ARE YOU PROTECTED?

GET AHEAD OF THE CURVE

DELL EMC – GLOBAL DATA PROTECTION INDEX 2018

VansonBourne

Demographics

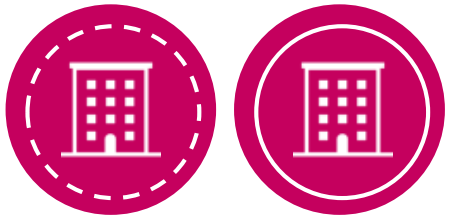
INTERVIEWED 2,200 IT DECISION-MAKERS IN 3 REGIONS:

INDEPENDENT RESEARCH AND ANALYSIS: VANSON BOURNE

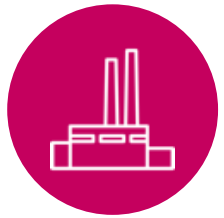
500	1,100	600
Americas	Europe, Middle East, and Africa	Asia Pacific Japan

18 COUNTRIES

ORGS OF 250 OR MORE EMPLOYEES



BOTH PUBLIC AND PRIVATE ORGS



11 INDUSTRIES

VansonBourne

MATURITY CURVE

VansonBourne

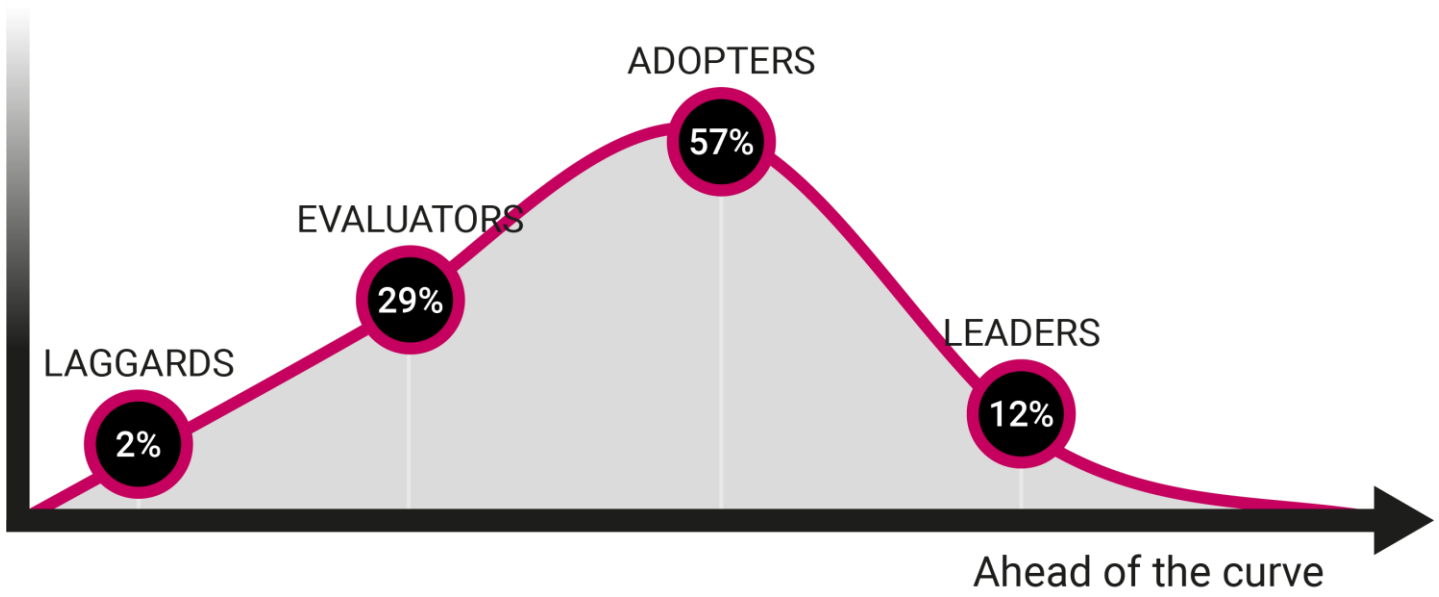
Data protection maturity curve 2018

AROUND

ONE IN TEN

ORGANIZATIONS ARE CONSIDERED TO BE DATA PROTECTION LEADERS IN 2018

(COMPARED TO 2% IN 2016)



VansonBourne

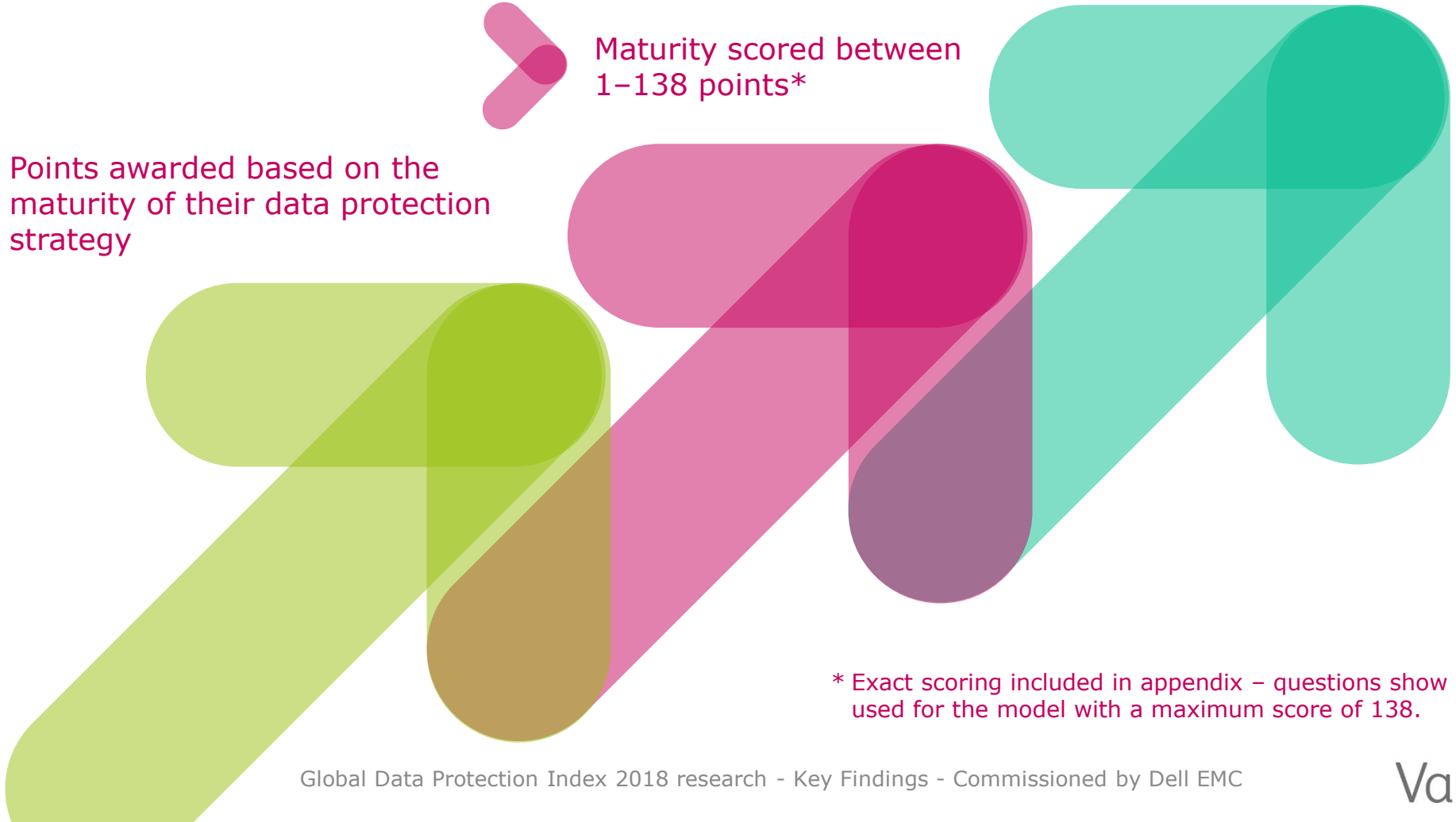
Maturity index

Points awarded based on the maturity of their data protection strategy

Maturity scored between 1–138 points*

More points awarded for:

- Shorter recovery times
- Confidence in backup infrastructure
- Modern backup systems
- Higher valuation of data



* Exact scoring included in appendix – questions show points used for the model with a maximum score of 138.

Profile characteristics

The profile characteristics for each of the following maturity groups tend to be…

Laggards

- Place little or no value on data
- Have DP solutions that will not meet future challenges
- No consideration of public cloud for DP
- Recovery times often over 12 hours
- Little or no confidence in terms of DP compliance, meeting SLOs, and recovering data in the event of data loss

Evaluators

- See the potential value of data
- Have DP solutions that will meet a minority of future challenges
- Minimal use of public cloud for DP
- Recovery times 3-9 hours
- Several doubts in terms of DP compliance, meeting SLOs, and recovering data in the event of data loss

Adopters

- Starting to invest in tools to monetize data
- Have DP solutions that will meet most future challenges
- Use of public cloud for DP
- Recovery times 2-6 hours
- Moderate confidence in terms of DP compliance, meeting SLOs, and recovering data in the event of data loss

Leaders

- Place a very high value on data (data = capital)
- Have DP solutions that will meet all or most future challenges
- Advanced use of public cloud for DP
- Recovery times under 2 hours
- Highly confident in terms of DP compliance, meeting SLOs, and recovering data in the event of data loss

VansonBourne

Maturity rank by country

Rank	Country	Percentage of Leaders in 2018	Difference (vs. 2016 ranking)
#1	India	30%	Up 8
#2	Mainland China	27%	Down 1
#3	Brazil	23%	Down 2
#4	Italy	20%	Up 11
#5	Japan	18%	Up 10
#6	US	16%	Up 3
#7	Mexico	15%	Down 1
#8	Netherlands	13%	Up 7
#9	South Africa	12%	(-)

Rank	Country	Percentage of Leaders in 2018	Difference (vs. 2016 ranking)
#10	Switzerland	12%	(-)
#11	Canada	10%	Down 2
#12	UK	9%	Down 6
#13	Singapore	9%	Down 11
#14	UAE	8%	Up 1
#15	Germany	7%	Down 10
#16	Australia	5%	Down 10
#17	France	3%	Down 16
#18	South Korea	1%	Down 9

VansonBourne

FOCUS OF KEY FINDINGS:

1: The value of data
2: Data protection solutions currently in place
3: Challenges surrounding data protection
4: Public cloud – changing the data protection landscape
5: Disruption experience

VansonBourne

THE VALUE OF DATA

VansonBourne

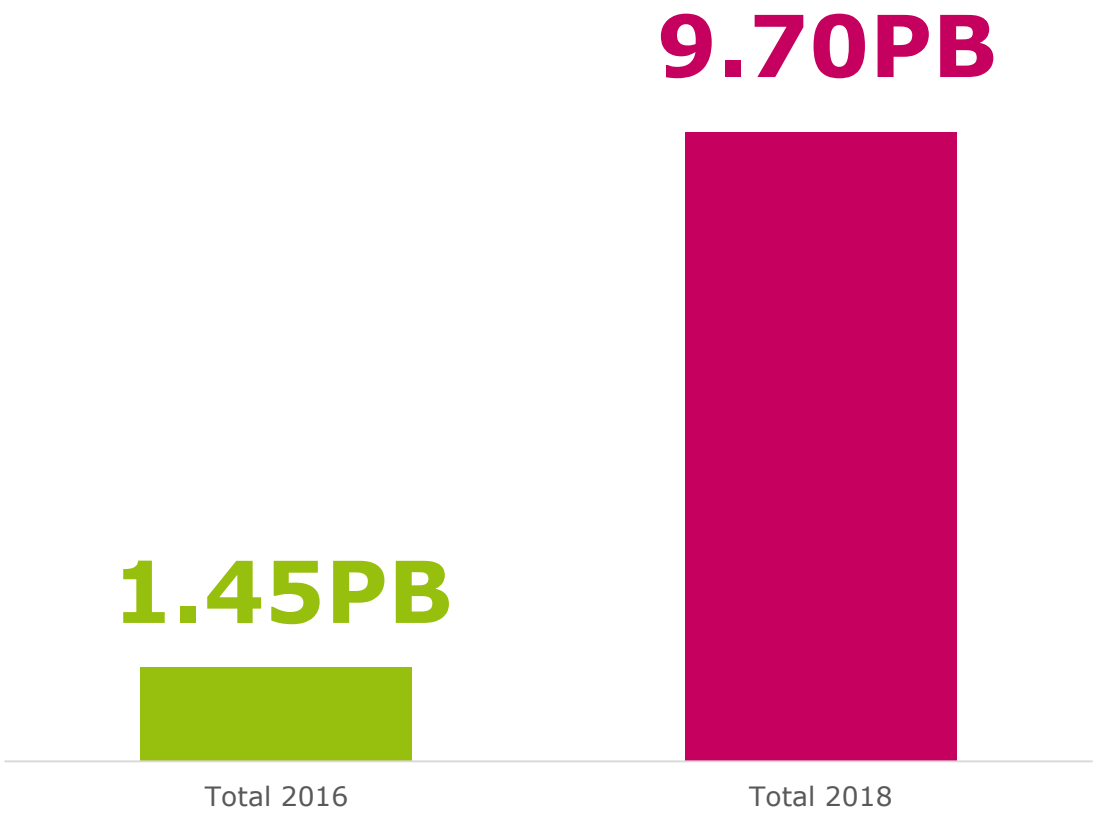
The ever-increasing volume of data

MANAGE ON AVERAGE

9.70PB

OF DATA IN 2018

IN 2016 IT WAS 1.45PB
(A GROWTH OF 569%)

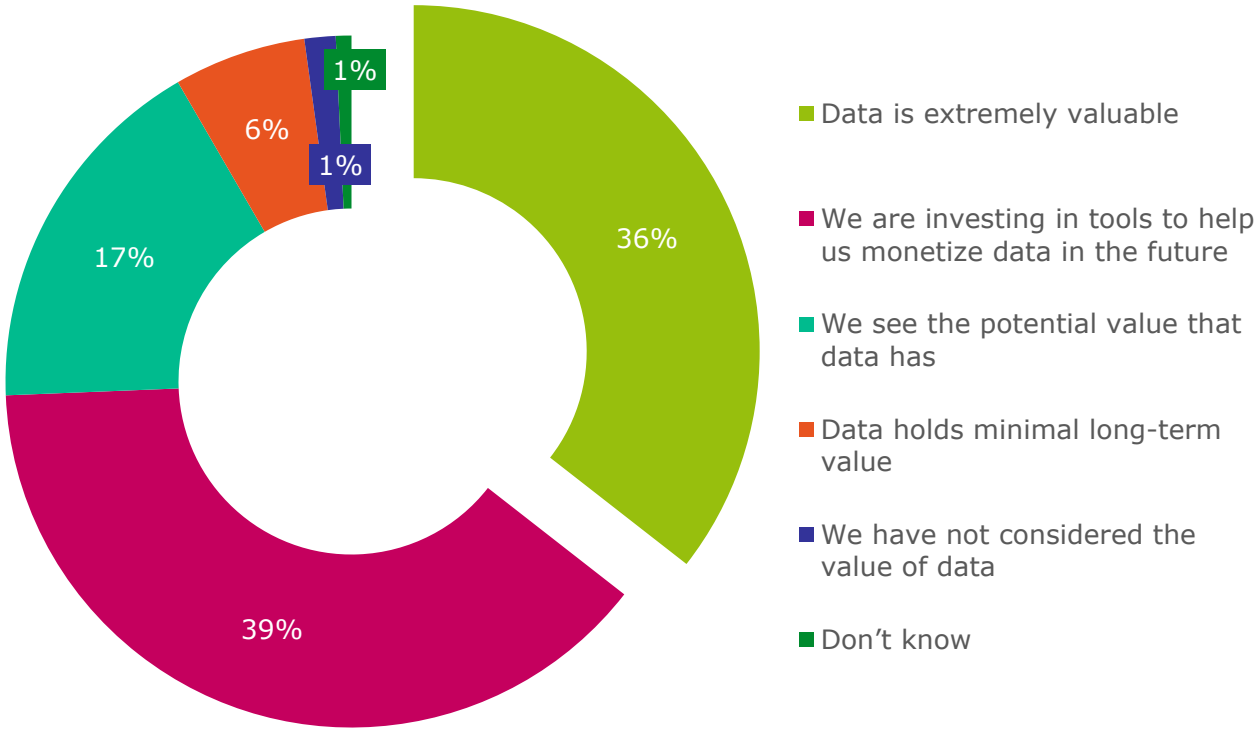


VansonBourne

The value of data

92%
SEE THE POTENTIAL VALUE OF DATA

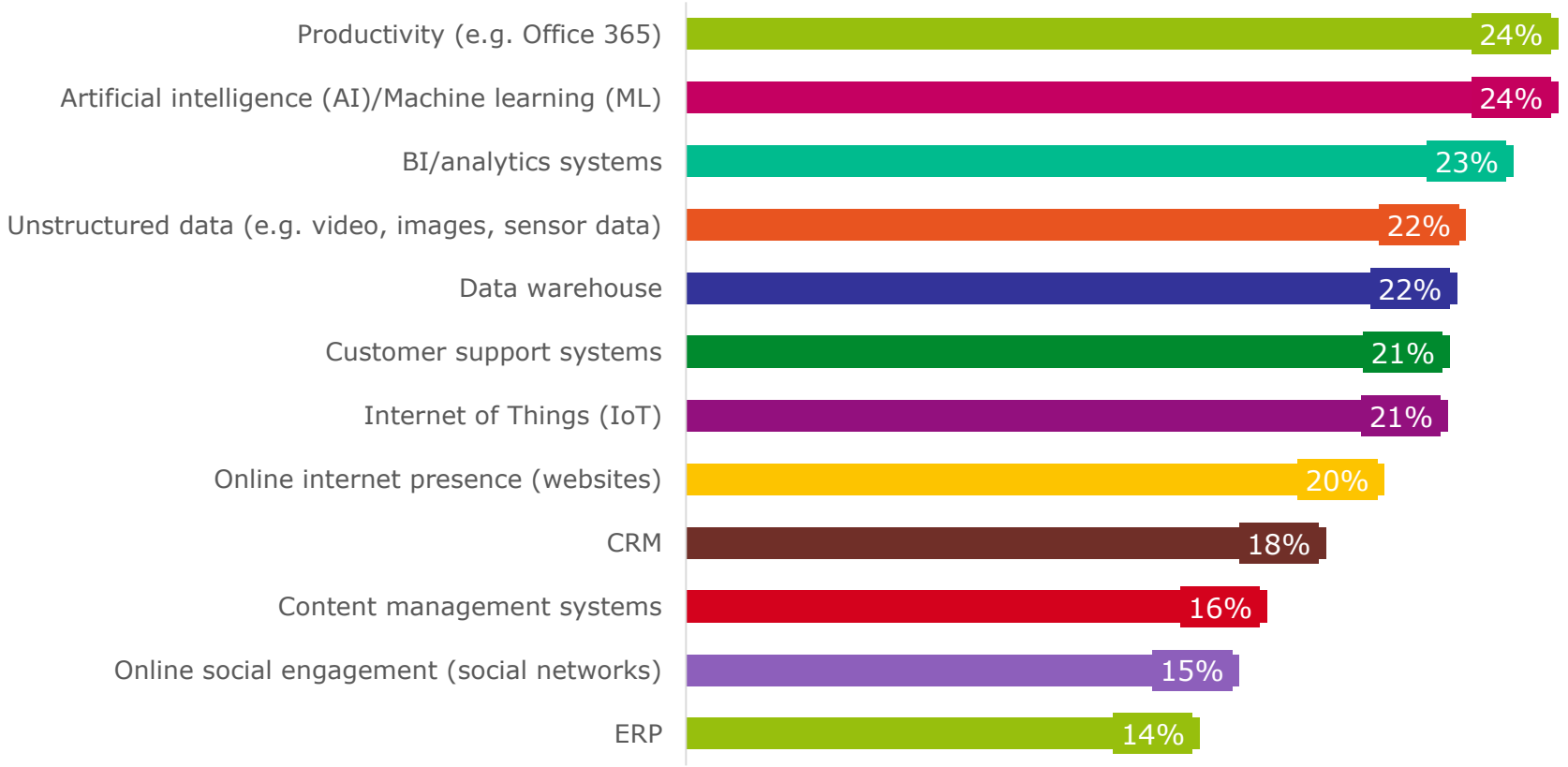
36% CONSIDER DATA TO BE EXTREMELY VALUABLE



VansonBourne

The most valuable sources of data

PRODUCTIVITY APPS AND AI/ML CONSIDERED TWO OF THE MOST VALUABLE SOURCES OF DATA

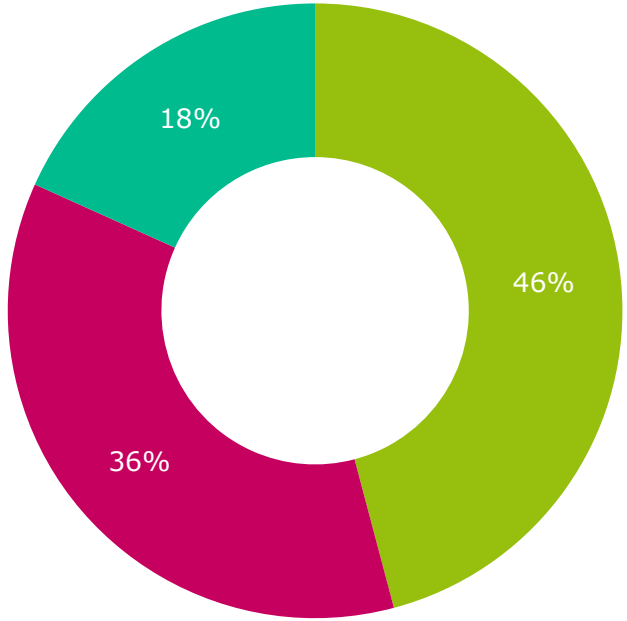


VansonBourne

Treating data protection differently for different data sources

81%

TAKE DATA PROTECTION MORE SERIOUSLY FOR 'MORE VALUABLE' DATA



- We take data protection much more seriously for the data that has the greatest monetary value
- We take data protection slightly more seriously for the data that has the greatest monetary value
- We treat all protection of data equally, regardless of the value of the data

VansonBourne

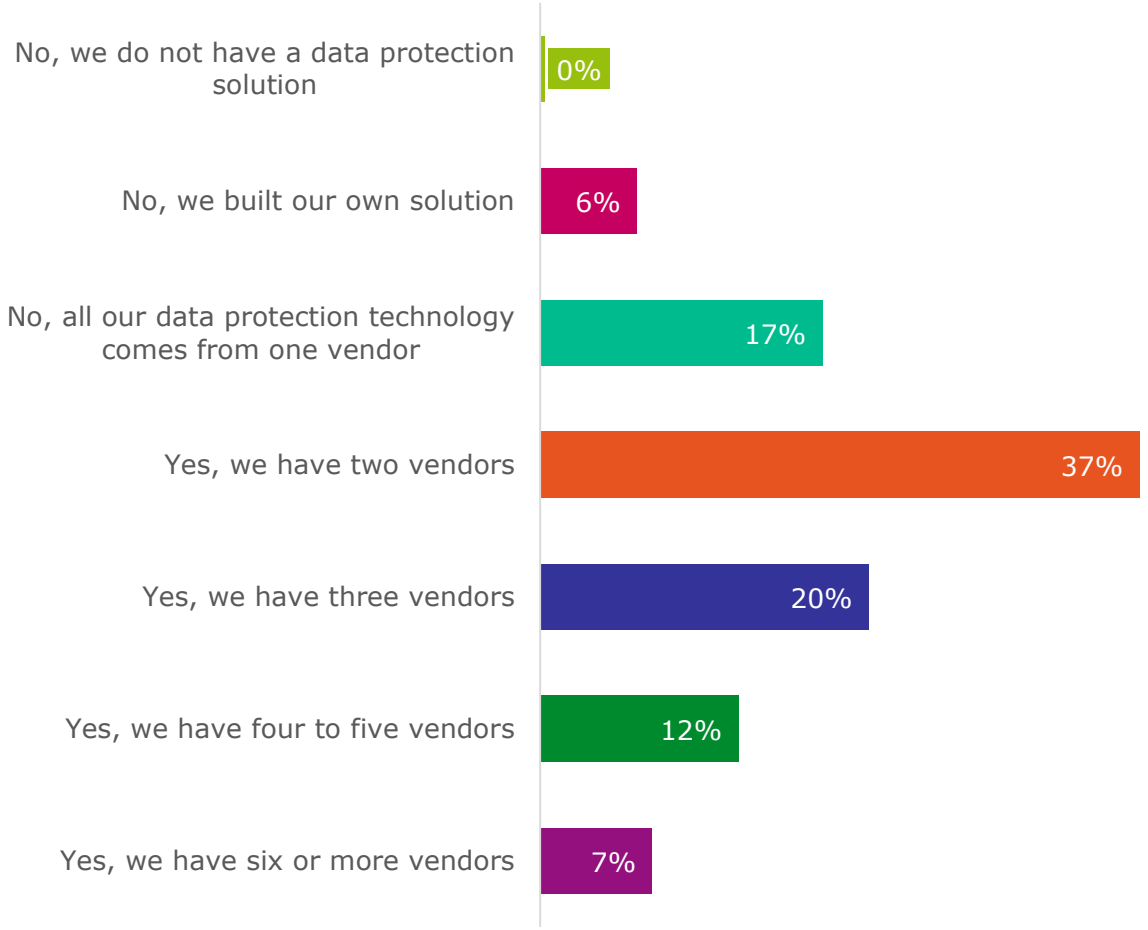
DATA PROTECTION SOLUTIONS CURRENTLY IN PLACE

VansonBourne

Vendors used for data protection infrastructure

76%

USE **AT LEAST TWO DATA** PROTECTION VENDORS

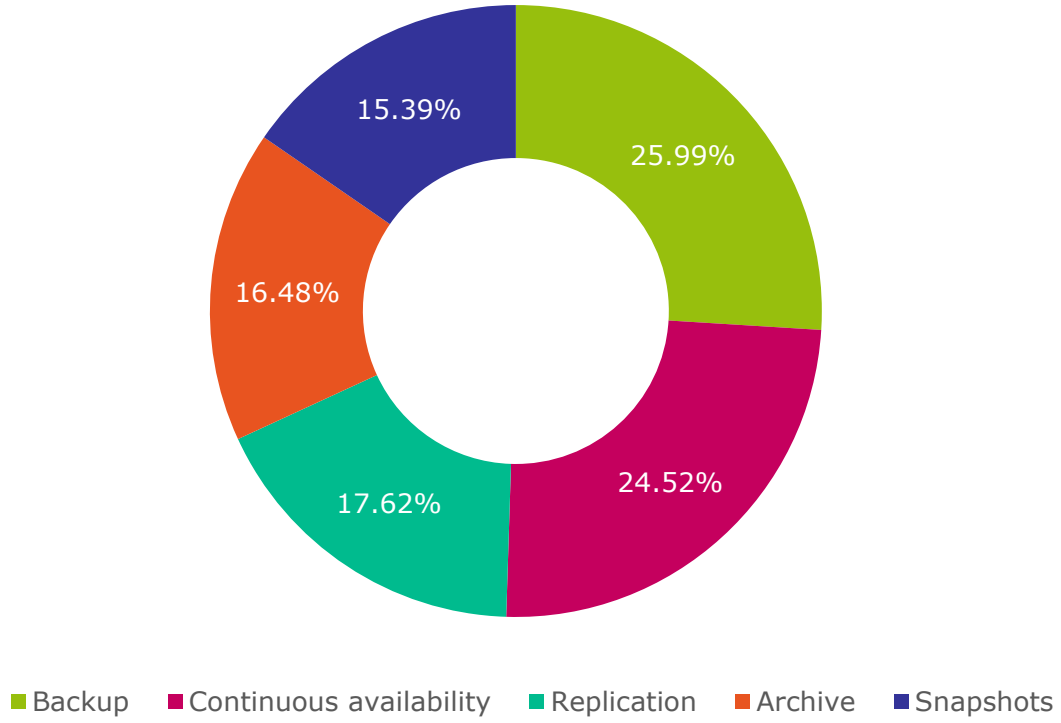


VansonBourne

Data protection solutions used

25.99% OF THE DATA IN RESPONDENTS' ORGANIZATIONS IS PROTECTED VIA BACKUP…

…COMPARED TO **24.52%** BY CONTINUOUS AVAILABILITY

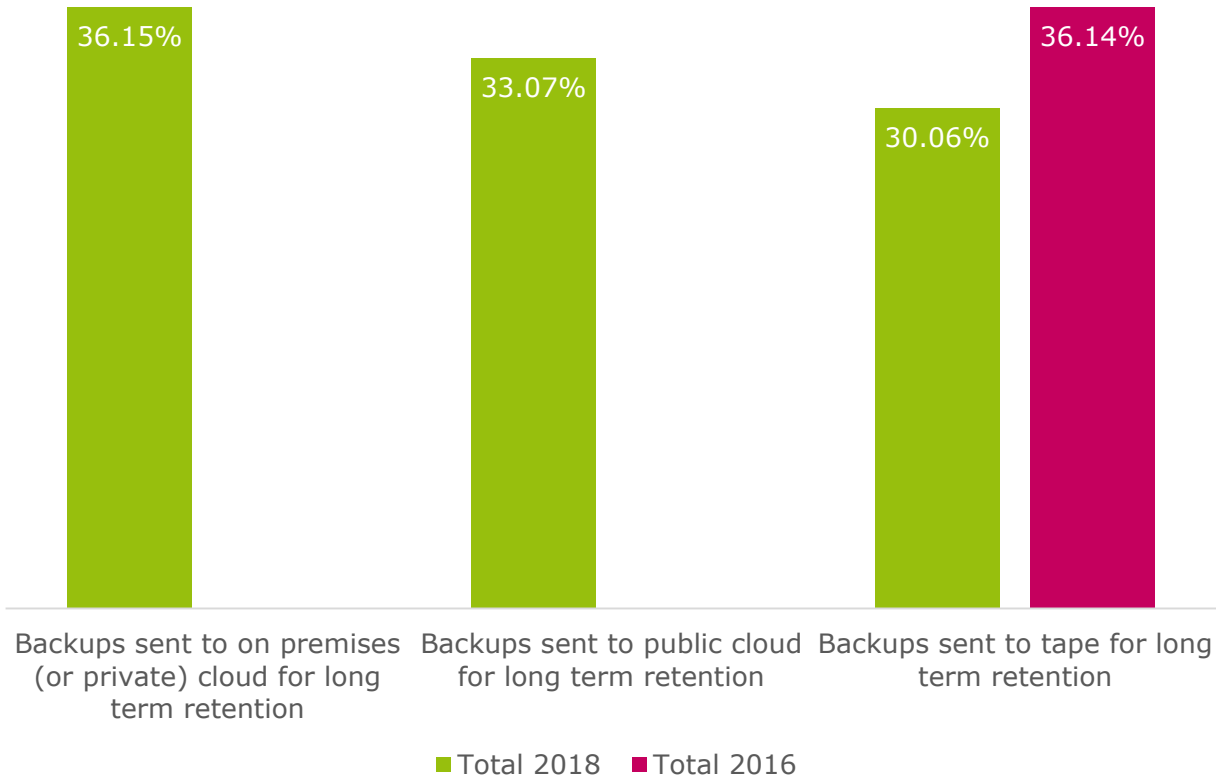


VansonBourne

Backup preferences for long-term retention

PRIVATE CLOUD IS NOW THE MOST POPULAR FOR LONG-TERM RETENTION BUT

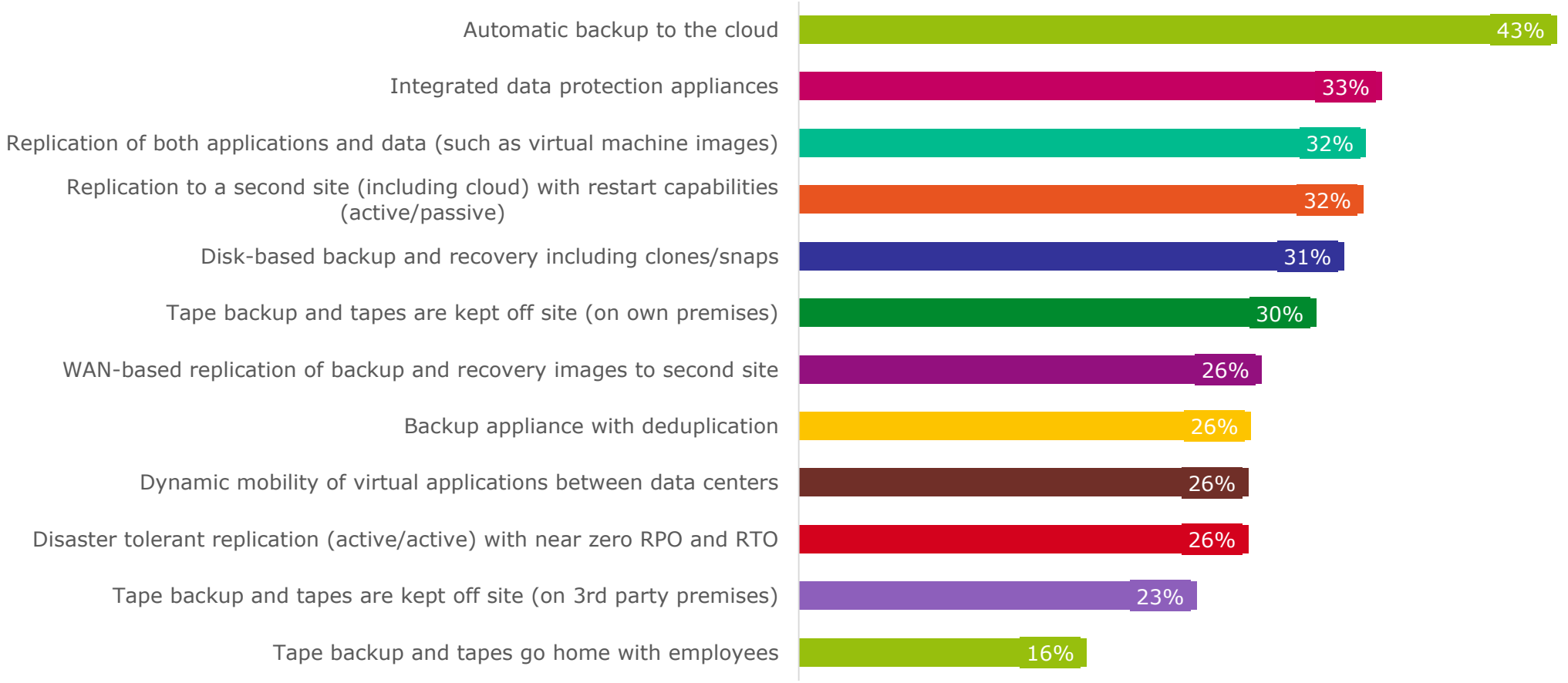
30% ARE STILL USING TAPE



VansonBourne

Technology currently used in availability strategies

AUTOMATIC BACKUP TO CLOUD IS THE TECHNOLOGY MOST FREQUENTLY INCLUDED AS PART OF AVAILABILITY STRATEGIES FOR MISSION-CRITICAL WORKLOADS

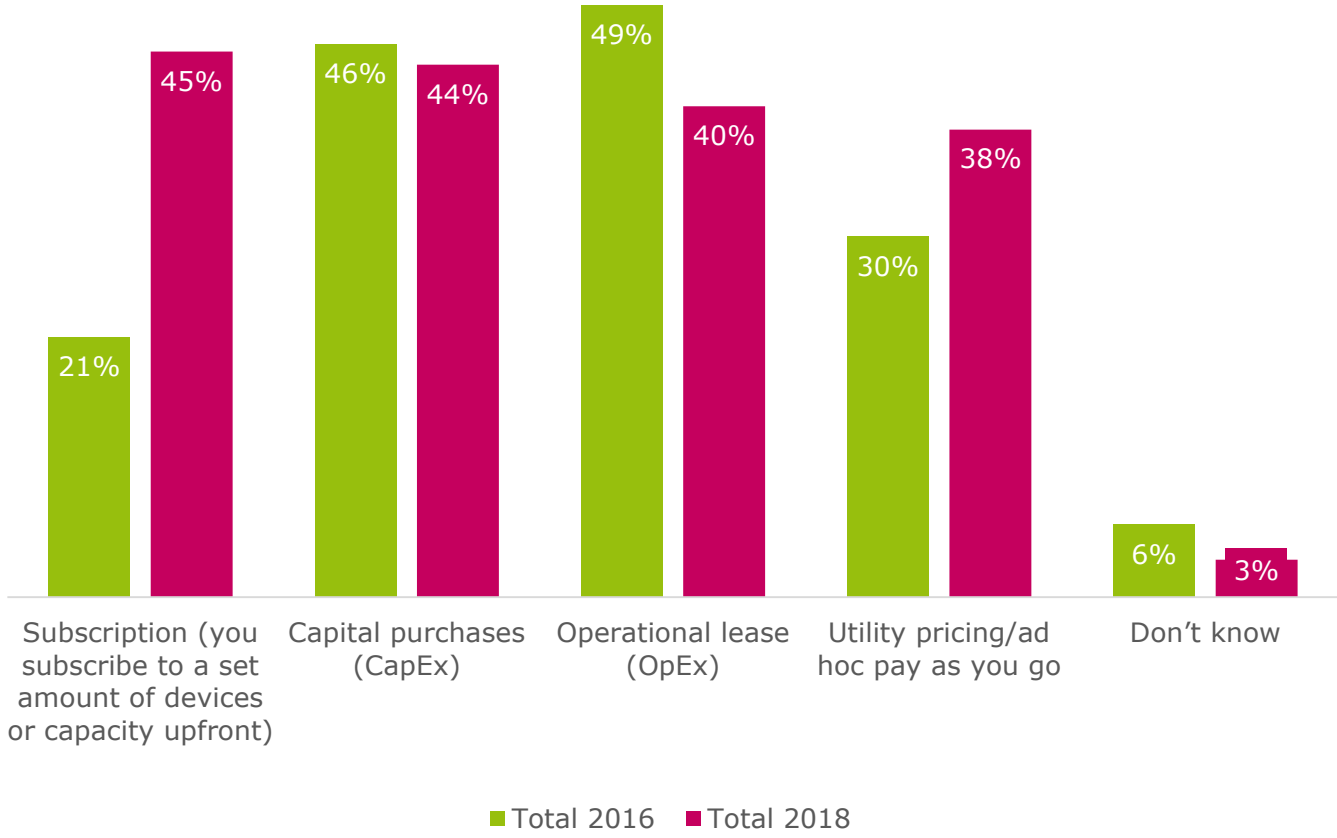


VansonBourne

Consumption of data protection

CONSUMPTION OF DATA PROTECTION IS CHANGING

SUBSCRIPTION MODELS ARE NOW THE MOST POPULAR METHOD OF CONSUMPTION - MORE POPULAR THAN CAPEX AND OPEX



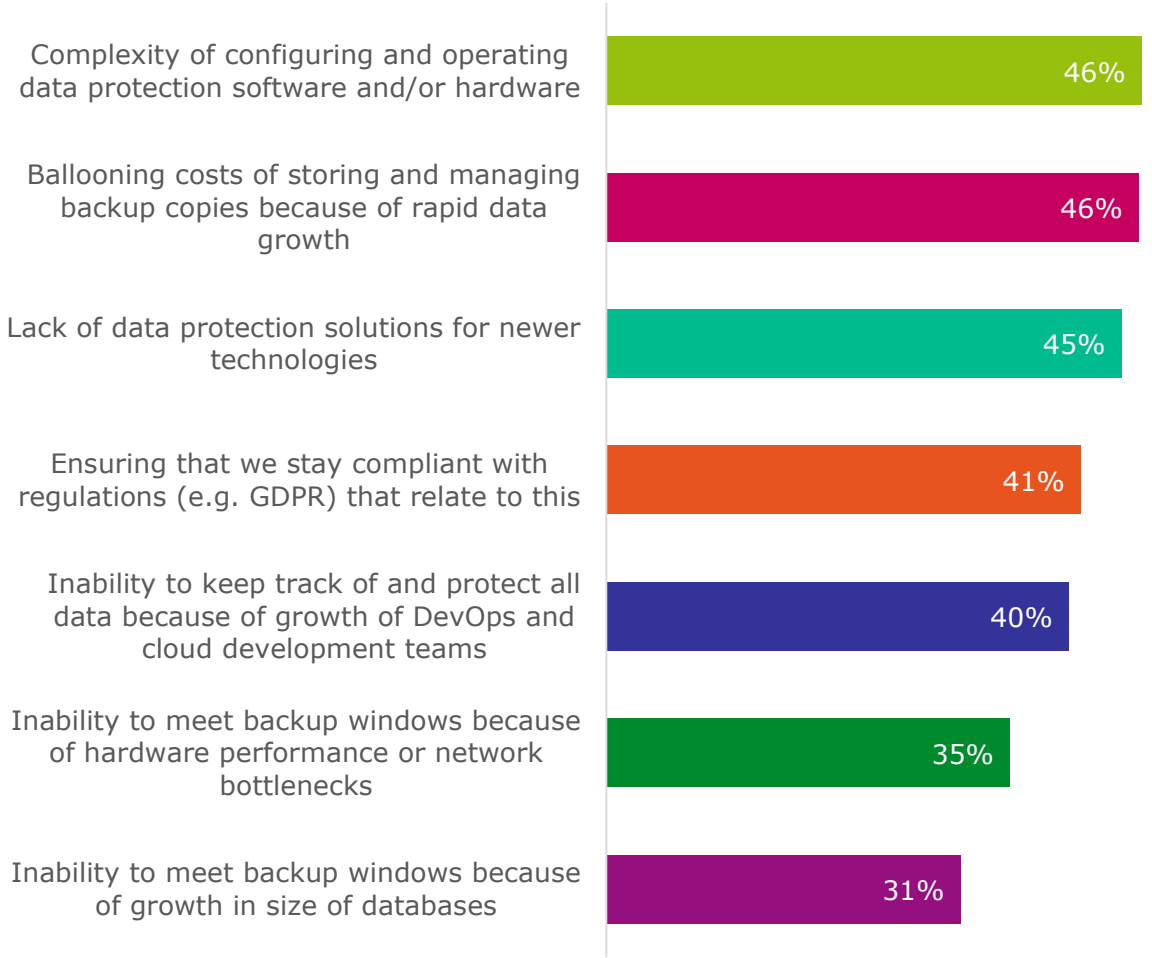
VansonBourne

CHALLENGES SURROUNDING DATA PROTECTION

VansonBourne

Data protection challenges

95% OF RESPONDENTS' ORGANIZATIONS ARE FACING AT LEAST ONE CHALLENGE IN RELATION TO DATA PROTECTION



VansonBourne

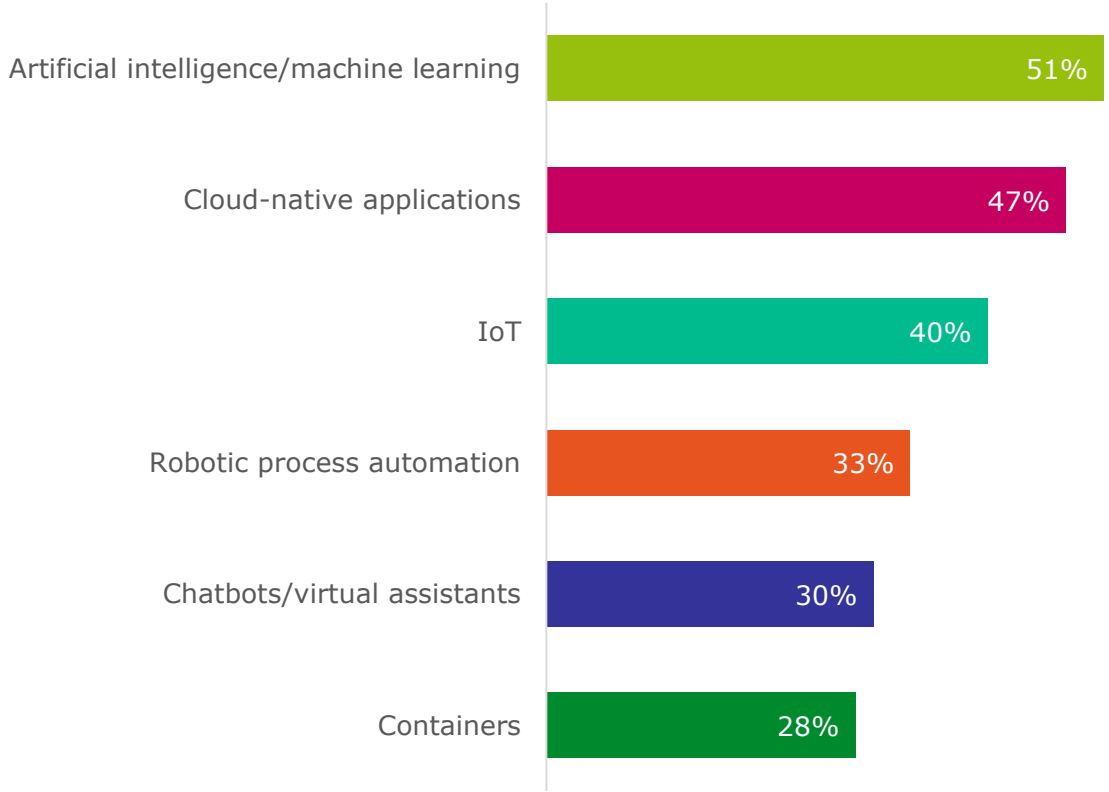
Lack of data protection solutions for newer technology

FOR THOSE WHO ARE STRUGGLING TO FIND SOLUTIONS FOR NEWER TECHNOLOGIES…

51%

CANNOT FIND SUITABLE DATA PROTECTION SOLUTIONS FOR AI/ML

WE CAN'T FIND DATA PROTECTION SOLUTIONS FOR…



VansonBourne

Confidence in current data protection solutions

ONLY

37%

ARE VERY CONFIDENT THAT THEIR ORGANIZATION IS **MEETING ITS BACKUP AND RECOVERY SLOS**

AND ONLY

35%

ARE VERY CONFIDENT THAT THEIR DATA PROTECTION INFRASTRUCTURE IS **COMPLIANT WITH REGULATIONS**

VansonBourne

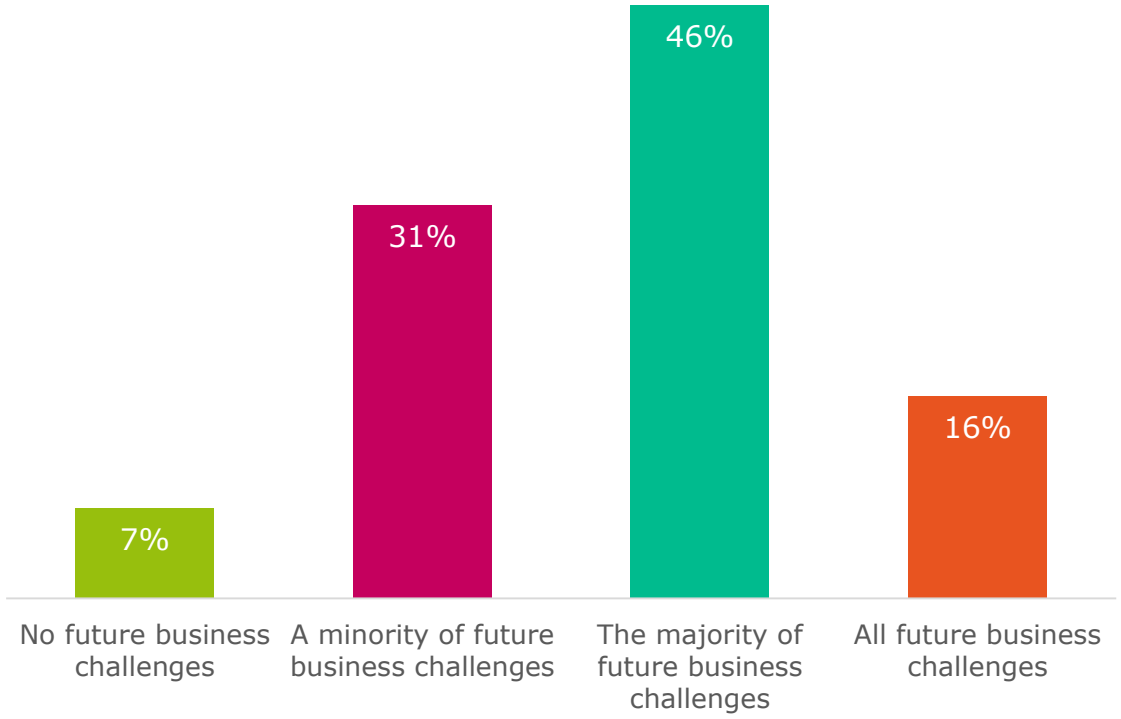
Meeting future business challenges

ONLY

16%

BELIEVE THAT THEIR CURRENT DATA PROTECTION SOLUTIONS WILL BE ABLE TO MEET **ALL** FUTURE BUSINESS CHALLENGES

OUR CURRENT DATA PROTECTION SOLUTIONS WILL BE ABLE TO MEET…



VansonBourne

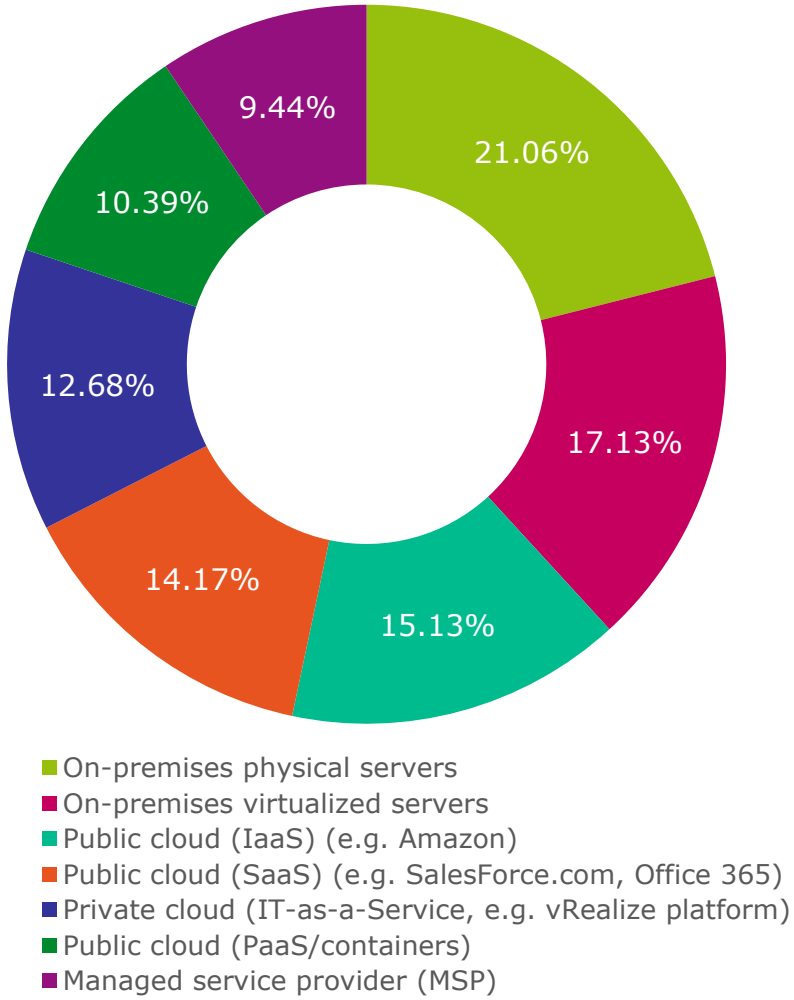
PUBLIC CLOUD – CHANGING THE DATA PROTECTION LANDSCAPE

VansonBourne

The IT environment in 2018

PUBLIC CLOUD USE HAS INCREASED FROM 29% IN 2016 TO **40%** IN 2018

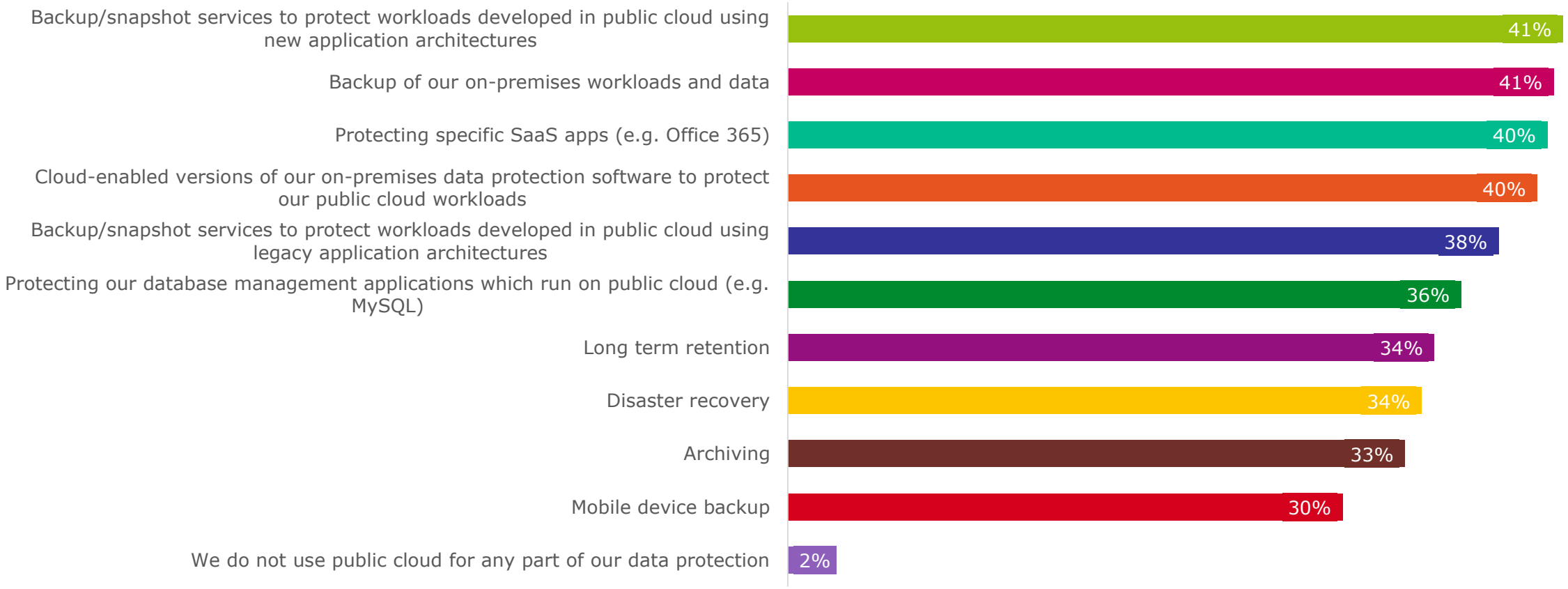
ON-PREMISES SOLUTIONS HAVE SHRUNK FROM 56% IN 2016 TO 38%



VansonBourne

Using public cloud for data protection

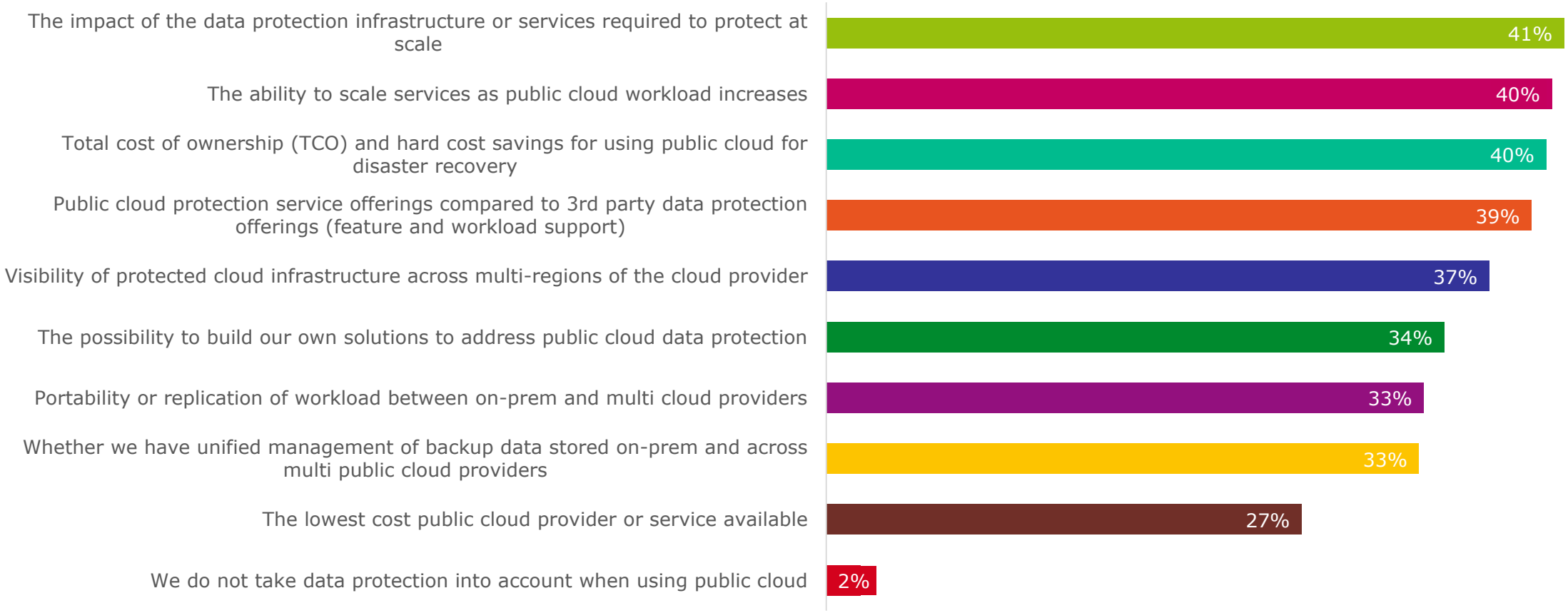
98% OF THOSE WHOSE ORGANIZATION USES PUBLIC CLOUD REPORT THAT IT FEATURES AS PART OF THEIR DATA PROTECTION INFRASTRUCTURE



VansonBourne

Data protection considerations in the public cloud

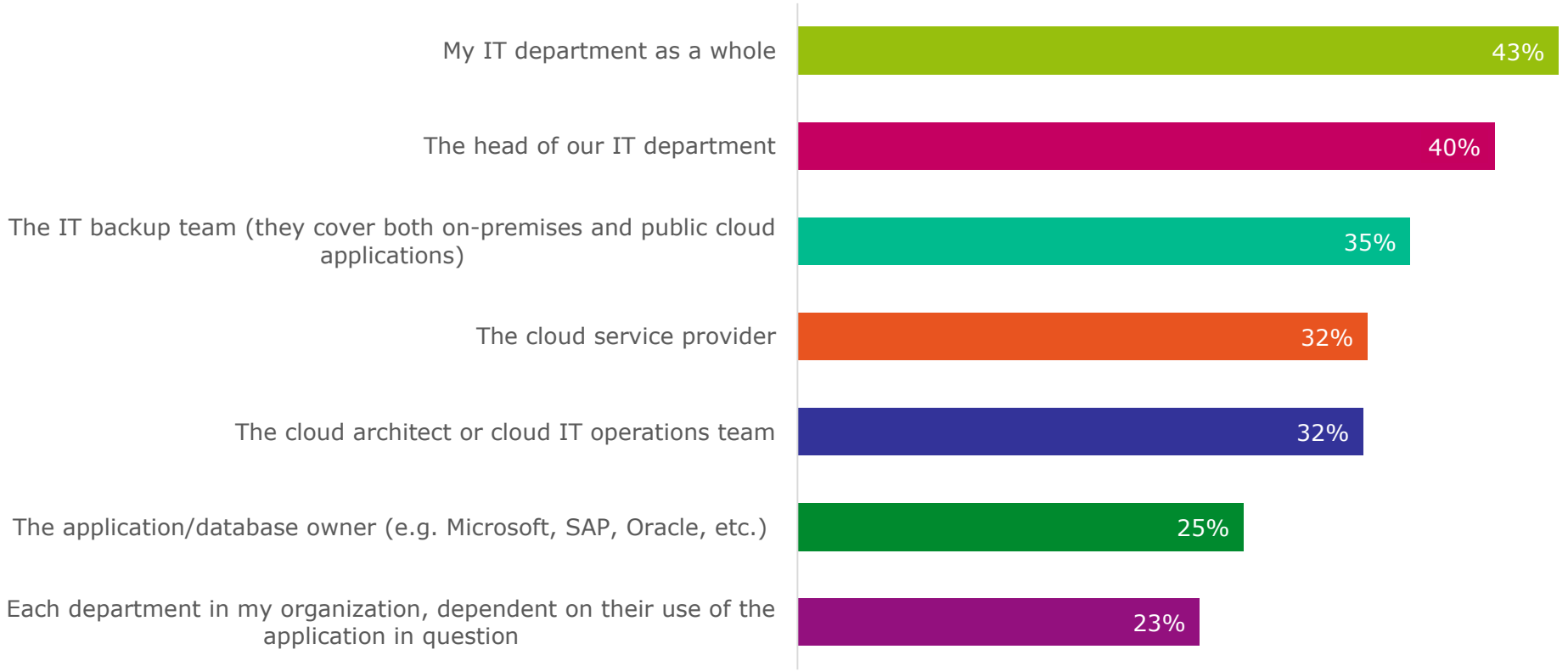
REQUIREMENTS VARY BY ORGANIZATION WHEN LOOKING AT DATA PROTECTION SOLUTIONS IN A PUBLIC CLOUD ENVIRONMENT



VansonBourne

Responsibility for public cloud-based applications

THE IT DEPARTMENT AS A WHOLE IS MOST LIKELY TO BE RESPONSIBLE FOR DATA PROTECTION OF PUBLIC CLOUD-BASED APPLICATIONS



VansonBourne

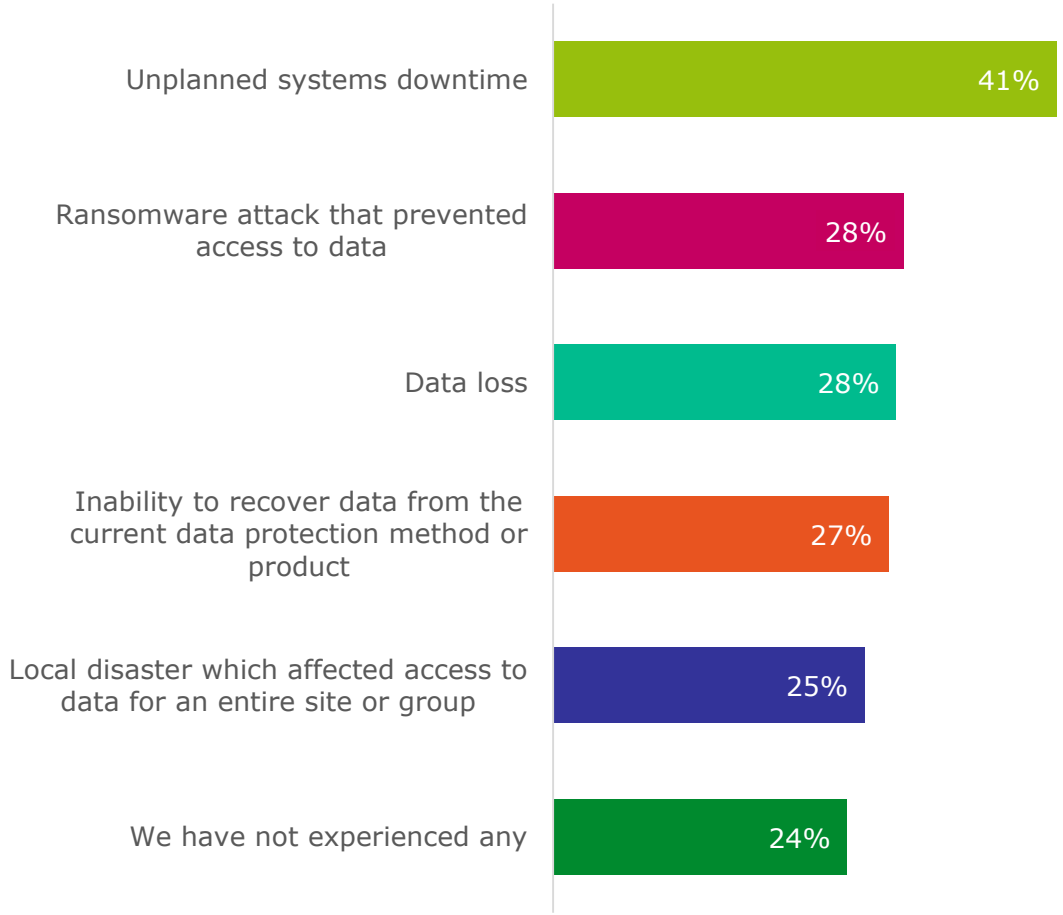
DISRUPTION EXPERIENCE

VansonBourne

Disruption experiences in the last 12 months

76%

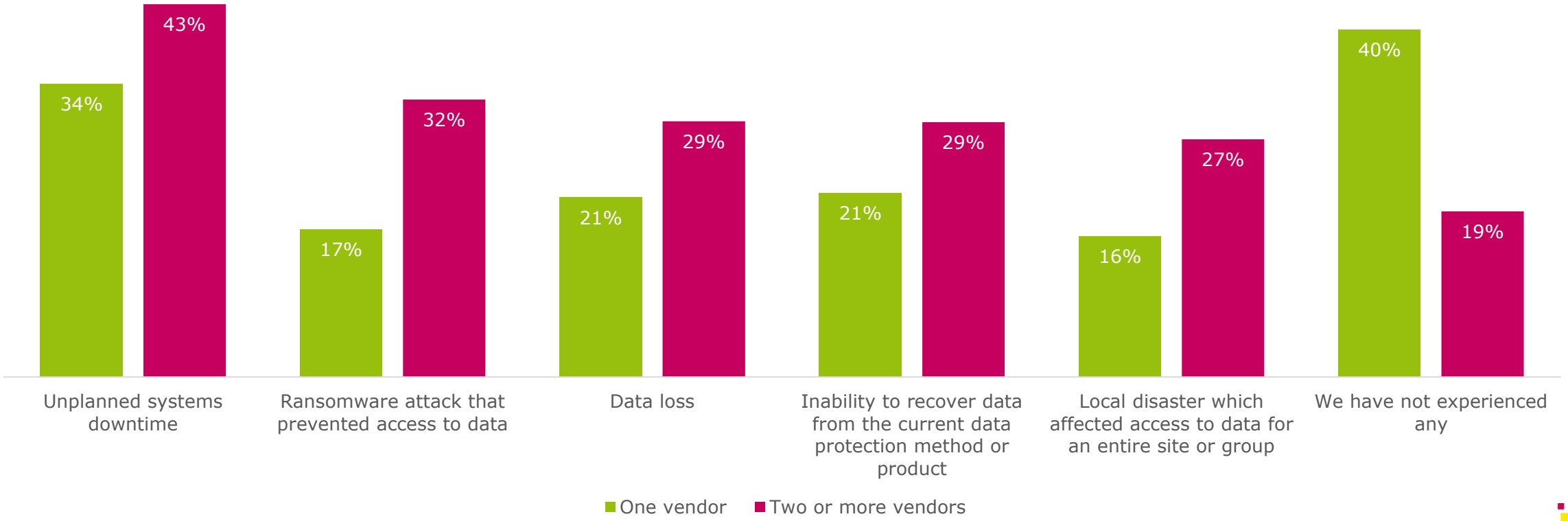
OF RESPONDENTS' ORGANIZATIONS HAVE EXPERIENCED DISRUPTION OF SOME KIND IN THE LAST 12 MONTHS



VansonBourne

The impact of multiple vendors on disruption

ORGANIZATIONS WITH A SINGLE DATA PROTECTION VENDOR ARE LESS LIKELY TO HAVE EXPERIENCED DISRUPTION IN THE LAST 12 MONTHS



VansonBourne

The cost of unplanned systems downtime

20 HOURS

OF DOWNTIME =

$526,845

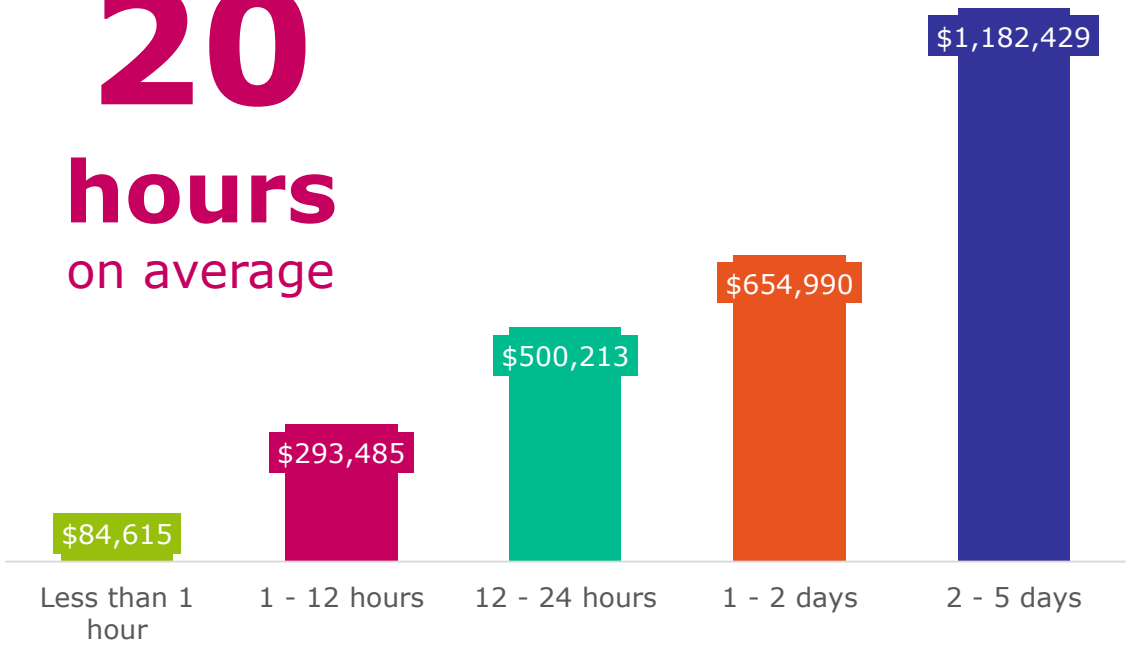
COST IN THE LAST 12 MONTHS,

ON AVERAGE

20

hours

on average



VansonBourne

The cost of data loss

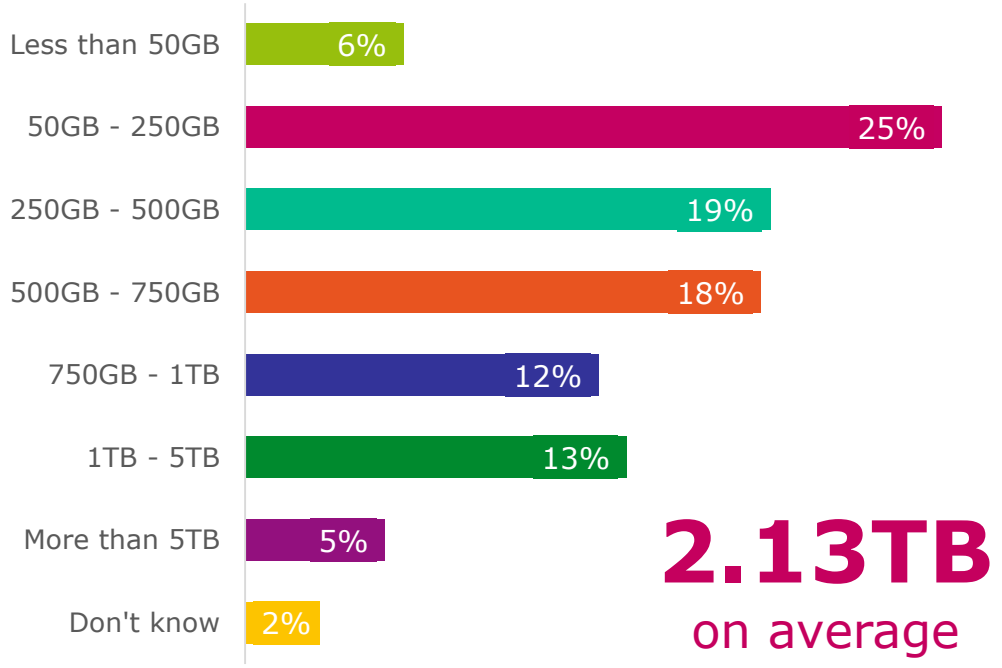
2.13TB

OF DATA LOST =

$995,613

COST IN THE LAST 12 MONTHS,

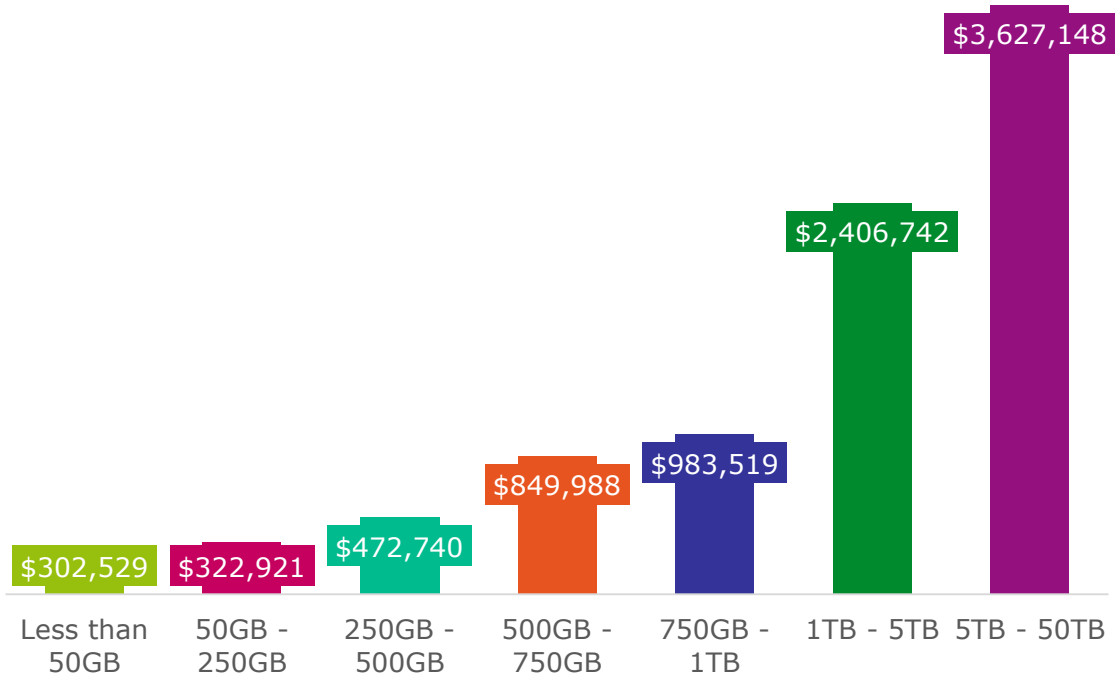
ON AVERAGE

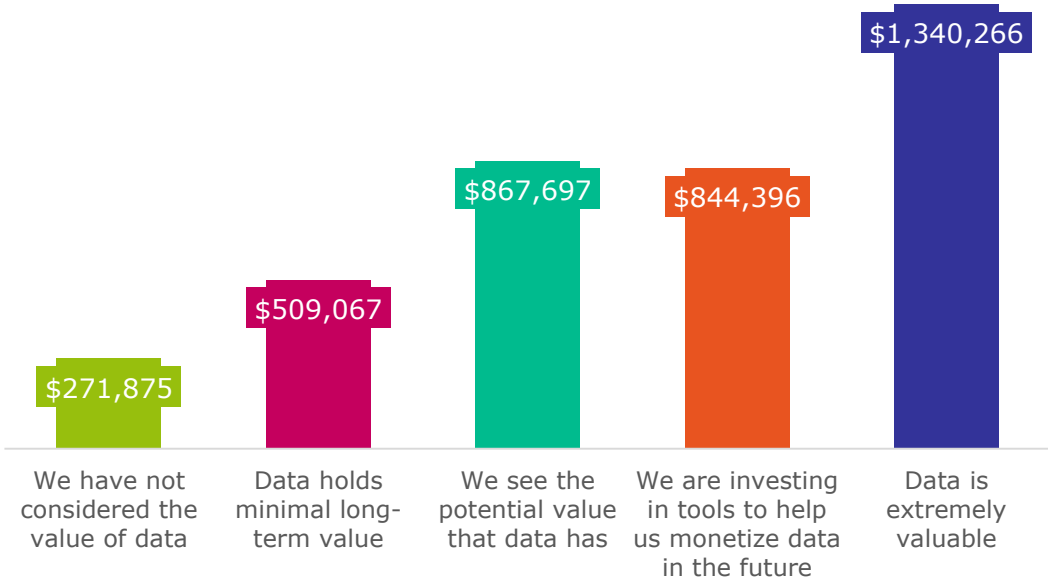


VansonBourne

The more you value data, the more it costs to lose it

NOT ONLY DOES THE AMOUNT OF DATA YOU LOSE INCREASE THE COST, SO DOES THE VALUE OF THE DATA ITSELF





VansonBourne

Recovering from unexpected critical application downtime

ONLY **8%** OF RESPONDENTS EXPECT THEIR ORGANIZATION'S RECOVERY TIME TO BE LESS THAN AN HOUR

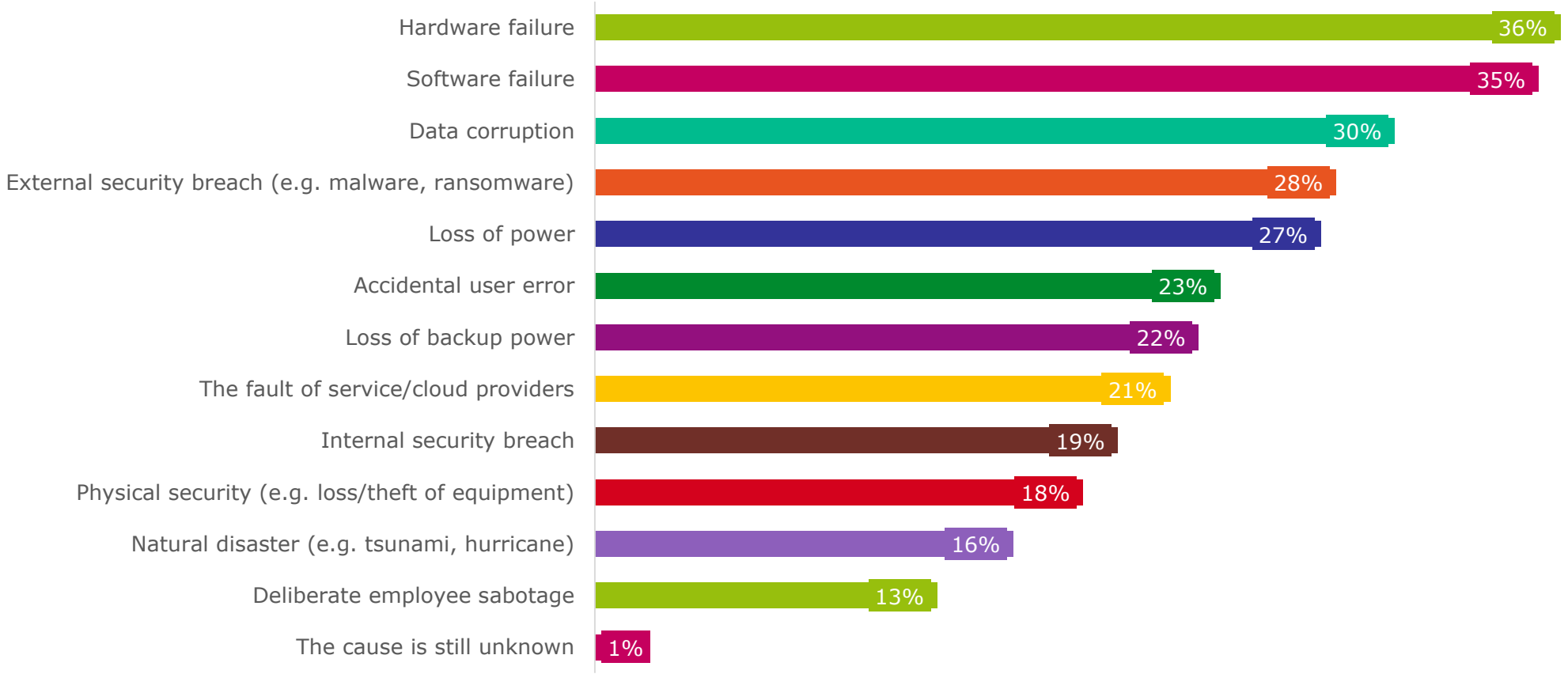
THE AVERAGE IS

7 HOURS

VansonBourne

What are the causes of this disruption?

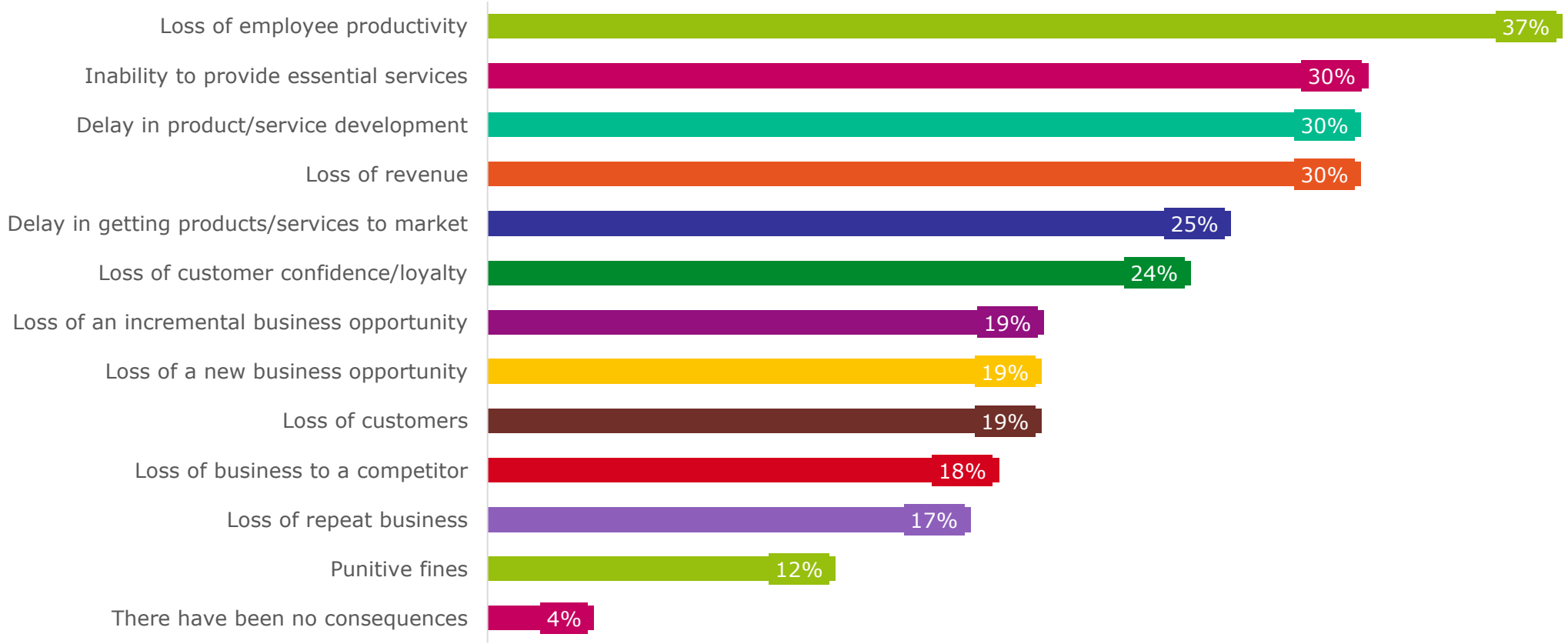
THERE ARE MANY DIFFERENT CAUSES FOR THIS DISRUPTION, MAKING IT DIFFICULT FOR ORGANIZATIONS TO DEFEND AGAINST



VansonBourne

Consequences of data loss and/or systems downtime

96% OF ORGANIZATIONS THAT HAVE SUFFERED DATA LOSS AND/OR UNPLANNED SYSTEMS DOWNTIME HAVE EXPERIENCED CONSEQUENCES



VansonBourne

Confidence in current data protection solutions

IN THE EVENT OF A DATA LOSS INCIDENT, ONLY

33%

ARE VERY CONFIDENT THAT THEIR ORGANIZATION COULD FULLY RECOVER IN ORDER TO MEET BUSINESS SLOs

IN THE EVENT OF A DESTRUCTIVE CYBERATTACK, ONLY

35%

ARE VERY CONFIDENT THAT THEIR ORGANIZATION COULD RELIABLY RECOVER ALL BUSINESS-CRITICAL DATA

VansonBourne

Overall confidence when it comes to data protection

ONLY **8%** ARE VERY CONFIDENT THAT THEIR ORGANIZATION CAN DO ALL OF THESE…

- …meet its backup and recovery SLOs
- …have data protection infrastructure and processes that are compliant with regional governance regulations
- …fully recover all systems/data (both on-premises and off) to meet business SLOs in the event of a data loss incident
- …reliably recover all business-critical data and protect the most critical data in the event of a destructive cyberattack

VansonBourne

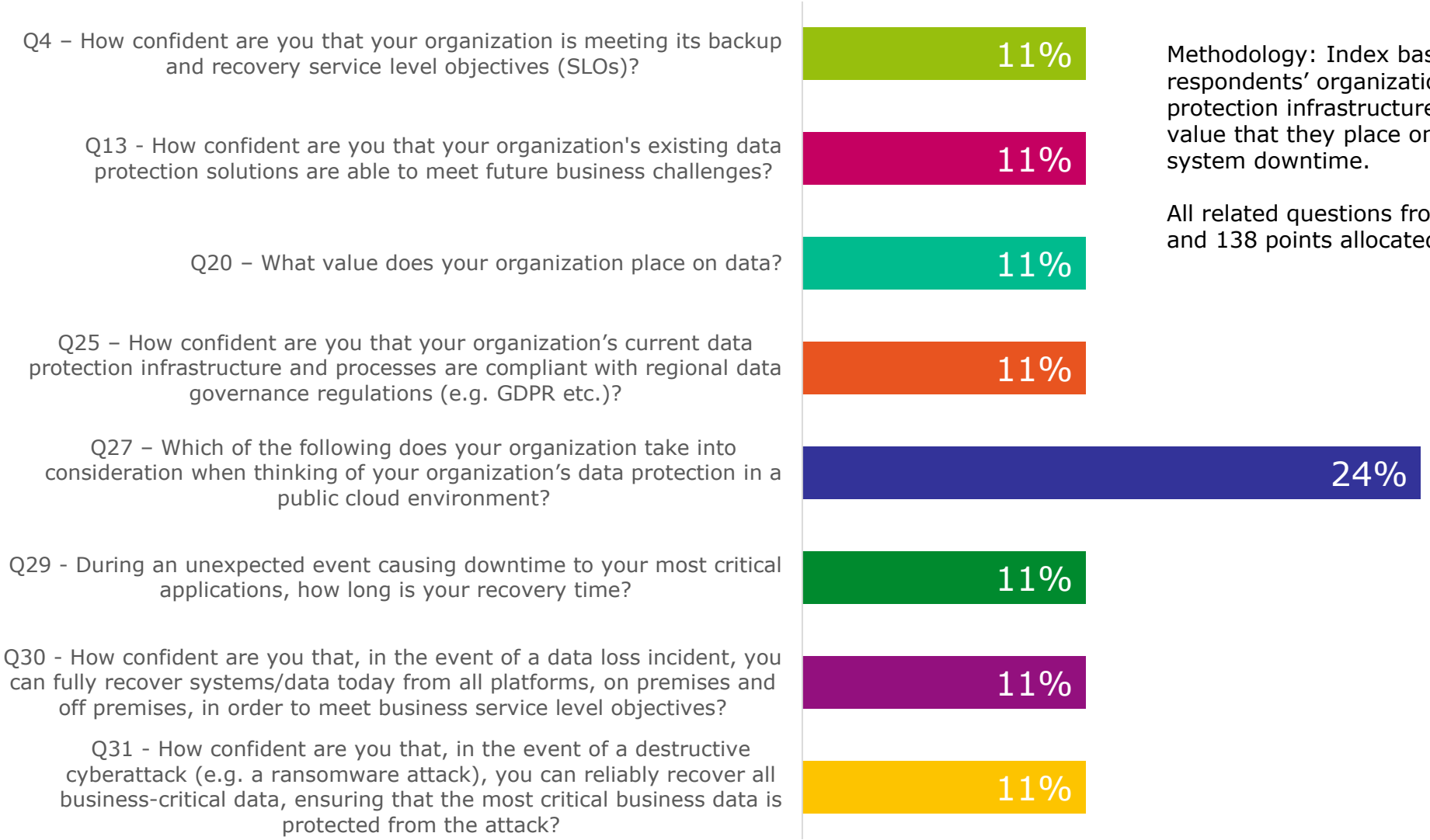
Conclusions

- Organizations are now managing a greater volume of data than they ever have before and are assigning a greater *value* to that data
- Yet many are still facing disruption, including unplanned systems downtime and data loss – and this is coming at an enormous cost
  - The risk is even greater for Data Protection Leaders as they are the ones assigning the greatest value to data
- In most cases, organizations need to improve their data protection infrastructure – the majority of respondents highlight at least one area that could be improved or that they do not have confidence in
  - This isn't easy though, with multiple vendors often being used and a complex environment being faced
- Organizations need to be investing in *future-ready* data protection. This includes moving data protection to a cloud environment and ensuring that data protection for emerging technologies (e.g. AI/ML) is also accounted for

APPENDIX – MATURITY MODEL

VansonBourne

Question weighting for DPI maturity model



Methodology: Index based on the performance of respondents' organizations in terms of their data protection infrastructure and their confidence in it, the value that they place on data, and recovery times during system downtime.

All related questions from research were filtered through, and 138 points allocated across the curve.

VansonBourne

Maturity model questions and scores (i)

Q4 – How confident are you that your organization is meeting its backup and recovery service level objectives (SLOs)?

- Not at all confident **(0 points)**
- Not very confident **(1 point)**
- Some doubt **(5 points)**
- Moderately confident **(10 points)**
- Very confident **(15 points)**

Maximum score = 15 points

Q13 – How confident are you that your organization's existing data protection solutions are able to meet future business challenges?

- Our current data protection solutions will **not** be able to meet **any** future business challenges **(0 points)**
- Our current data protection solutions will be able to meet a minority of future business challenges **(5 points)**
- Our current data protection solutions will be able to meet the majority of future business challenges **(10 points)**
- Our current data protection solutions will be able to meet all future business challenges **(15 points)**

Maximum score = 15 points

Q20 – What value does your organization place on data?

- Data is extremely valuable – we are currently monetizing it (i.e. data = capital) **(15 points)**
- We are investing in data retention and analytics tools that will help us to monetize all relevant data in the future **(10 points)**
- We see the potential value that data has **(5 points)**
- Data is just a by-product of our business process and holds minimal long-term value **(0 points)**
- We have not considered the value that data may bring to our business **(0 points)**
- Don’t know **(0 points)**

Maximum score = 15 points

VansonBourne

Maturity model questions and scores (ii)

Q25 – How confident are you that your organization's current data protection infrastructure and processes are compliant with regional data governance regulations (e.g. GDPR etc.)?

- Not at all confident **(0 points)**
- Not very confident **(1 point)**
- Some doubt **(5 points)**
- Moderately confident **(10 points)**
- Very confident **(15 points)**

Maximum score = 15 points

Q27 – Which of the following does your organization take into consideration when thinking of your organization's data protection in a public cloud environment?

Please select all the apply

- The possibility to build our own solutions to address public cloud data protection **(3 points)**
- The lowest cost public cloud provider or service available **(1 point)**
- Public cloud protection service offerings compared to 3rd party data protection offerings (feature and workload support) **(3 points)**
- The ability to scale services as public cloud workload increases **(5 points)**
- The impact of the data protection infrastructure or services required to protect at scale **(5 points)**
- Whether we have unified management of backup data stored on-prem and across multi public cloud providers **(5 points)**
- Visibility of protected cloud infrastructure across multi-regions of the cloud provider **(3 points)**
- Portability or replication of workload between on-prem and multi cloud providers **(3 points)**
- Total cost of ownership (TCO) and hard cost savings for using public cloud for disaster recovery **(5 points)**
- We do not take data protection into account when using public cloud (exclusive) **(0 points)**

Maximum score = 33 points

VansonBourne

Maturity model questions and scores (iii)

Q29 – During an unexpected event causing downtime to your most critical applications, how long is your recovery time?

- Our recovery time is more than one working day (please specify in days) **(0 points)**
- Our recovery time is 12 - 24 hours **(2 points)**
- Our recovery time is 6 - 12 hours **(4 points)**
- Our recovery time is 3 - 6 hours **(6 points)**
- Our recovery time is 2 - 3 hours **(8 points)**
- Our recovery time is 1 - 2 hours **(10 points)**
- Our recovery time is less than an hour **(12 points)**
- Our recovery time is zero **(15 points)**
- I do not know **(0 points)**

Maximum score = 15 points

Q30 – How confident are you that, in the event of a data loss incident, you can fully recover systems/data today from all platforms, on premises and off premises, in order to meet business service level objectives?

- Not at all confident **(0 points)**
- Not very confident **(1 point)**
- Some doubt **(5 points)**
- Moderately confident **(10 points)**
- Very confident **(15 points)**

Maximum score = 15 points

Q31 – How confident are you that, in the event of a destructive cyberattack (e.g. a ransomware attack), you can reliably recover all business-critical data, ensuring that the most critical business data is protected from the attack?

- Not at all confident **(0 points)**
- Not very confident **(1 point)**
- Some doubt **(5 points)**
- Moderately confident **(10 points)**
- Very confident **(15 points)**

Maximum score = 15 points

VansonBourne

ARE YOU PROTECTED?

GET AHEAD OF THE CURVE

DELL EMC – GLOBAL DATA PROTECTION INDEX 2018

VansonBourne