DevOps INSTITUTE

ADVANCING THE HUMANS OF DEVOPS

What I Learned in 2020

Helen Beal

DevOps Institute

Human

Ways of Working Practitioner

Strategic Advisor

Chief Ambassador: DevOps Institute

Ambassador: CD Foundation

DevOps Editor: InfoQ

Analyst: Accelerated Strategies

Ecologist, novelist

Volunteer warden at Kingley Vale

Can dig an Olive Ridley turtle nest

Mission: Bringing joy to work

DevOps Institute

The Joy of Community

DevOps Institute Ambassador Community

AMBASSADOR

DevOps INSTITUTE

Human of DevOps

DevOps Institute

DevOps Institute Chapters

DevOps Institute

The Professional Membership Program

COMING SOON!

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The Joy of
Home

Sean D. Mack 5 Followers · About Follow

Upgrade

DevOps for Pandemics

Sean D. Mack Oct 27 · 10 min read

by Sean D. Mack and Sia Ahmadzadeh

COVID-19 has transformed the way we live and work. Today we sit amid a pandemic whose effects will extend well beyond today and into the future of work. This is truly an unprecedented event and it has forced us to adapt in ways that we could not have anticipated. DevOps has evolved over the past ten years as a set of principles to respond more quickly to the rapidly changing business and technology landscape. DevOps has transformed the way we work by bridging the gap between development and operations teams and improving time to market while improving service availability. Key DevOps principles and practices such as collaboration, transparency, and automation stand at the core of our ability to adapt. The same DevOps

"The same DevOps principles which have helped deliver better market outcomes have also helped us to adapt to rapidly changing conditions brought about by the COVID-19 pandemic."

WILEY

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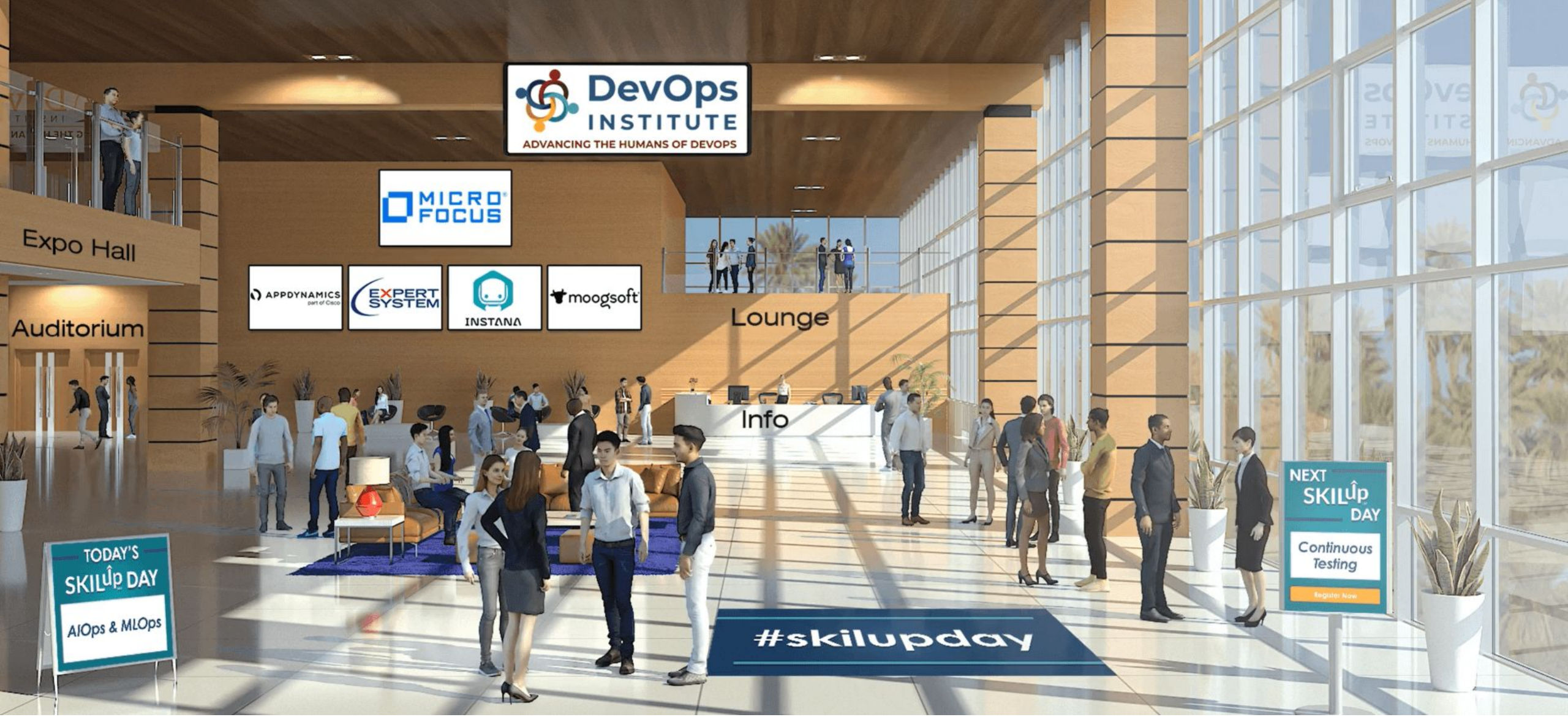
What Wiley Observed

- Adaptability through DevOps processes, practices and tooling
  - Cloud, IaC, CICD, ‘socially distanced’ applications
- Increase in use of collaboration tools
- Inclusiveness and a culture founded in trust
- Focus on learning for security in the face of increased attack vectors
- Infrastructure elasticity as customers (students) flock to online learning
- Transparency/visibility - monitoring and business continuity dashboard



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ROAD TO OBSERVABILITY

CETRIC OR AGNOSTIC : THAT IS THE QUESTION

CHRIS ENGELBERT

EVERYTHING IS C·O·N·N·E·C·T·E·D SOMEHOW

~~FIXED THRESHOLDS~~

ANOMALY

AS HUMANS WE NEED A MACHINE TO CORRELATE ANALYZE DATA

FINDING PATTERNS

BASELINE

LOTS OF DIFFERENT DATA SOURCES

PROBABLY APART OF OBSERVABILITY

LIKE FLYING A 747 - LOTS GOING ON

OLD VERSION

NEW VERSION NO MORE COCKPIT FULL OF BUTTONS

SCREEN TELLS YOU WHAT YOU NEED TO KNOW

LIMIT ON WHAT WE CAN PROCESS

- MANY VASTLY DIFFERENT COLLECTORS.
- VARYING DATA QUALITY.
- HARDER TO SETUP. CONFIGURE BY I.
- VISUALIZATION FREEDOM NOT ALWAYS GOOD
- BROADER SYSTEMS SUPPORT
- REUSE EXISTING DATA COLLECTORS

DATA FROM EXTERNAL

THEIR FOCUS

DEPENDENCIES

DOMAIN-AGNOSTIC VS. DOMAIN-CENTRIC

PROS & CONS

ONE-STYLE COLLECTOR

SINGLE PROVIDER

- CONSISTENT DATA QUALITY
- QUICK & EASY TO GET STARTED
- VERY OPINIONATED
- LESS SYSTEMS SUPPORT
- INTEGRATION WITH EXTERNAL TOOLS

SKILUP DAYS

INSTANA

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The Joy of Journeys

We are not on the
road anymore.

Not on a train.

Not on a plane.

COMING SOON!

Team DOCA

DevOps Scorecard

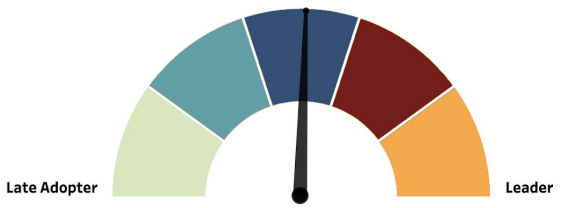
Download

DEVOPS CAPABILITY ASSESSMENT

5 Dimensions of DevOps Capability: How to Become a High Performing Organization

In this digitally disrupted world, we've discovered the patterns, principles and practices that correlate with the organizational designs and behaviors that optimize the flow of value outcomes from idea to value realization and ensure a company survives or even thrives in the face of competitive pressures. You know that you have to be able to deliver more value, at accelerated pace, at higher quality and more safely than you do to delight your customers and teams, but it's very hard exactly to know where to focus your efforts and energy when DevOps evolution has so many complex elements to consider and requires the intent of a large number of humans over several years of time. Our DevOps capability assessments provide insights into where your capabilities are highest (kudos!) and where you may want to pay some more attention to improve. **Keep coming back to them to inspect the impact of the experiments and adapt accordingly; pivot or persevere.**

DevOps Capability Score: 51%



You're about halfway there - keep going! If energies are starting to flag, find new ways to motivate people. Take a close look at how you are measuring improvement, sharing, celebrating and rewarding it. Make sure you are measuring unplanned work and toil and get these tasks out of the way so you and your teams can focus on the fun stuff and get feedback on the value you are creating

Enterprise DOCA

Data Trends

+ Custom Reports

Download

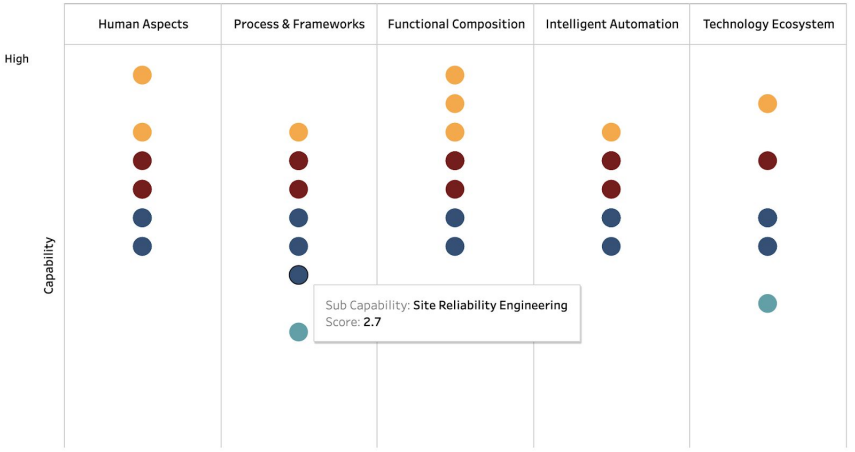
DEVOPS CAPABILITY ASSESSMENT

Capability Distribution

Highlight Capability - Sub Capability: Highlight Capability - Sub Capability

Teams: Team 1

Strongly Disagree (1 - 1.8) Disagree (1.9 - 2.6) Neither Agree Nor Disagree (2.7 - 3.4) Agree (3.5 - 4.2) Strongly Agree (>=4.3)



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The Joy of
Flow

2020

State of DevOps Report

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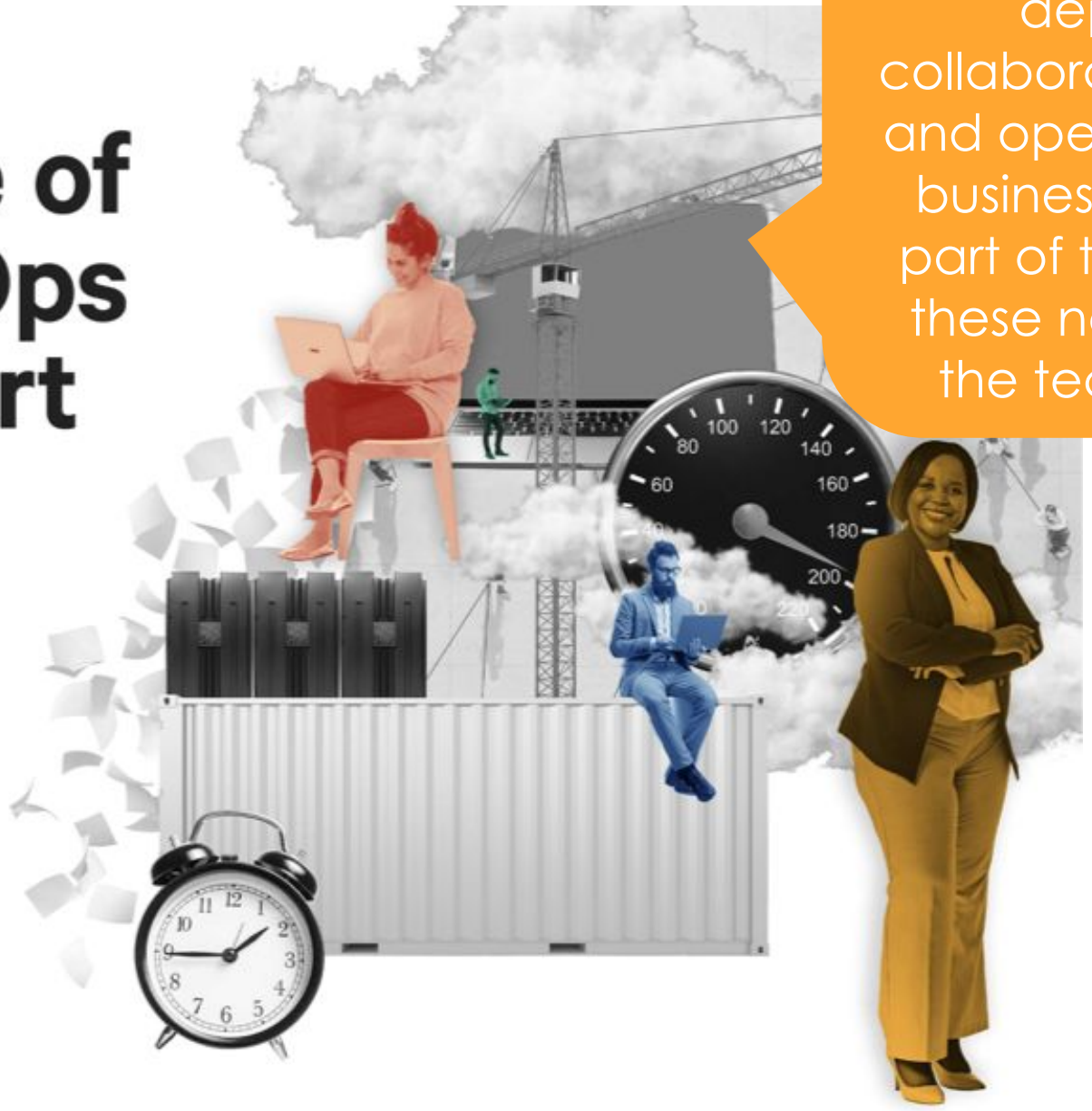

"In any organization, creating value through software does not depend solely on good collaboration between developers and operators. Nearly all adjacent business functions are ultimately part of the software process, and these need to evolve along with the technical delivery teams."

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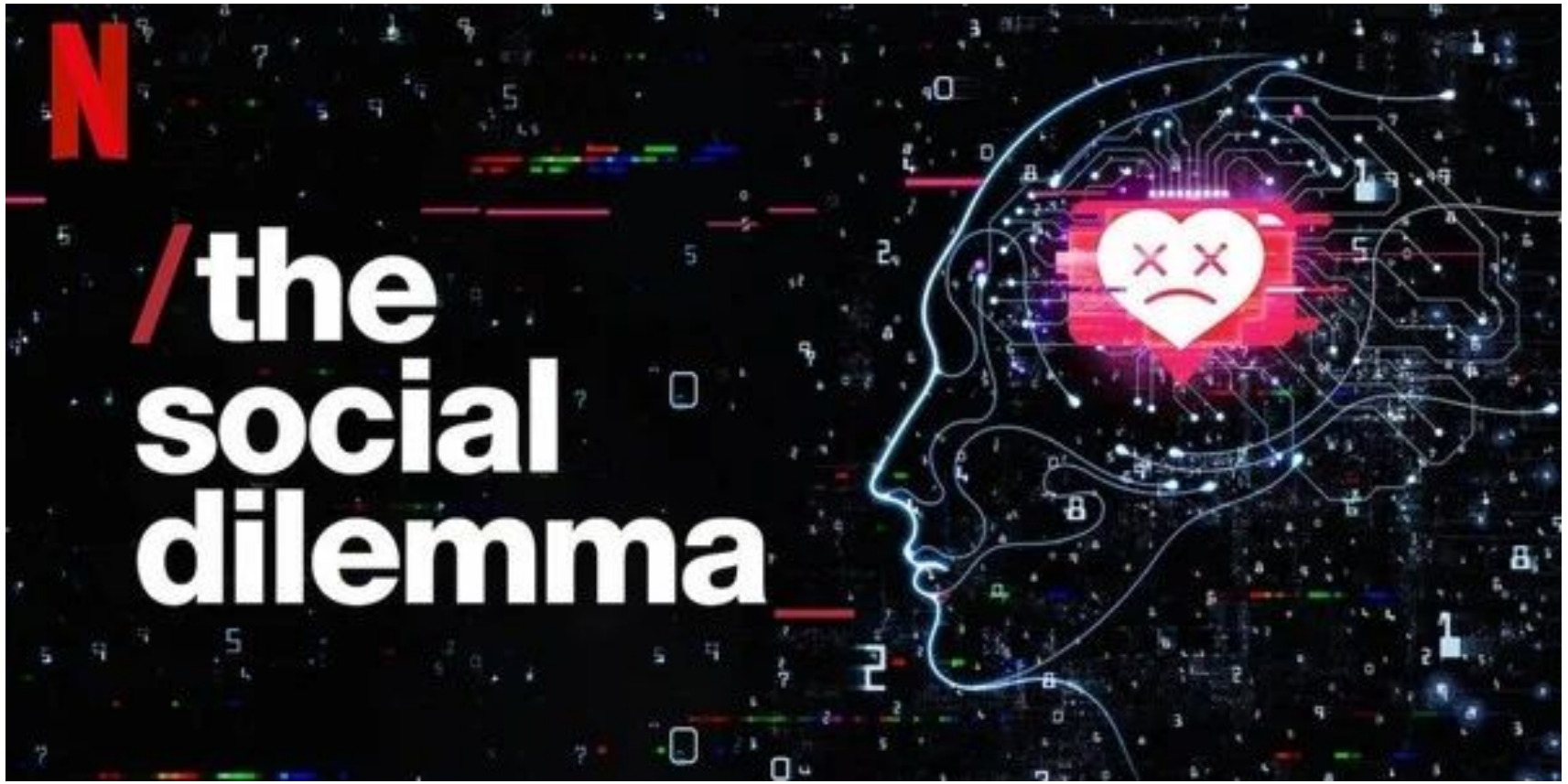
"When we published our first VSM evaluation in 2017, few AD&D leaders had heard of VSM; since then, the VSM tools market has evolved rapidly as have prospective buyers of VSM tools. AD&D planners, engineers, and release experts understand VSM and want it to help them plan, create, and deliver software experiences that align to both the business' and customers' needs. In fact, 33% of development managers tell us that collecting and integrating more feedback from users and speeding release and cycle times are among their top three priorities. Smart AD&D leaders know they can't improve their processes without data. VSM gives them the data they need to create baselines of current software delivery practices and set a path for improvement across each role of the AD&D organization."

FORRESTER®

The Forrester Wave™: Value Stream Management Solutions, Q3 2020' by Chris Condo with Christopher Mines, Diego Lo Giudice, Andrew Dobak, and Kara Hartig, published July 15, 2020

The Joy of Humanity

The Attention Economy



As long as social media companies profit from outrage, confusion, addiction, and depression, our well-being and democracy will continue to be at risk.

Center for Humane Technology

Driven by Value

Center for Humane Technology

"You can be **values-driven** while still being informed by metrics. You can spend your time thinking about the specific values (e.g., health, well-being, connection, productivity, fun, creativity…) you intend to create with your product or feature. Those values can be a source of inspiration and prioritization. You can measure your success directly by investing in mechanisms of understanding that match the complexity of what you value, e.g. qualitative research and bringing in outside expertise."

? How can technology help increase capacities for concentration, clarity, and equanimity?

? How can technology foster a sense of agency and community?

? When are you vying for the user's attention for the benefit of your product rather than for their benefit?

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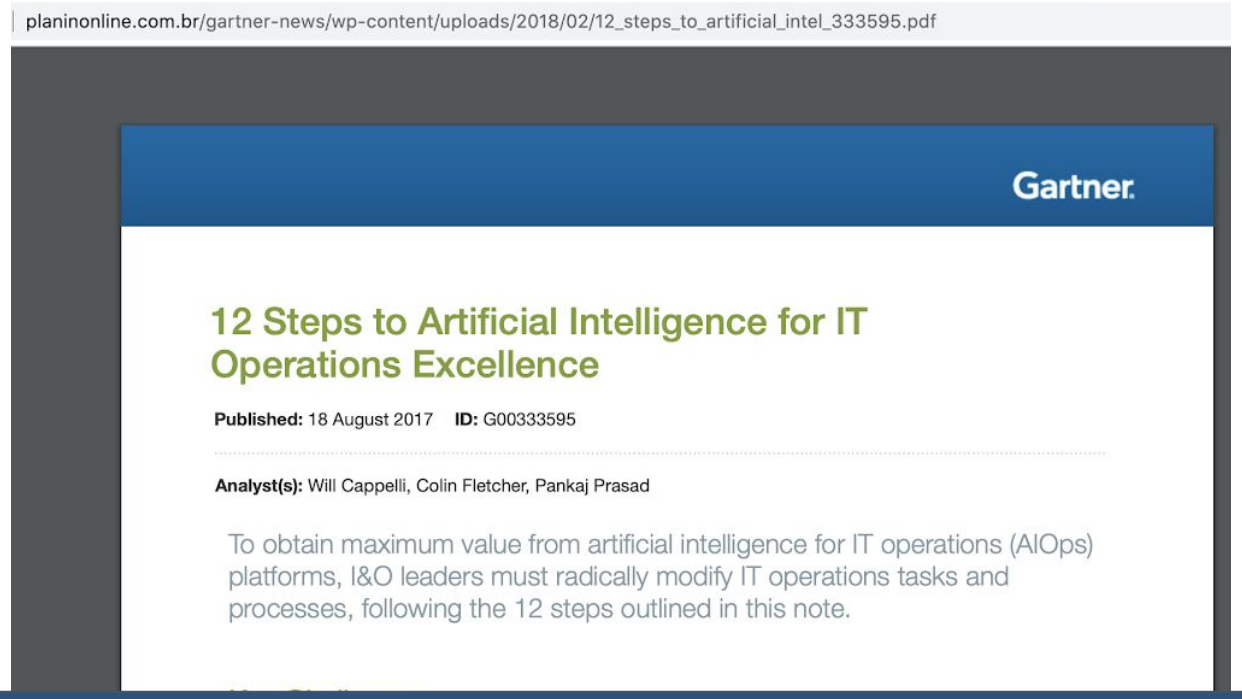
The Origins of AIOps

Given that most performance incidents, ultimately, result from changes and that many of those changes originate on the development side of the house, continuous communication between development and production is the surest path to quickly and effectively isolating the root cause of a performance incident. (Will Cappelli)



40% of DevOps teams will be using application and infrastructure monitoring apps that have integrated artificial intelligence for IT operations (AIOps) platforms by 2023. (Gartner as quoted by Forbes)

Gartner®

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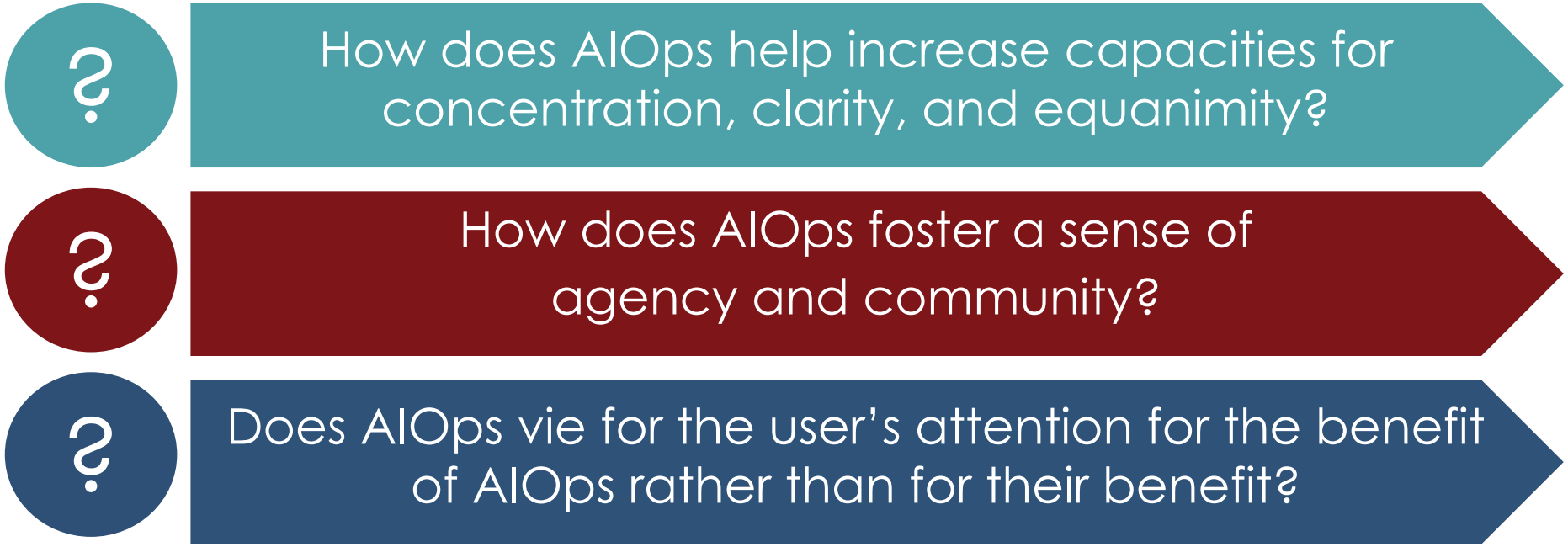
AIOps is Humane.
AIOps Helps Us Be Humane.



2021

2020 State of DevOps Report

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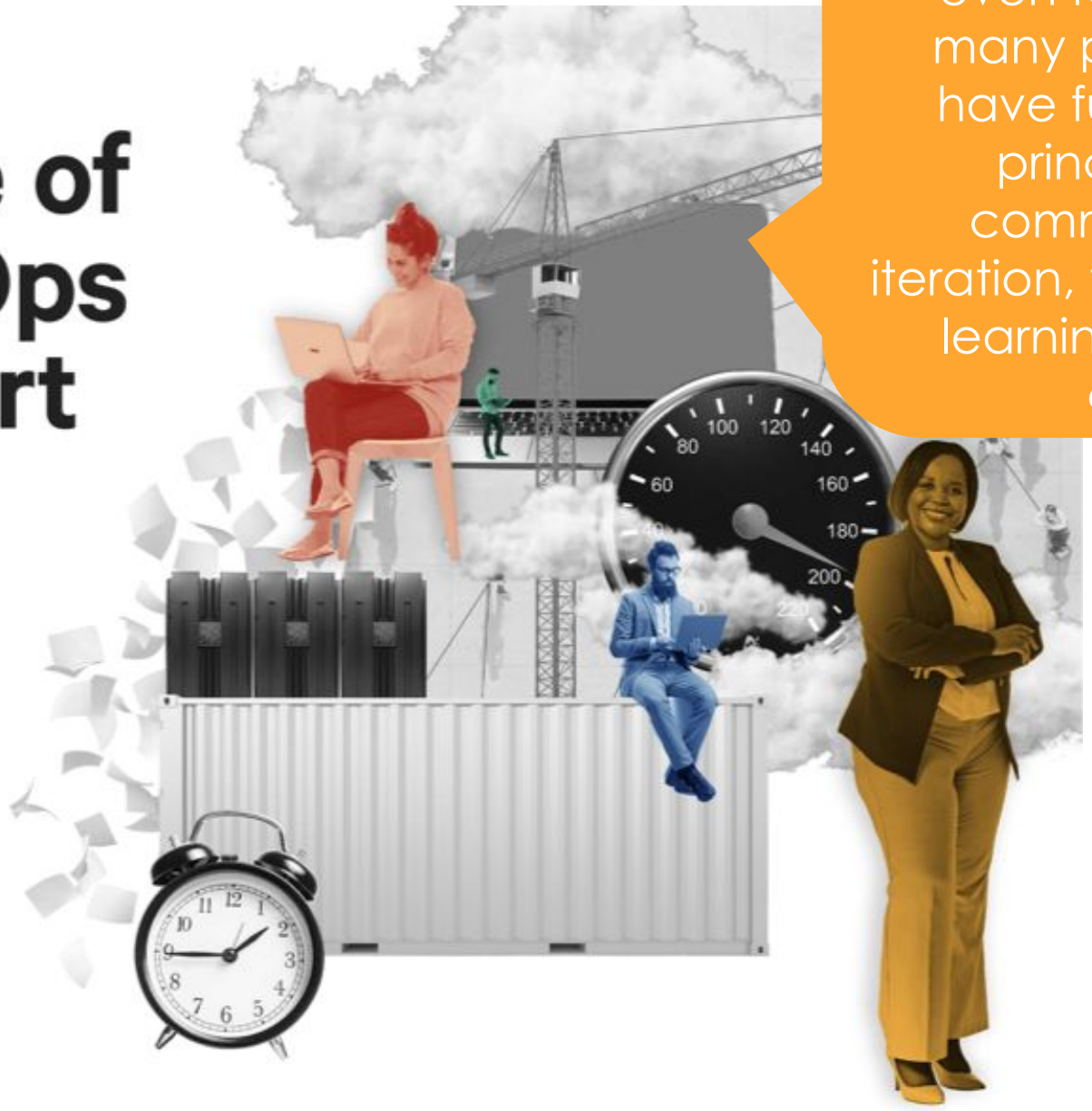

> "Perhaps a few years from now, the term "DevOps" will sound quaint — even fade away — because so many people and organizations have fully adopted the DevOps principles of collaboration, communication, small-batch iteration, feedback loops, continuous learning and improvement. We certainly hope so."

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"To accelerate development and enable continuous delivery of customer value, organizations need to reach the next level in their agile and DevOps practices. I&O leaders and application leaders must focus on value stream management to maximize flow, improve delivery efficiency and drive innovation."

Gartner

'Predicts 2021: Value Streams Will Define the Future of DevOps' by Daniel Betts, Chris Saunderson, Ron Blair, Manjunath Bhat, Jim Scheibmeir, Hassan Ennaciri. Published 5 October 2020

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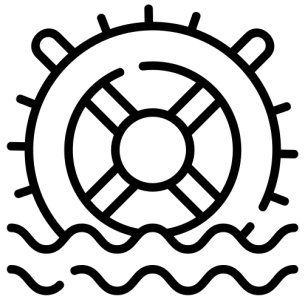
Carlota Perez

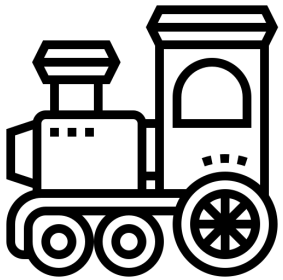
1



The industrial revolution

1771

2



The age of steam and railways

1829

3

Age of steel, electricity and heavy engineering

1875

4

Age of oil, automobiles and mass production

1908

5

Age of information and telecomms

1971

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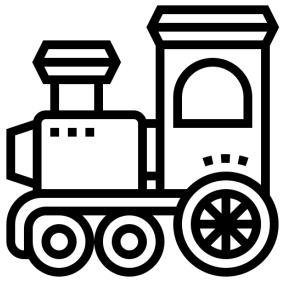
1



Steam engines

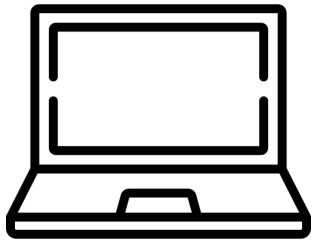
18th - 19th century

2

Steel, oil, electricity, combustion engines

1870-1914

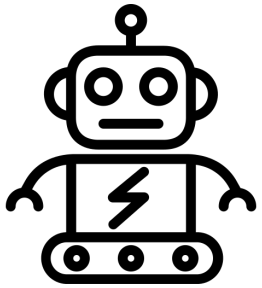
3



Digital revolution

1980's

4



AI, big data, robotics, IoT, blockchain and crypto

21st Century

5

Connection of frontier tech to purpose and inclusivity

21st Century

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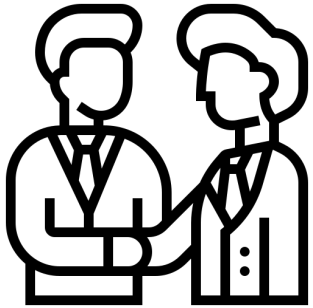
1

Managerial capitalism

1930

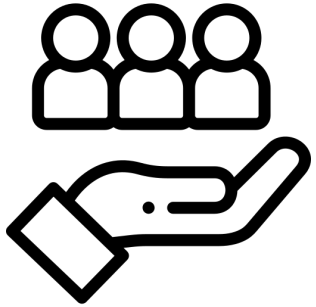
2



Shareholder capitalism

1980

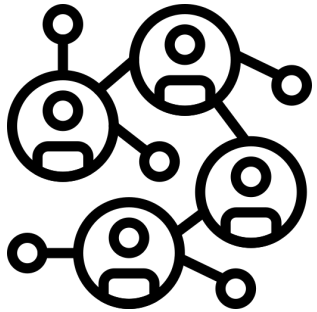
3



Customer capitalism

2010

4



Community capitalism

2020

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"In contrast to trends in the 4th Revolution toward de-humanization, technology and innovation best practices are being bent back toward **the service of humanity** by the champions of the 5th."

Jim Van Eerden

"Most of the conferences I attend focus on 'the next big tech thing' and what it can do, often to the exclusion of the utility and impact the technology will have on society. I am most often asked what the next 'smart money' tech trend is in fintech. I am now happy to report it is not blockchain, bitcoin, or AI.
It is humanity."

Lawrence Wintermeyer

Thanks for listening!
Stay human.

Helen Beal

Chief Ambassador at DevOps Institute

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