

#### HOW THIS STUDY WAS CONDUCTED

The HPE 2019 As-a-Service: Driving Change Report is based on primary research conducted across three countries – the United States, Germany and the United Kingdom.

The research explores IT Decision Makers'\* awareness of as-a-Service (aaS) solutions, attitudes towards it, as well as their hopes and worries related to its adoption, both now and in the future.

The following research is organized in 5 key themes:

- 1. IT industry's future looks bright
- 2. aaS is here to stay
- 3. Overcoming barriers
- 4. Ensuring career growth and opportunity
- 5. It takes a village and C-suite support

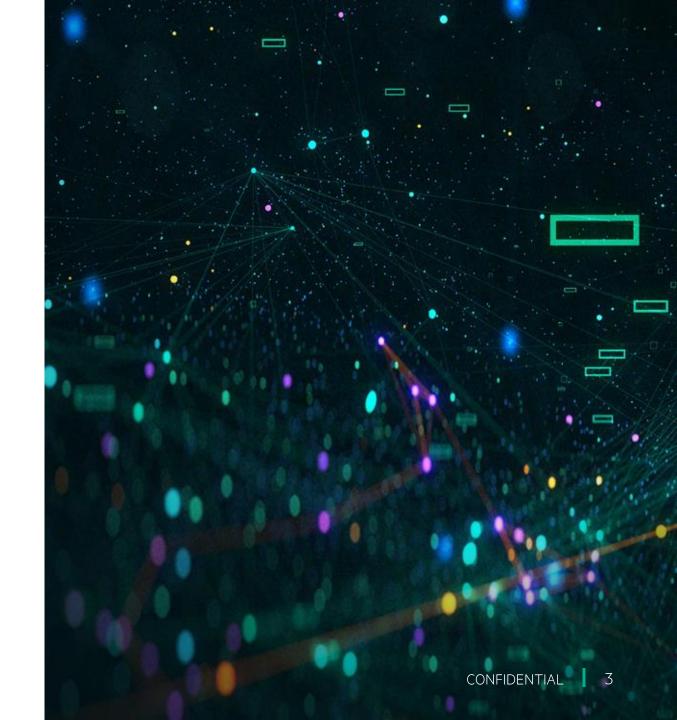
The study was commissioned by HPE in partnership with an independent market research firm and included over 1,000 IT Decision Makers across all countries, and includes a range of sample across age groups, seniority, sector and company sizes.\*

In the following, when referred to the "total" that refers to the average of all ITDMs across all countries surveyed.



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#### **EXECUTIVE SUMMARY**

- aaS adoption is well underway and here to stay.
  - 87% of ITDMs confirm that implementation of aaS solutions has already started or been fully implemented at their organizations, and just as many (86%) agree that widespread adoption is inevitable.
- ITDMs agree that aaS is fundamental for innovation, efficiency and costs.
  - ITDMs agree that without aaS, innovation would be stagnant and that with transitioning to aaS solutions, there is more to be gained than there is to be lost, both financially (88%) and as it relates to efficiency (89%).
- Potential barriers include costs, legacy systems and fear of being replaced.
  - Interestingly, those under 55 are more likely than their older peers to think IT professionals often stay away from aaS out of fear of losing their jobs.

- Younger ITDMs are more concerned than their older peers.
  - ITDMs under 55 are more concerned to keep up with changing aaS developments/transformations (ages 22-34: 74%, ages 35-54: 74% vs 55+ 49%), and that digital natives may have an advantage over their experience (ages 22-34: 69%, ages 35-54: 70% vs 55+ 48%).
- 5 ITDMs long for C-suite support.
  - Most ITDMs (86%) say the C-suite recognizes the business value of aaS solutions but 78% also wish the Csuite was more supportive of aaS adoption at their organizations.



### **DEMOGRAPHICS – TOTAL**

#### **REGION**



Germany

318

respondents



USA

434

respondents



UK

321 respondents **AGE** 



35-54

55+ 10% **JOB TITLE** 



C-suite

44%



Non-C-suite

56%

#### **COMPANY SIZE**



Small (<100)

Medium

(100-999)

Large (1,000+)

13%

43%

44%

#### **SECTOR**



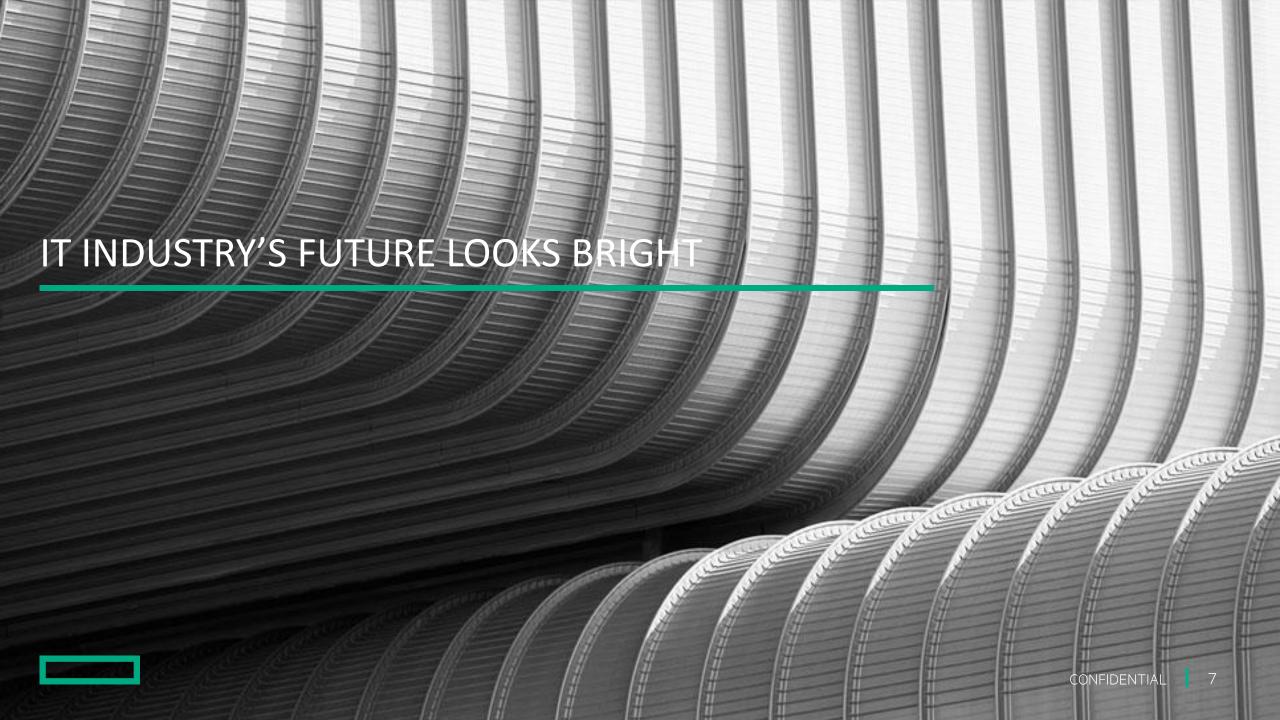
Public

25%



Private

75%

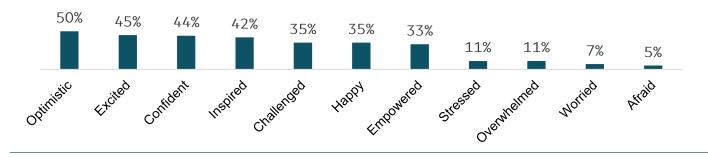


# ITDMS HAVE A POSITIVE OUTLOOK ON THE IT INDUSTRY'S FUTURE

- While many ITDMs feel positive about being part of the future of the IT industry, there are differences between Americans and their German peers.
- However, some also feel challenged, stressed and overwhelmed about the future of the IT industry.
  - Almost one-in-ten Germans are worried or afraid.
- ITDMs 35 and older are more likely to feel inspired about the future of the IT industry than those under 35.

#### **TOTAL**

Thinking of the future of the IT industry overall and being part of it in the future makes ITDMs feel...



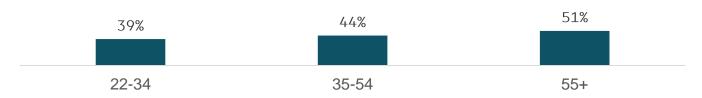
#### **REGION**

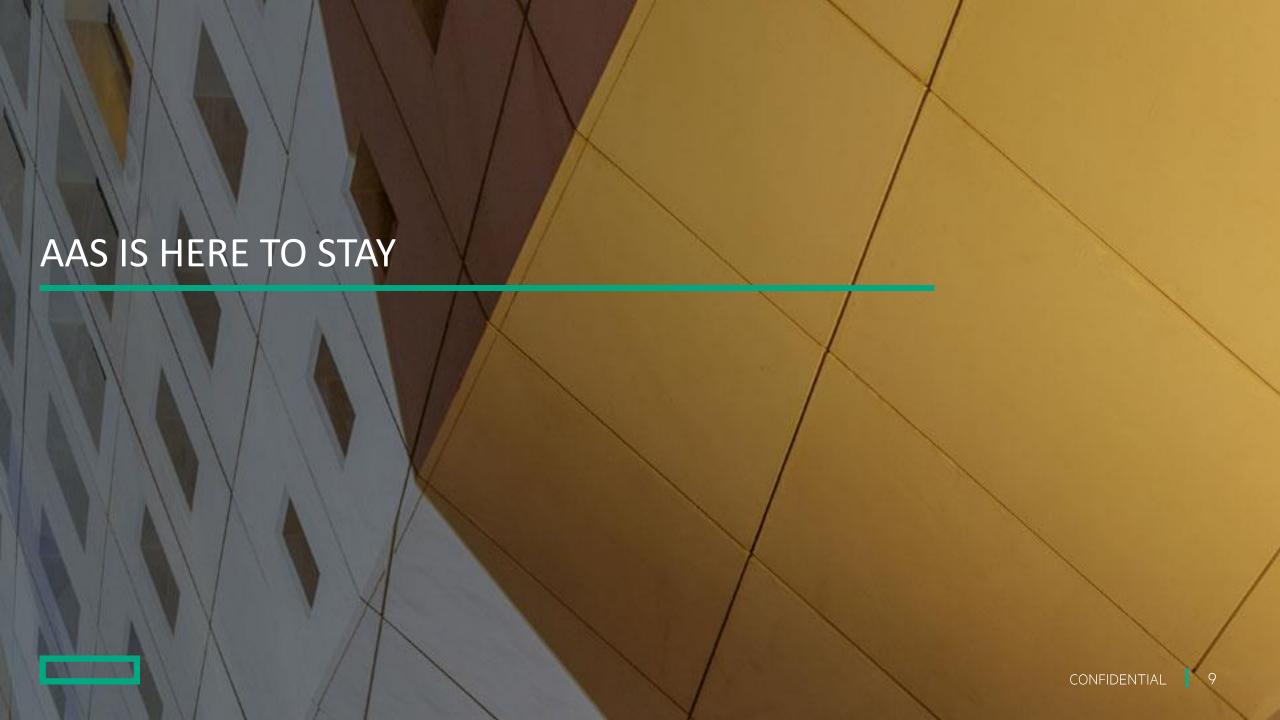




#### **AGE**

ITDMs who feel inspired to be part of the IT industry future



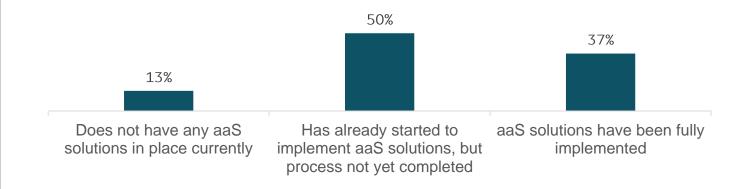


### ADOPTION OF AAS SOLUTIONS IS WELL UNDERWAY

- About nine-in-ten (87%) ITDMs across all countries surveyed state that their organizations have started to implement aaS solutions or have already completed the process.
- Three-quarters of all ITDMs surveyed expect their organizations to move toward full adoption of aaS solutions in less than 5 years.
- More than eight-in-ten regard widespread adoption as inevitable.

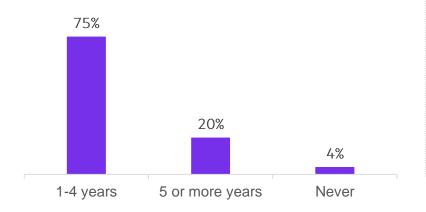
#### TOTAL

Current adoption of aaS solutions at organizations



#### **TOTAL**

ITDMs think their organizations will move towards full aaS adoption in the next...



#### TOTAL

Widespread aaS adoption is inevitable



#### **AGREE**

(somewhat/strongly)

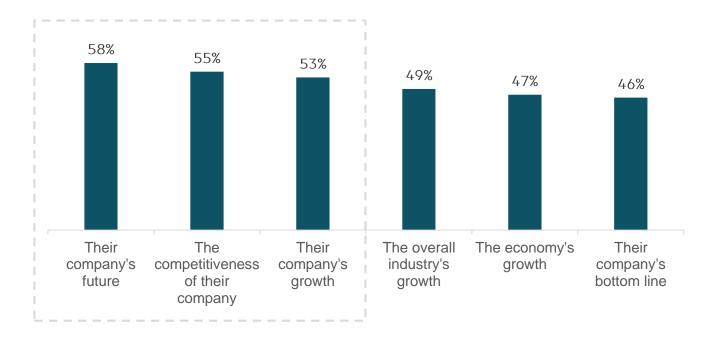


# ITDMS RECOGNIZE BENEFITS OF AAS FOR THEIR OWN COMPANY

- ITDMs agree that aaS solutions will be very important for their company's future, competitiveness and growth, but slightly less so for its bottom line.
- Fewer believe aaS adoption will be very important for the industry's and economy's growth.

ITDMs who believe aaS solutions are VERY important for...

#### **TOTAL**

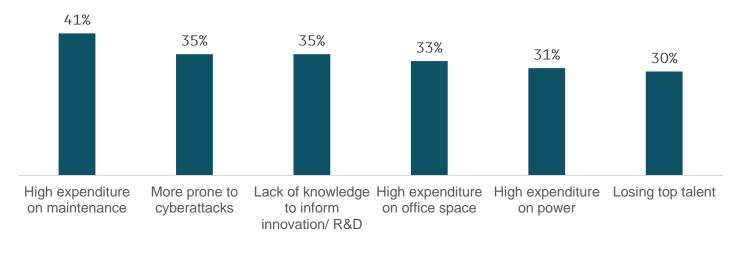


# ITDMS RECOGNIZE THREATS FOR ORGANIZATIONS THAT DON'T ADOPT AAS

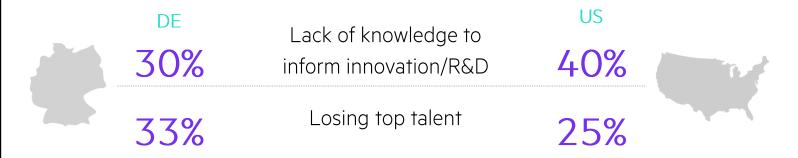
- According to ITDMs, if aaS solutions are not adopted in the future an organization may face:
  - high expenditures on maintenance, office space and power;
  - being more prone to cyberattacks; and
  - lacking knowledge to inform innovation/ R&D.
- US ITDMs are particularly worried about the lack of knowledge to inform innovation/ R&D as an effect of not adopting aaS solutions.
- Many also fear losing top talent, especially in Germany.

#### **TOTAL**

Key challenges for organizations that won't adopt aaS solutions in the future



#### **REGION**



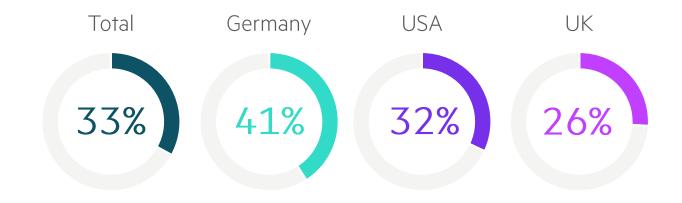


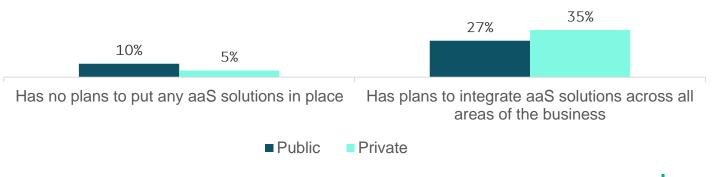
# ITDMS HAVE PLANS TO INTEGRATE AAS ACROSS THE BUSINESS

- Germany appears to be a frontrunner, as two-in-five ITDMs state that they have plans in place to integrate aaS solutions across all areas of their business.
- Across all countries surveyed, ITDMs in the public sector are twice as likely as those in the private sector to not have any plans in place, and significantly less likely to have plans to integrate aaS solutions across all areas of the business.

ITDMs' organizations have plans to integrate aaS solutions across ALL areas of their business

#### **REGION**



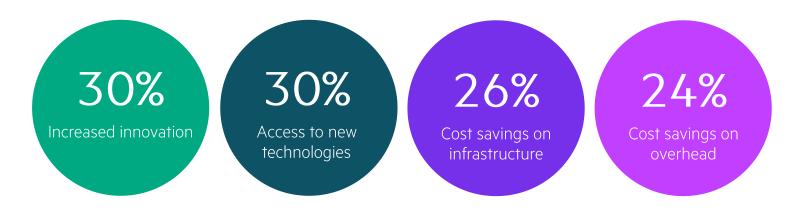


# INNOVATION IS THE TOP REASON AAS IS ADOPTED

Top reasons for adopting aaS solutions include increased innovation, access to new technologies and cost savings, both on infrastructure adoption and overhead.

#### **TOTAL**

Top reasons for adopting aaS solutions

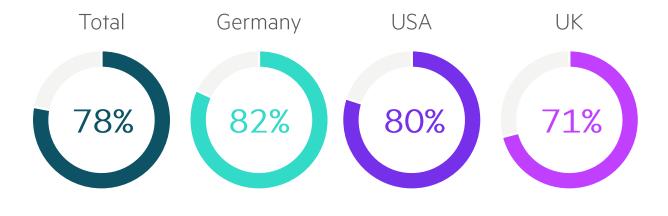


# INNOVATION WILL BE STAGNANT WITHOUT AAS

- A majority of ITDMs agree that without aaS, innovation would be stagnant.
- Though most agree, UK's ITDMs are the least likely across all countries to feel this way.
- Younger generations appear more passionate that innovation will be stagnant without aaS, as eight-in-ten ITDMs under 55 agree, compared to only about two-thirds of ITDMs 55+.

#### **REGION**

ITDMs who agree (strongly/somewhat) that without aaS, innovation will be stagnant



#### **AGE TOTAL**

ITDMs who agree (strongly/somewhat) that without aaS, innovation will be stagnant

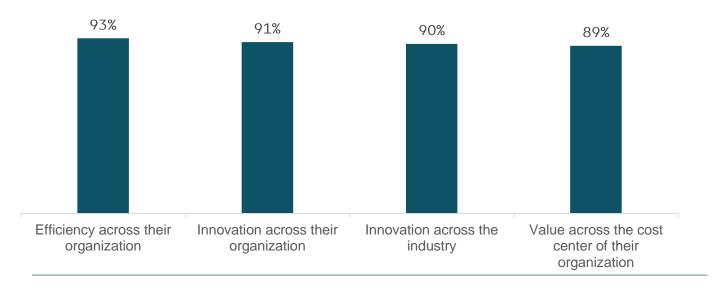
79% 80% 64% 22-34 year-olds 35-54 year-olds 55+ year-olds

### AAS SPURS COST SAVING AND EFFICIENCY

- ITDMs also agree that adoption of aaS is a way to drive efficiency across their organizations, as well as drive innovation across their organizations and the industry.
- The vast majority of ITDMs agree that with transitioning to aaS solutions there is more to be gained than there is to be lost, both financially and as it relates to efficiency.

#### TOTAL

ITDMs who agree (strongly/somewhat) that the adoption of aaS as a way to drive...



#### **TOTAL**

ITDMs agree there is more to be gained from transitioning to an aaS solutions model than there is to be lost...

88% Financially &

89%
In terms of efficiency

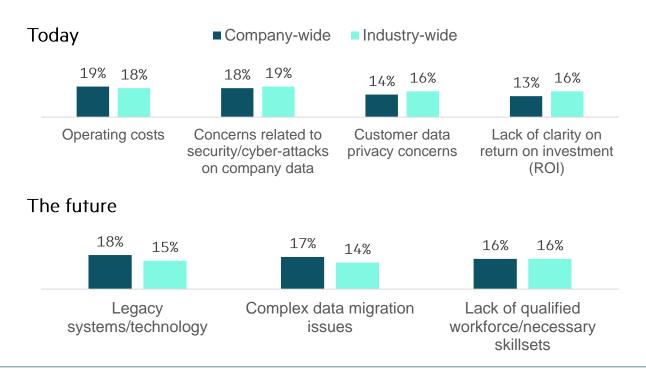


### MAIN AAS BARRIERS ARE COST, PRIVACY CONCERNS AND LEGACY SYSTEMS

- ITDMs cite the same barriers to aaS solution adoption for their organizations and industrywide today, including operating costs, cyber attacks on company data, customer data privacy concerns and lack of clarity on return on investment (ROI).
- In *the future*, however, ITDMs equally expect their organizations and the wider IT industry to struggle with legacy systems, data migration issues and lack of a qualified workforce.
- ITDMs 55+ are significantly more likely than the total to see complex data migration issues as one of the top challenges/barriers of aaS adoption for their company in the future.

#### **TOTAL**

Biggest challenges/barriers of aaS solution adoption – now and in the future



#### **AGE**



55+ years old who expect complex data migration issues to be the key challenge in the future in their organizations:

27%

s. 17% total

# FEW HAVE DATA MIGRATION ISSUES, BUT WORRIES STALL PUBLIC CLOUD ADOPTION

- About three-fourths of ITDMs confirm they have no issues when migrating their organization's data to the public cloud.
- And yet, about two-thirds state they agree that data migration to the public cloud is currently stalled at their organizations, potentially indicating internal business decisions that need to be made prior to actually migrating data to the public cloud.
- Only about two-fifth of those 55+ feel data migration to the public cloud is stalled at their organizations, compared to much higher numbers among younger ITDMs.

#### TOTAL

ITDMs who had no issues when migrating their organization's data to the public cloud



ITDMs who say data migration to a public cloud is currently stalled at their organizations



#### **AGE**

ITDMs who say data migration is currently stalled at their organizations

**74%** 66% **39%** 22-34 year-olds 35-54 year-olds 55+ year-olds

# THE REAL STRUGGLE FOR TODAY'S ITDMS: DATA SILOS

• About three-quarters of ITDMs agree that at their organizations, data is siloed between public and private clouds and admit that data silos are a key challenge.

#### TOTAL

ITDMs who agree that data is siloed between the public and private cloud at their organizations



ITDMs who say data silos are a key challenge within their organizations



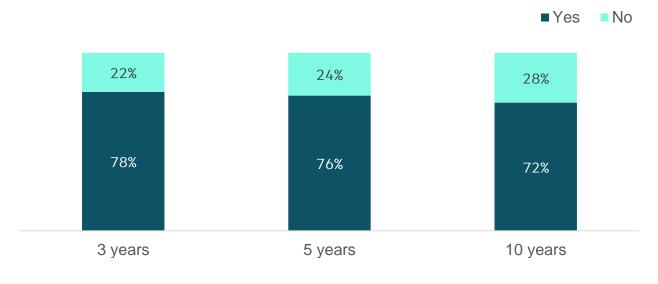
## **ENSURING CAREER GROWTH AND OPPORTUNITY**

## IN NEXT 3 YEARS ITDMS EXPECT AAS TO POSITIVELY IMPACT JOB ROLE

- While across all countries surveyed, about eight-in-ten ITDMs expect aaS adoption to significantly impact their job responsibilities/role in the next 3 years, most view it as a positive change.
- Nine-in-ten ITDMs believe that aaS adoption will allow IT team members more time and space to think strategically and innovate.

#### TOTAL

ITDMs believe aaS adoption will have a significant impact on their job responsibilities/role in the next...\*



#### **TOTAL**

Having aaS in place will allow IT team members to have more time and space to:

$$91\%$$
 &  $91\%$  Innovate



# ITDMS RECOGNIZE AAS AS AN OPPORTUNITY AND CAREER DRIVER

- About nine-in-ten ITDMs agree that aaS adoption will advance their careers.
- Eight-in-ten ITDMs believe their roles will shift from day-to-day IT support toward business strategists.
- Across all countries surveyed, seven-in-ten ITDMs say aaS adoption will make their roles within their organizations more important and give them more control over data and budget.

#### **TOTAL**

Agree (strongly/somewhat) that aaS adoption will advance their careers

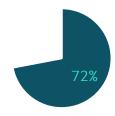


#### TOTAL

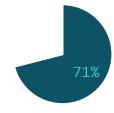
ITDMs who agree (somewhat/strongly) that their roles will be shifting toward business strategists, as opposed to day-to-day IT support



## TOTAL aaS adoption will...



Make their roles within the organizations more important



Give them more control over how the IT budget will be spent



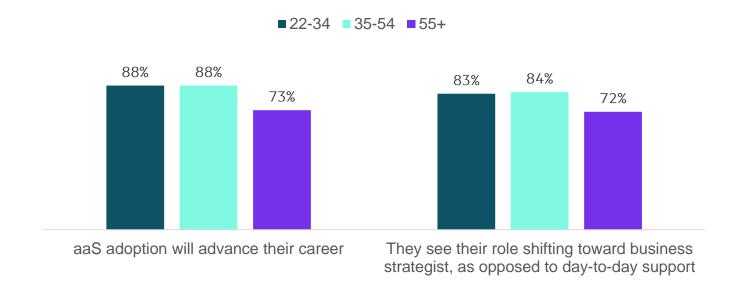
Give them more control over data

# YOUNGER ITDMS RECOGNIZE AAS AS AN OPPORTUNITY AND CAREER DRIVER...

- ITDMs 55+ are less likely to see the opportunity aaS presents for career advancement.
- ITDMs 55+ are less likely than younger generations to see their roles shift towards business strategists, as opposed to day-to-day support.

#### **AGF**

ITDMs who agree (strongly/somewhat) that...



## ...BUT OVERWHELMED BY OPTIONS AND WORRIED THEY CAN'T KEEP UP

- About seven-in-ten ITDMs are concerned about keeping up with the changing aaS developments and transformations and twothirds worry about new generations of digital natives having an advantage over their experience as it relates to aaS adoption.
- The C-suite is more concerned than the total about both the changing landscape and new generations of digital natives.
- While, ITDMs 55+ are much less concerned about the changing aaS developments and new generations of digital natives having an advantage than younger generations.

#### **TOTAL**

71%

are concerned (strongly/somewhat) about keeping up with the changing aaS developments/transformations

#### I FVFI

C-suite even more so than the total

74%

#### **AGE**

Concern varies across age groups

74% 74% 49% 22-34 35-54 55+ year-olds year-olds

#### **TOTAL**

67%

are concerned (strongly/somewhat) that new generations of digital natives are having an advantage over their experience as it relates to aaS adoption

#### I FVFI

C-suite even more so than the total

72%

#### AGE

Concern varies across age groups

69% 70% 48% 22-34 35-54 55+ year-olds year-olds



# ITDMS EXPECT AAS TO ELIMINATE CERTAIN JOBS, NOT THEIR OWN

- Most ITDMs agree that aaS adoption will replace certain jobs across industries but only onequarter are strongly concerned that their own jobs would be eliminated.
- C-suite ITDMs are more concerned about their own jobs.
- However, among those who already have aaS solutions implemented, only one-in-five have seen a decrease in employee job security.
- Over half of American ITDMs believe that aaS has increased their job security, while around one-quarter of German ITDMs believe it has decreased their job security.

**TOTAL** 

83%

of ITDMs agree (strongly/somewhat) that aaS adoption will replace certain jobs across industries

But only few have actually seen a decrease in job security

17%

Sentiment is different across countries



VS.

57%

25%
Think job security has decreased

Think job security has Increased

JOB TITLE

Only

24%

are strongly concerned that their own job will be eliminated as a result of aaS adoption

But C-suite ITDMs are significantly more concerned



C-suite

30%

### EMPLOYEES MAY AVOID AAS OUT OF FEAR OF LOSING JOBS

- About two-thirds of ITDMs believe that IT professionals often stay away from aaS solutions out of fear of losing their jobs.
- This is particularly true for younger ITDMs across all countries surveyed.

#### **TOTAL**

ITDMs think IT professionals often stay away from aaS out of fear of losing their jobs



#### AGE

Younger ITDMs more likely to think IT professionals often stay away from aaS out of fear of losing their jobs

## YOUNG ITDMS WORRIED AAS WILL MAKE THEIR JOBS OBSOLETE

- The younger ITDMs are, the more worried that aaS adoption may make their job obsolete.
- ITDMs 55+ are less concerned that aaS adoption is making their job obsolete, compared to those 22-34 years old and those 35-54 years old.

#### **TOTAL**

ITDMs who are concerned (strongly/somewhat) that aaS adoption will make their job obsolete



#### **AGE**

The younger ITDMs are, the more concerned (strongly/somewhat) that aaS adoption may make their job obsolete

60%

VS.

52%

VS.

23%

22-34 year-olds

35-54 year-olds

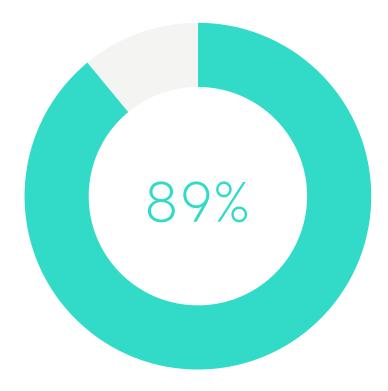
55+ year-olds





# IT TAKES A VILLAGE TO SUCCESSFULLY ADOPT AAS ON A LARGE SCALE

 Nine-in-ten ITDMs agree that successfully adopting aaS on a large scale is the shared responsibility of employees, C-suite and IT ambassadors.



#### **TOTAL**

ITDMs who agree (strongly/somewhat) that successfully adopting aaS on a large scale is the shared responsibility of all stakeholders (incl. employees, C-suite, IT ambassadors, etc.)

# ALL EYES ON THE C-SUITE

- Organizations where aaS solutions have been fully implemented are the ones whose C-suite recognizes aaS' overall business value.
- ITDMs in organizations where aaS solutions are already fully implemented are more likely to say that their C-suite recognizes the overall business value of aaS solutions, compared to those who have only started implementation or have no plans to do so.

#### **TOTAL**

ITDMs who agree (strongly/somewhat) that their organizations' C-suite recognizes the overall business value of aaS solutions



#### **ADOPTION**

Among those whose organization...

78%

...does not have any aaS solutions in place

84%

...has already started to implement aaS solutions

92%

...has fully implemented aaS solutions

agree (strongly/somewhat) that their organizations' C-suite recognizes the overall business value of aaS solutions



# WHILE C-SUITE RECOGNIZES AAS VALUE, ITDMS LACK THEIR SUPPORT — ESPECIALLY FELT BY YOUNGER ITDMS

- While more than eight-in-ten ITDMs state that their organizations' C-suite recognizes the overall business value of aaS solutions, many ITDMs still wish their C-suite was more supportive.
- Support seems to be particularly lacking in medium and large organizations.
- Younger ITDMs particularly agree that they wish the C-suite was more supportive of aaS adoption at their organizations, much more so than ITDMs 55+.

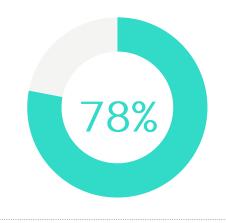
#### **TOTAL**

Organizations' C-suite recognizes the overall business value of aaS solutions (agree somewhat/ strongly)



#### **TOTAL**

ITDMs who wish their C-suite was more supportive of adoption at their organizations (agree somewhat/ strongly)



#### SIZE

Agree (somewhat/ strongly) that they wish the C-suite was more supportive of aaS adoption

Medium sized businesses	79%

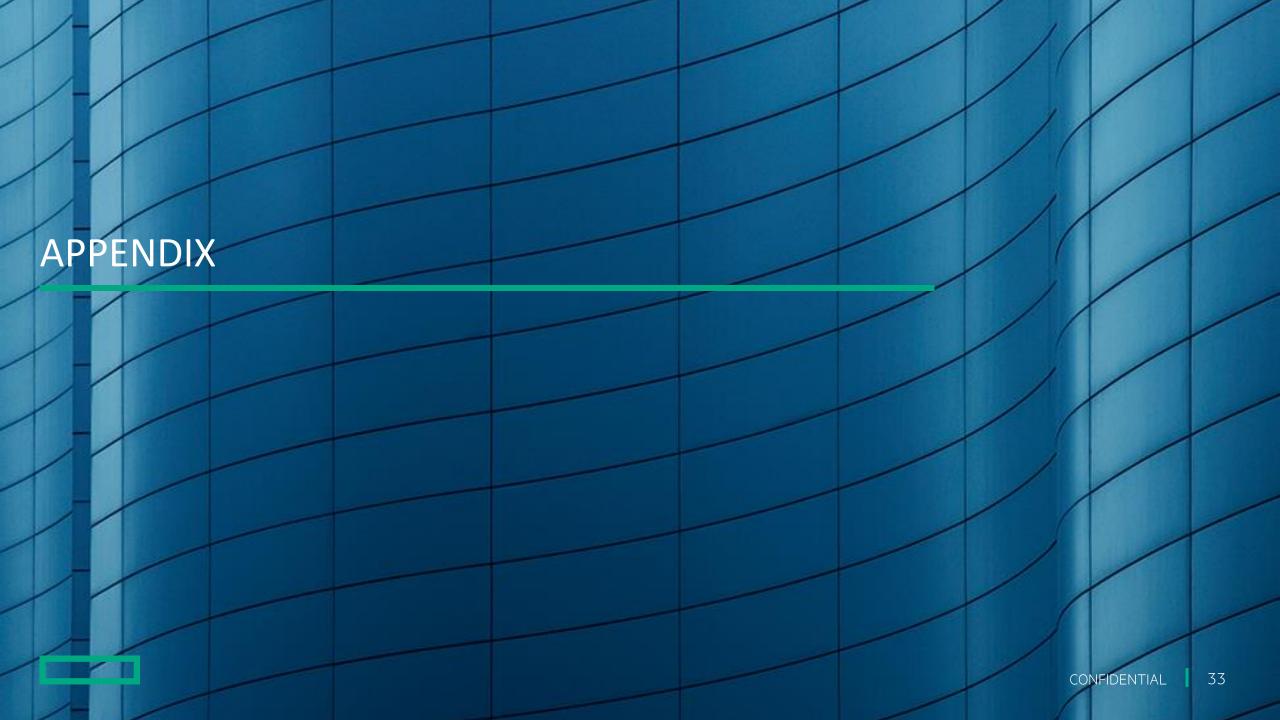
Large sized businesses

82%

#### AGE

84%	81%	49%
22-34	35-54	55+
year-olds	year-olds	year-olds





#### **METHODOLOGY**

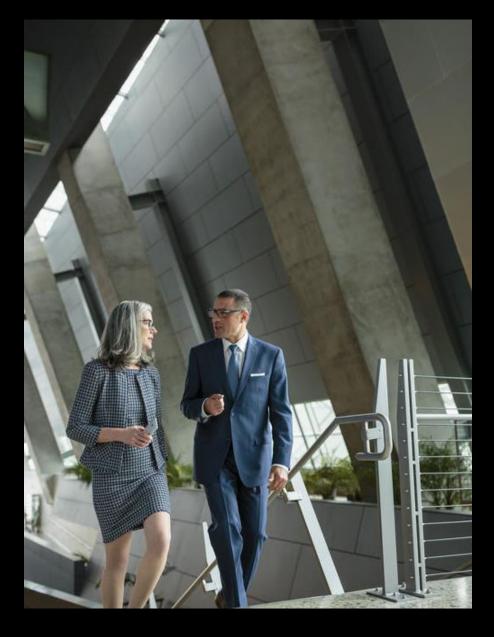
HPE partnered with an independent research firm to field a 15-minute survey among 1,073 IT decision makers (ITDMs) from the US, the UK and Germany. The study was conducted between October 4-17, 2019. At the 95% confidence level, the total sample has a margin of error (MOE) of ±3.1%.

This presentation also contains the data and key findings for specific breakouts, listed alongside specific sample sizes and margins of error below.

Category	Breakouts	Sample size	Margin of error	Category	Breakouts	Sample size	Margin of error
Country	Germany	n=318	± 6 p.p.				
	US	n=434	± 5 p.p.	Sector	Private	n=804	± 3 p.p.
	UK	n=321	± 6 p.p.		Public	n=269	± 6 p.p.
	Total (UK, Germany, US)	n=1,073	± 3 p.p.	Adoption of aaS	None in place	n=138	± 8 p.p.
Age	22-34	n=372	± 5 p.p.		Started but incomplete	n=542	± 4 p.p.
	35-54	n=560	± 4 p.p.		Fully implemented	n=393	± 5 p.p.
	55+	n=108	± 9 p.p.	Company size	Small (<100)	n=143	± 8 p.p.
Job title	C-suite	n=468	± 5 p.p.		Medium (100-999)	n=457	± 5 p.p.
	Non-C-suite	n=605	± 4 p.p.		Large (>1,000)	n=474	± 5 p.p.

Total Country Weighting: The "total" (3-country average) is an average calculation with each country's sample size weighted to have the same value to ensure each country has an equal weight in this total.

To ensure a common understanding of "aaS," the following definition was provided to respondents prior to the main questionnaire. Respondents were able to read the definition for every mention of aaS when they hovered over it with their mouse: "We will now ask a number of questions related to "as-a-Service" solutions (aaS solutions). When we refer to "as-a-Service" solutions, or aaS, we mean the delivery of a vast number of products, tools and technologies that third parties provide to users as a service over a network, typically the internet, rather than providing it locally or on-premises-only within an enterprise."



# TARGET AUDIENCE – IT DECISION MAKERS (ITDMS)

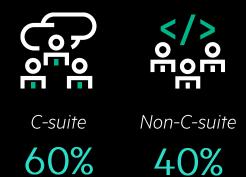
- Respondents were thoroughly screened and vetted, and had to fulfill the following criteria:
  - ITDMs are defined as IT professionals who
    - play a business-leading managerial role OR play a significant role in selection and implementation of IT solutions for their company;
    - influence or make final purchasing decisions for their company's enterprise IT solutions;
    - have a C-suite title, or the title of owner/partner, director/general manager, VP/SVP/EVP, manager/executive or supervisor/officer.
- Close monitoring of fielding progress ensured a range of levels/years of experience/job titles (manager plus+, including C-suite), and a good mix of industries and different company sizes (small, medium, large).

### **COUNTRY DEMOGRAPHICS – GERMANY**

#### **AGE**

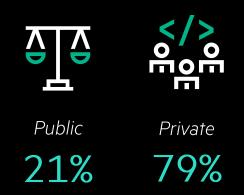


#### **JOB TITLE**



#### **COMPANY SIZE**



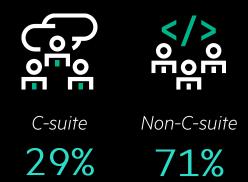


### COUNTRY DEMOGRAPHICS – US

#### **AGE**

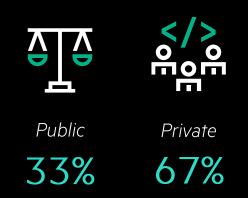


#### **JOB TITLE**



#### **COMPANY SIZE**



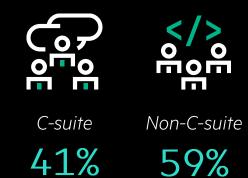


### COUNTRY DEMOGRAPHICS – UK

#### **AGE**



#### **JOB TITLE**



#### **COMPANY SIZE**



