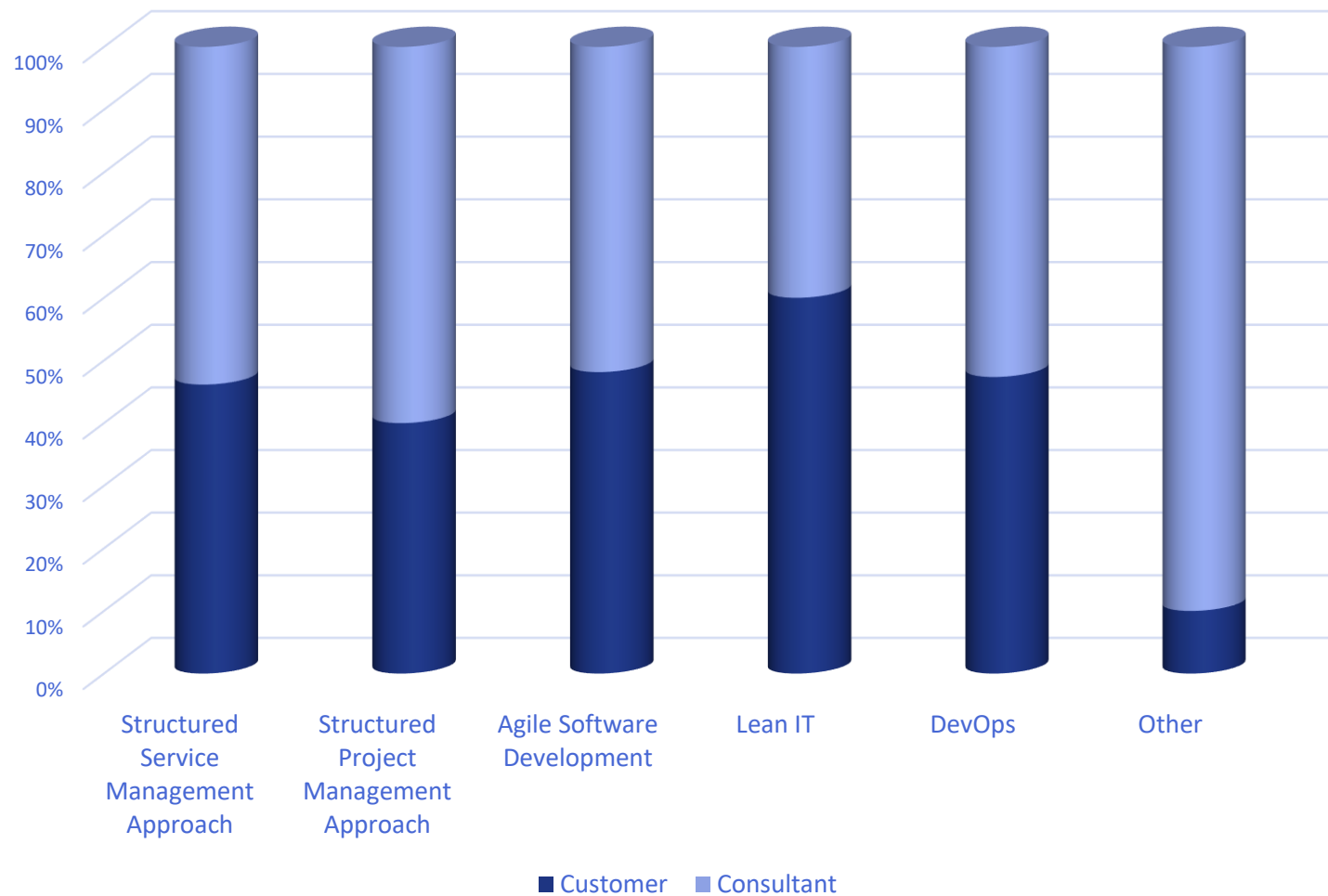
AGILE	LEAN	DEVOPS
<ul style="list-style-type: none"> • SCRUM • XP • CMMI-DEV • Test Driven Development or Test-first Development (TFD) • Software Quality • Project Management framework • Agile Unified Process (RUP) • Complex Adaptive Systems (CAS) Theory • Water-Scrum-fall • Pair programming • High Velocity 	<ul style="list-style-type: none"> • Customer presence product development • Incentive contract • Kanban • Kaizen • Gemba • Knowledge sharing • Lean management • Lean culture • Lean leadership • Lean Enterprise • Lean Product Development • People Development System • Problem solving capabilities • Respect for people • Value Stream Map • 5S • Tacit knowledge value • Employee satisfaction • Employee motivation • Employee commitment • Waste elimination 	<ul style="list-style-type: none"> • Agile approach • Agile software development • SCRUM • XP • RUP • Lean software development • Culture (C) • Development & IT operations • Continuous delivery • Continuous integration • Continuous experimentation • Software Release management • Monitoring • ITIL • Automation (A) • Measurement (M) • Sharing (S) • Cloud Computing • MTTM • MTTR

Interview Series

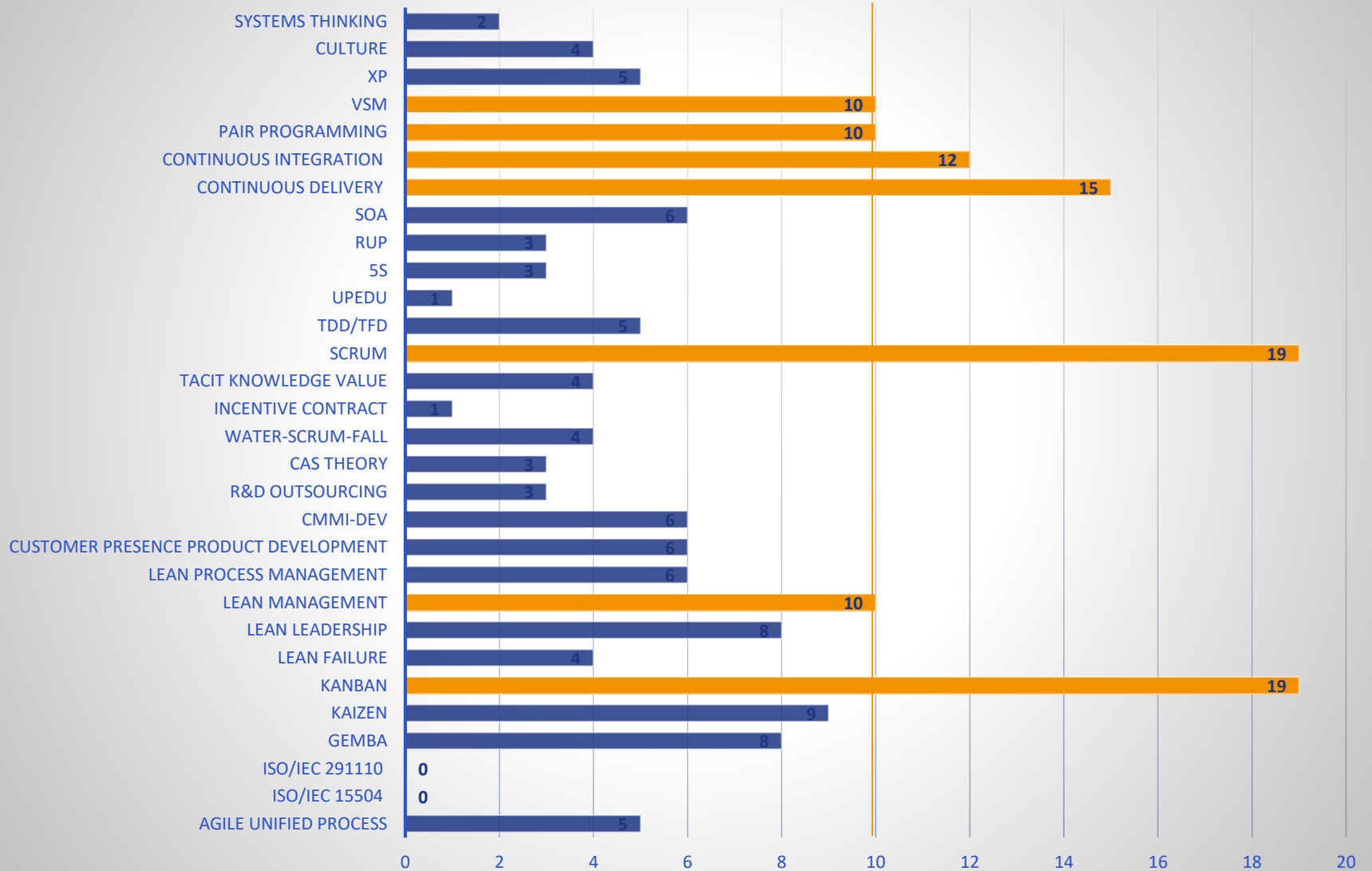
Interview Series (Sep. 2018 - Jan 2019)



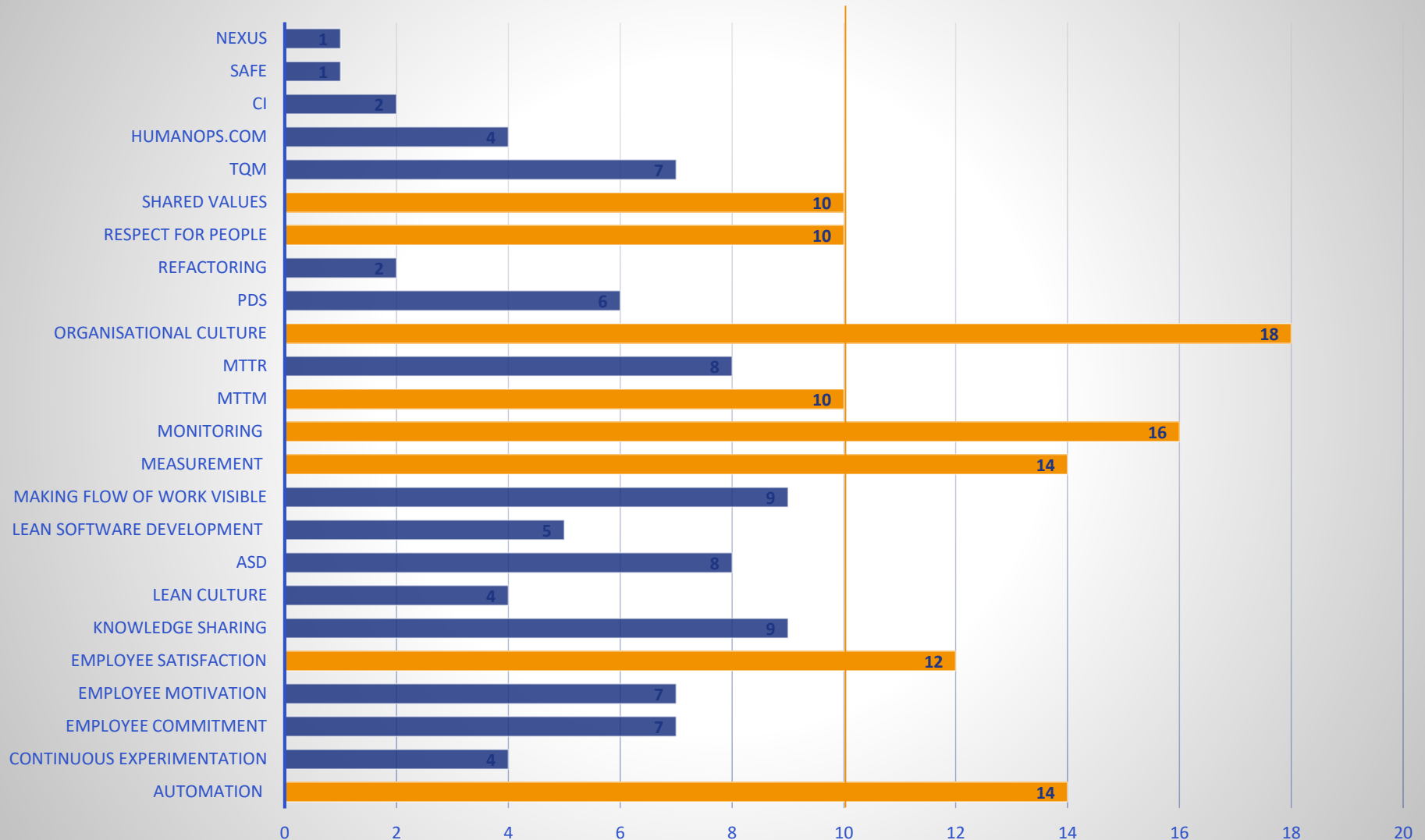
Has your organisation adopted any of the following frameworks or practices?



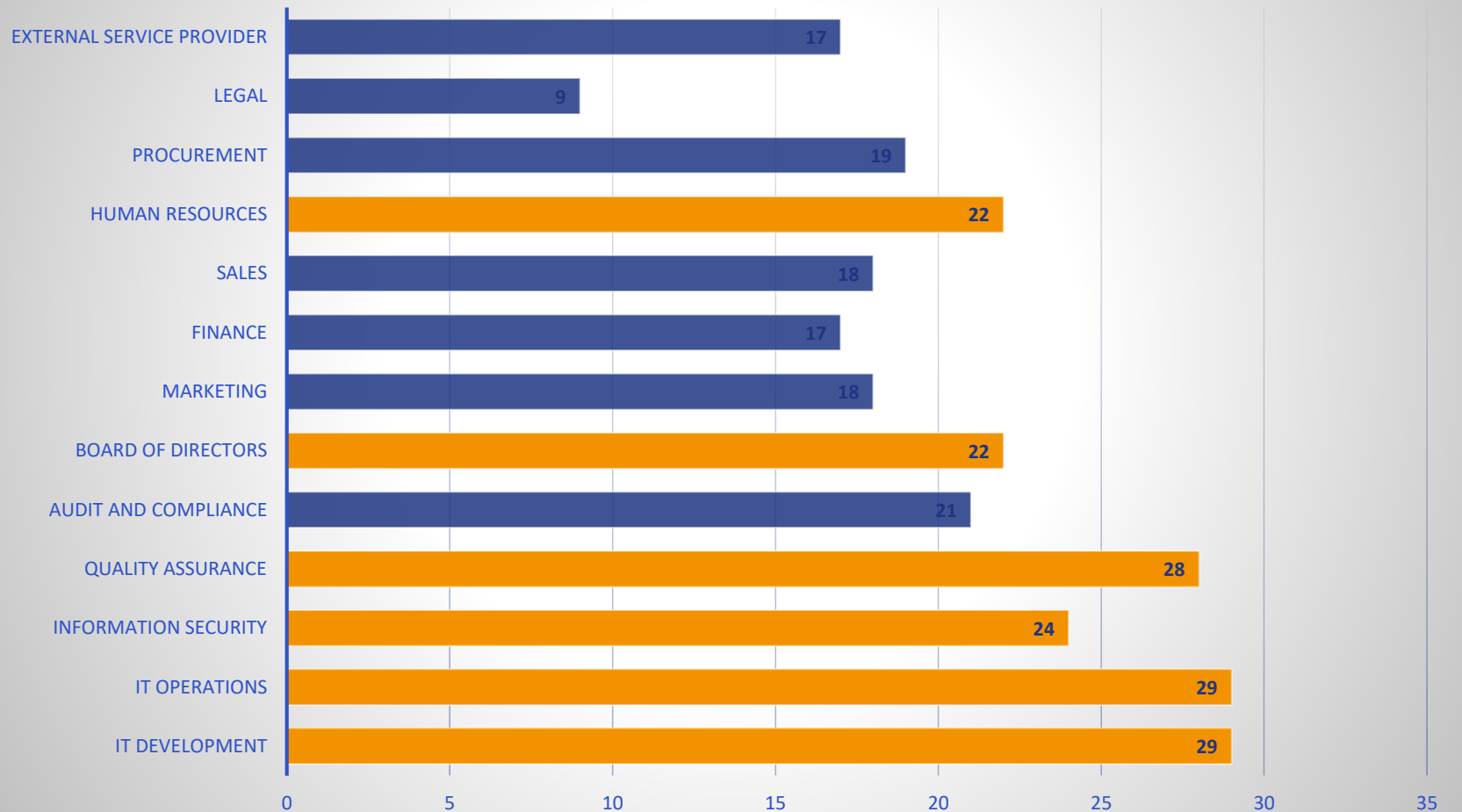
Agile and Lean Practices (30 Interviews)



Agile and Lean Principles (30 Interviews)



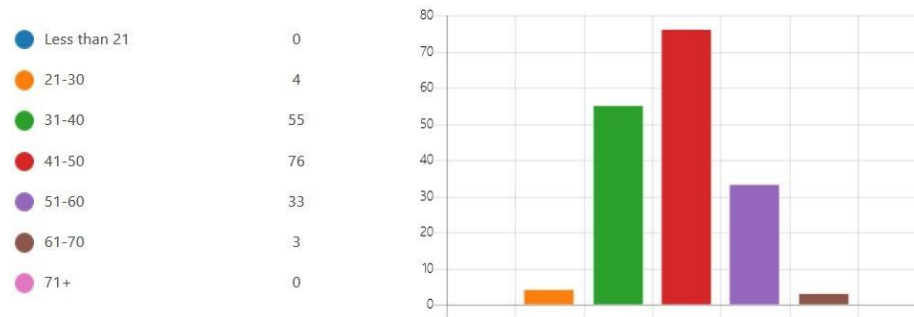
Organisational teams as part of DevOps adoption practices and principles



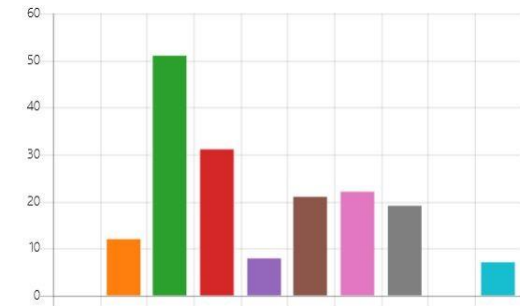
Survey Results

Online Survey (Jul 2019 – Oct 2019)

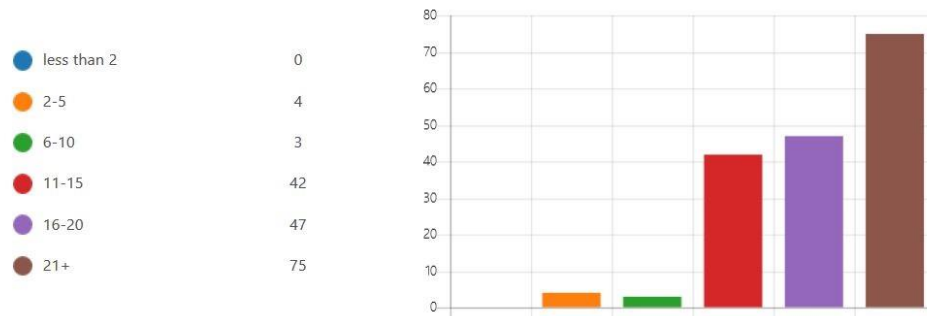
Please state your age (years) to help us improve segmentation of obtained survey outcomes.



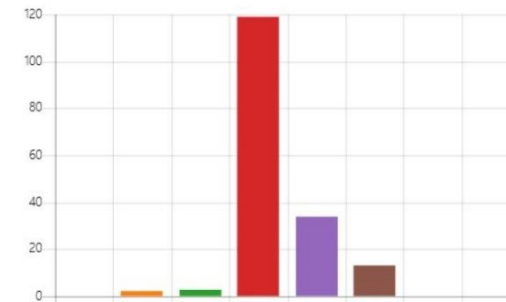
Please state your role area within the organization you are currently employed? Please select only one option.



How many years of professional experience do you have?

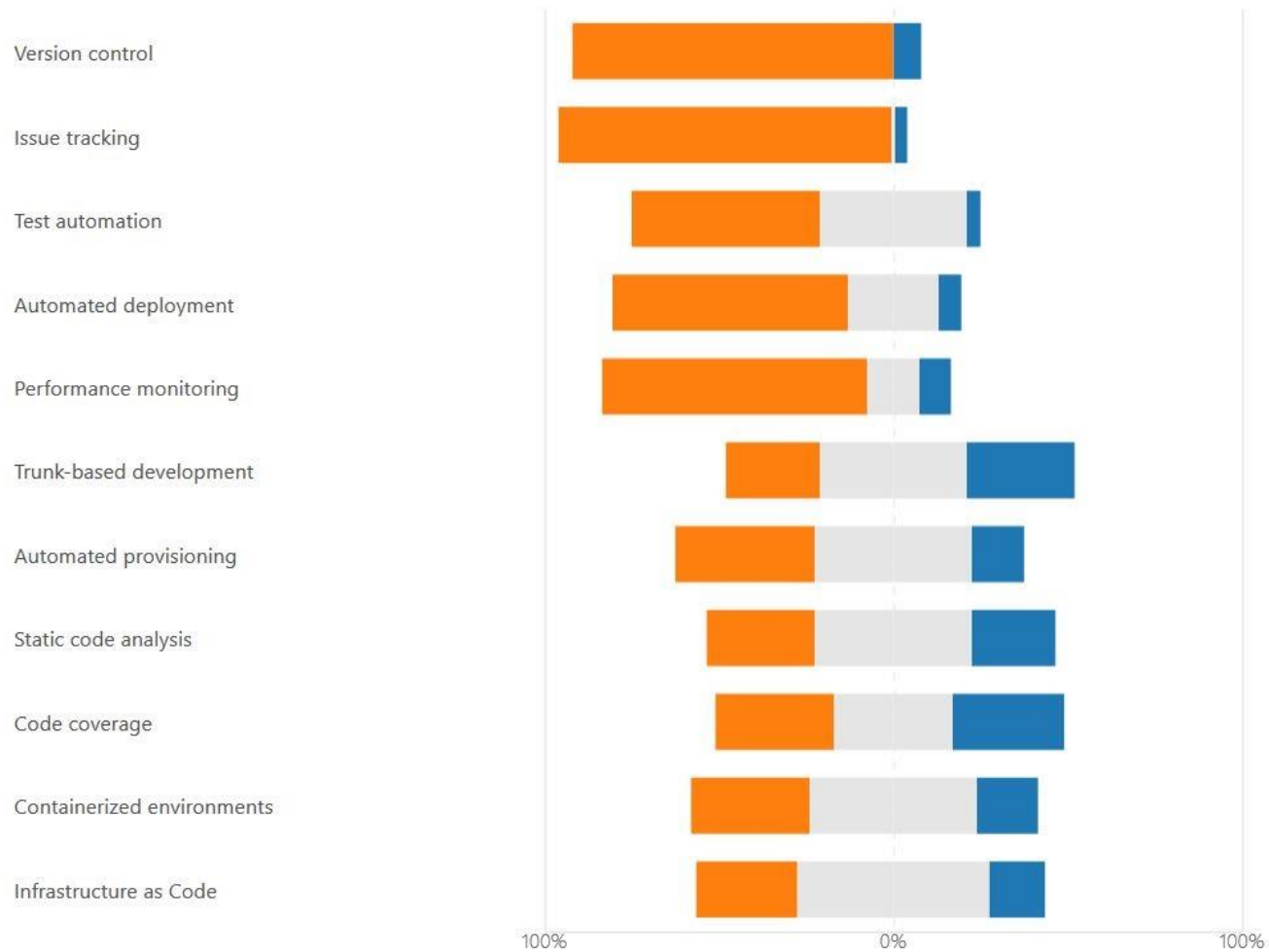


Which region are you based in? Please select only one option.



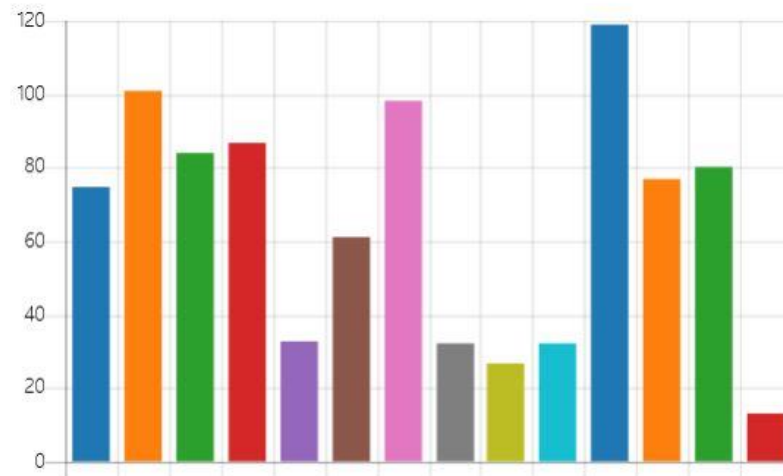
Which, if any, of the following techniques are already in place in your organization?

Yes No Not sure

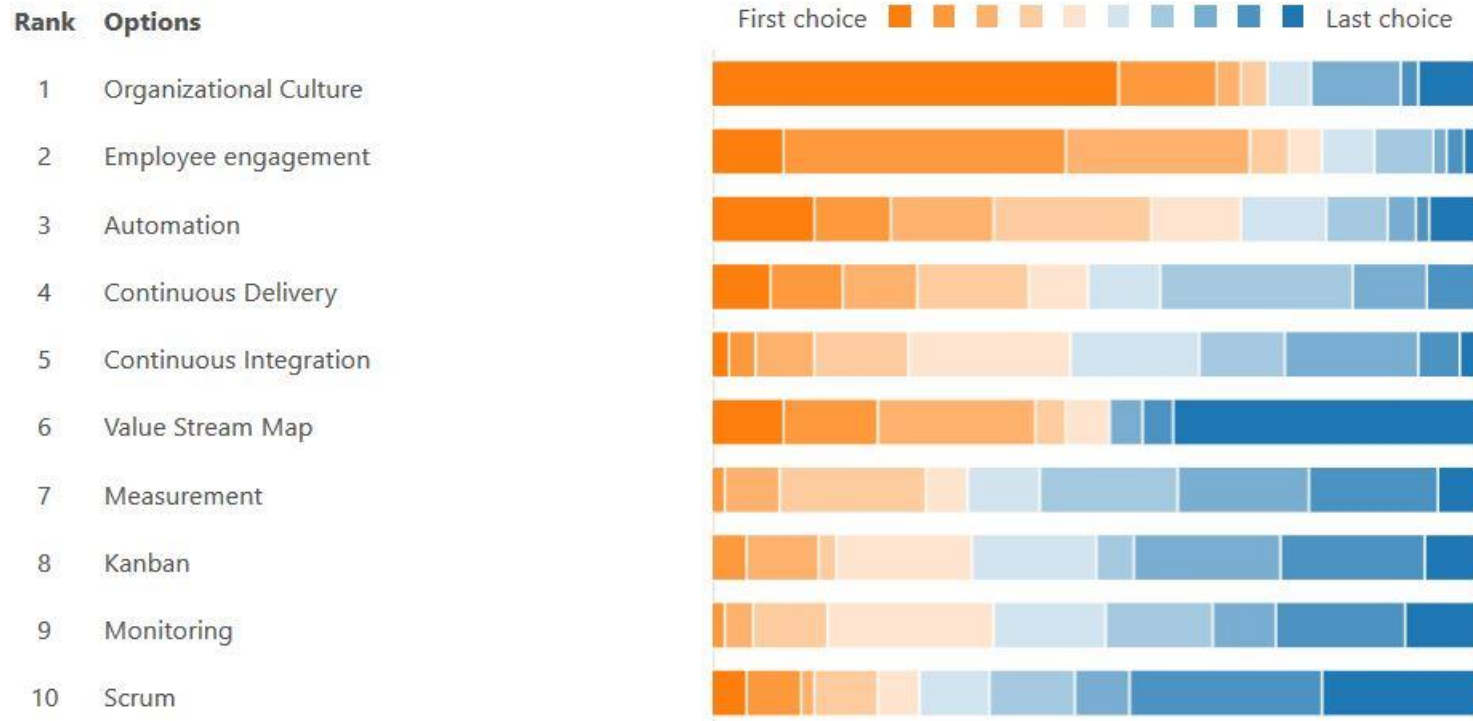


State in your opinion how should DevOps practice and principles adoption levels be measured.
Please select as many options as you deem appropriate.

Behavioral metrics	75
Critical Success Factors	101
Deployment duration (time)	84
Deployment frequency	87
Deployment size	33
Feature usage	61
Key Performance Indicators	98
Knowledge article creation frequency	32
Knowledge article read frequency	27
Releases frequency per developer	32
Time to Market	119
Time to Recovery	77
Time to Detect (defect)	80
Other	13

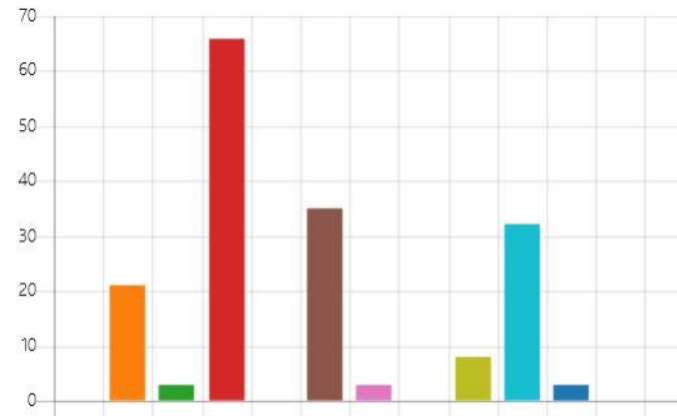


Considering the following practices and principles which ones do you consider most beneficial to an organisation's ability to maximise value delivered to the customer via DevOps?



Who is primarily involved in the decision-making process of DevOps practice adoption? Please select only one option.

Analyst	0
Architect	21
Business Domain	3
C-Level (CIO, CTO, CDO, etc.)	66
Developer	0
Development Lead	35
DevOps Engineer	3
Information Security Officer	0
Operations Lead	8
Product Owner	32
System/Network/Database Ad...	3
External Consultant	0
Other	0



Should a new practice adoption leadership role exist such as DevOps Leader role?

Yes	106
No	62
Other	3



Take the Survey and Represent Sweden!

The research study focuses on value-based product development having an approach across Agile, Lean IT and DevOps principles and practices.

The survey should take less than 8 minutes to complete.

Special thanks to all of the respondents.

Survey Link:

<https://lnkd.in/dUycsef>

