F	First name: TARIF
1.	Which of the following do you do in your position?
	a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)? ✓ Yes □ No
	b. Participate in decisions about servicing or maintaining equipment for your data center?
	√Yes □ No
2	How many How many data centers, server rooms, and server closets does your company own or operate?
Er	nter number here NTT Communications: >30 NTT America: 10
3	. [If more than one data center] For how many data centers are you involved in major equipment purchase and maintenance decisions?
Er	nter number here AU VS Sites
4	 The majority of the data centers you help manage are: a. Server closets or rooms (less than 500 square feet) b. Localized data centers (500 – 5,000 square feet) c. Enterprise data centers (> 5,000 square feet) d. Mega or utility-scale data centers (>10,000 square feet)
5	. What is the average number of racks in your typical data center?
En	or or if > 2000
	5. How many servers are there in your organization as a whole? □ < 2000 □ 2000 − 10,000 □ 10,000 − 50,000 □ > 50,000 This project is approved by U.S. Office of Management and Budget. The clearance # is 2000,0038
1	This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

7. What type of data centers does your company operate? ☐ Server rooms or closets ☐ Enterprise/corporate data centers ☐ Cloud/hyperscale computing ☐ High-performance/scientific computing ☐ Multi-tenant/colocation data centers
8. Which sectors does your data center support? (Name top three)
a IT services
b. Energy and utilities
c. Media and telecommunications
(d.) Banking and financial services
e. Health care
f. Education
(g.) Co-location/shared
h. Other:
9. What state(s) are your data centers located in? Enter states here: A, VA, CT, TX, WI, NY
10. When did you last pursue a major equipment purchase/upgrade for your data center?
(a. Within the last 3 years
b. 3-5 years ago
c. More than 5 years ago
11. How often do you replace servers in your data centers?
12. How often do you make major infrastructure upgrades to your data centers? ANNUMENT
13. Do you actively participate in the EnergySTAR Buildings, Green Grid, or another third-party energy-efficiency program?
Yes

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14. Have you had an energy audit performed	d by a third pa	rty within th	e last three y	ears?	
□ Yes					
			 of one of you	r data cente	ers?
•	•		060		
a. If so, what is the average PUE o	f your data ce	nters?	1.3/new	rer DCs	1.6
17. Do you track server utilization?					'lle
a. Is so, what is the average server utilization	on rate of you	data center	s?		
18. Do you rent data center space from anot	her company	اکر ا	es es	□ No	
If yes, what percentage of your data cente	er needs are m	et by renting	g space from	others?	
19. Do you lease or outsource <i>from another</i> centers?	<i>company</i> any	of the follow	ing element	s of your da	ta
	Yes	No	Som	etimes	
	_			¥	
-			14		
20. Do you lease space in your data center(s)	to other com	panies?	☐ Yes	√ No	
a. What is the typical annual electricity consumption (kwh) of one of your data centers? 16. Do you track power usage effectiveness (PUE) or any other energy efficiency measures? a. If so, what is the average PUE of your data centers?					
21. If you lease DC space to or from another pay for electricity costs?	company, doe				У

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	Has	used	Never	used	Don't
	would use again	would not use again	would consider in the future	would not consider	know
Facility Management					
Isolating hot/cold aisles	W				
Blanking panels	Ø				
Enclose server racks (e.g., strip curtains)	Ø				
Data center infrastructure management (DCIM) software	v z				
Raising temperature set points List typical facility temperature: 76 F Cold A3te	D D D D				
Variable speed fan drives	NE				
Energy-efficient air handling units	VZ_				
Modular facility design for data center expansion	Ø				
Air-side economizer	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
Water-side economizer	有口句有有有句				
Energy-efficiency lighting	<u> </u>				
Predictive modeling of future IT deployments					
Other, specify: Vigilent Dynamic Control of Coding					
Servers	,				
Energy-efficient server hardware (e.g., power supply, fans,	ų □ ∕				
etc.)	1.				
Underclocking					
Virtualization					
Decommission idle servers					
Consolidate lightly used servers	Q				
Improve data storage efficiency					
IT power management software	√D/				
Other, specify:					
[Multi-tenant DCs] Adjust pricing models to incentivize					
energy efficiency					
Space-based pricing	$\Box_{/}$			Œ	
Space and power block pricing (differentiate power and	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
energy)	_/			<u> </u>	
Space and actual power pricing (differentiate power and	VZ				
energy)	_	_		_	_
Other, specify:					

⁴ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

First name: 10M
1. Which of the following do you do in your position?
a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)?
b. Participate in decisions about servicing or maintaining equipment for your data center?
Yes
2. How many How many data centers, server rooms, and server closets does your company own or operate?
Enter number here & & >
3. [If more than one data center] For how many data centers are you involved in major equipment purchase and maintenance decisions?
Enter number here
 4. The majority of the data centers you help manage are: a. Server closets or rooms (less than 500 square feet) b. Localized data centers (500 – 5,000 square feet) c. Enterprise data centers (> 5,000 square feet) d. Mega or utility-scale data centers (>10,000 square feet)
5. What is the average number of racks in your typical data center?
Enter number here $\frac{75-2}{5-20}$ or \Box if > 2000
6. How many servers are there in your organization as a whole? □ 2000 - 10,000 □ 10,000 - 50,000 □ > 50,000
1 This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

7.	What type of data centers does your company operate? Server rooms or closets Enterprise/corporate data centers Cloud/hyperscale computing High-performance/scientific computing Multi-tenant/colocation data centers
8.	Which sectors does your data center support? (Name top three)
	a. IT services
	b. Energy and utilities
	c. Media and telecommunications
	d. Banking and financial services
	e. Health care
	f. Education
	g. Co-location/shared
	h. Other: Food & Beverge
	What state(s) are your data centers located in? Enter states here: Pinay - Thexes, Colorado /=75 Across US
	. When did you last pursue a major equipment purchase/upgrade for your data center?
_	á. Within the last 3 years
	o. 3-5 years ago
(c. More than 5 years ago
11	. How often do you replace servers in your data centers?
12	. How often do you make major infrastructure upgrades to your data centers? <u> </u>
13	. Do you actively participate in the EnergySTAR Buildings, Green Grid, or another third-party energy-efficiency program?
Í	Yes □ No

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14. Have you had an energy audit performed	d by a third pa	rty within the	e last three y	/ears?	
Yes No	1.Tlas	3,C/J,	NO () વિ વ	(eit
15. Do you track energy use on a regular bas	sis?)	10		
14. Have you had an energy audit performed by a third party within the last three years? Yes	ers?				
16. Do you track power usage effectiveness	(PUE) or any o	ther energy 6	efficiency me	easures?	ہں
a. If so, what is the average PUE o	f your data ce	nters?			
17. Do you track server utilization? ソレミ	>				
a. Is so, what is the average server utilization	on rate of you	r data centers	? 450	%	
18. Do you rent data center space from anot	ther company	? Þ/ Y	es _e ,	□ No	
	er needs are m	net by renting	space from	others?	
	<i>company</i> any	of the follow	ing element	s of your da	ata
b. Serversc. Facility managementd. Maintenance & repairs			区 图 —	netimes	
20. Do you lease space in your data center(s)	to other com	panies?	☐ Yes	_ Mo	
If yes, what percentage of your racks are	leased to othe	er companies	?		%
21. If you lease DC space to or from another pay for electricity costs?	company, doe	es the tenant	or facility ov	vner typica	lly

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	Has	used	Neve	rused	Don't
	would use again	would not use again	would consider in the future	would not consider	know
Facility Management					
Isolating hot/cold aisles	区				
Blanking panels					ĺΣ
Enclose server racks (e.g., strip curtains)			2 3		
Data center infrastructure management (DCIM) software			△		
Raising temperature set points					₽
List typical facility temperature:					
Variable speed fan drives					
Energy-efficient air handling units	T				
Modular facility design for data center expansion			⊠		
Air-side economizer					\$ 2 ≥∕
Water-side economizer					
Energy-efficiency lighting	A				
Predictive modeling of future IT deployments			⊠		
Other, specify:					
Servers				=	
Energy-efficient server hardware (e.g., power supply, fans, etc.)					
Underclocking					图
Virtualization	⊠′				
Decommission idle servers					
Consolidate lightly used servers	13 6				
Improve data storage efficiency			<u> </u>		
IT power management software			<u> </u>		
Other, specify:					
[Multi-tenant DCs] Adjust pricing models to incentivize					
energy efficiency					
Space-based pricing					B
Space and power block pricing (differentiate power and					P
energy)					
Space and actual power pricing (differentiate power and					₽
energy)					
Other, specify:					

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First name: MARK
1. Which of the following do you do in your position?
 a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)? ✓ Yes No
b. Participate in decisions about servicing or maintaining equipment for your data center?
✓ Yes □ No
2. How many How many data centers, server rooms, and server closets does your company own or operate?
to the state of th
Enter number here50
Litter number nere
3. [If more than one data center] For how many data centers are you involved in major equipment
purchase and maintenance decisions?
Enter number here
4. The majority of the data centers you help manage are:
a. Server closets or rooms (less than 500 square feet)
b. Localized data centers (500 – 5,000 square feet)
c. Enterprise data centers (> 5,000 square feet)
d. Mega or utility-scale data centers (>10,000 square feet)
5. What is the average number of racks in your typical data center?
Enter number here or □ if > 2000
6. How many servers are there in your organization as a whole?□ < 2000
□ 2000 − 10,000
□ > 50,000
1 This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

7.	What type of data centers does your company operate? Server rooms or closets Enterprise/corporate data centers Cloud/hyperscale computing High-performance/scientific computing Multi-tenant/colocation data centers	ABOA
8.	Which sectors does your data center support? (Name top three)	
	a. IT services	
	b. Energy and utilities	
	c. Media and telecommunications	
	d. Banking and financial services	
	e. Health care	
	f. Education	
	g. Co-location/shared	
	h. Other: INSURANCE	S
	What state(s) are your data centers located in? TX, TL Enter states here: TX, TL	
(a	When did you last pursue a major equipment purchase/upgrade for within the last 3 years 3. 3-5 years ago	r your data center?
	c. More than 5 years ago	
·	Wore than 5 years ago	
11.	. How often do you replace servers in your data centers?	
12.	. How often do you make major infrastructure upgrades to your data	a centers? 10 yrs
13.	. Do you actively participate in the EnergySTAR Buildings, Green Grid energy-efficiency program?	d, or another third-party
Į	Yes 🗆 No	

² This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

14. Have you had an energy audit performed	by a third pa	rty within the	last three ye	ears?
□ Yes □ No				
			×	
15. Do you track energy use on a regular basis	s?NC	2		
a. What is the typical annual electri	icity consum	ption (kwh) of	one of your	data centers?
16. Do you track power usage effectiveness (F	'UE) or any c	ther energy e	fficiency me	asures? ND
a. If so, what is the average PUE of	your data ce	nters?		
17. Do you track server utilization?				
a. Is so, what is the average server utilization	n rate of you	r data centers	?	
18. Do you rent data center space from anoth	er company	? 🗆 Ye	es	No
If yes, what percentage of your data center	needs are m	net by renting	space from	others?
19. Do you lease or outsource <i>from another cocenters?</i>	<i>ompany</i> any	of the followi	ng elements	of your data
	Yes	No	Some	etimes
b. Servers			P	
c. Facility management				
d. Maintenance & repairse. Other, specify:				
e. Other, specify:	_ ⊔	Ш	Ц	
20. Do you lease space in your data center(s) t	o other com	panies?	Yes	□ No
If yes, what percentage of your racks are le	eased to othe	er companies?	5	%
21. If you lease DC space to or from another copay for electricity costs?		es the tenant o		ner typically

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	Has			Never used	
· .	would use	would not use	would consider in the	would not	know
	again	again	future	consider	
Facility Management				_	
Isolating hot/cold aisles					
Blanking panels	4				
Enclose server racks (e.g., strip curtains)	\$ 0 b b		1		
Data center infrastructure management (DCIM) software					
Raising temperature set points List typical facility temperature:					
Variable speed fan drives	E				
Energy-efficient air handling units					
Modular facility design for data center expansion			P		
Air-side economizer	D				
Water-side economizer					
Energy-efficiency lighting					
Predictive modeling of future IT deployments					B
Other, specify:					
Servers					
Energy-efficient server hardware (e.g., power supply, fans,	D				
etc.)	18.5	_		_	
Underclocking					T
Virtualization					-12
Decommission idle servers					-
Consolidate lightly used servers					4
Improve data storage efficiency					P
IT power management software					B
Other, specify:					
[Multi-tenant DCs] Adjust pricing models to incentivize					
energy efficiency					
Space-based pricing	M				
Space and power block pricing (differentiate power and	VET.				
energy)	235	(Particular)		-	
Space and actual power pricing (differentiate power and					
energy)		719	_	_	_
Other, specify:					

⁴ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

First name:
1. Which of the following do you do in your position?
a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)? Yes No
b. Participate in decisions about servicing or maintaining equipment for your data center?
□ Yes □ No
2. How many How many data centers, server rooms, and server closets does your company own or operate? Enter number here
3. [If more than one data center] For how many data centers are you involved in major equipment purchase and maintenance decisions?
Enter number here
4. The majority of the data centers you help manage are:
a. Server closets or rooms (less than 500 square feet)
b. Localized data centers (500 – 5,000 square feet)
c. Enterprise data centers (> 5,000 square feet)
d. Mega or utility-scale data centers (>10,000 square feet)
5. What is the average number of racks in your typical data center?
Enter number here or □ if > 2000
 6. How many servers are there in your organization as a whole? □ < 2000 □ 2000 − 10,000 □ 10,000 − 50,000 □ > 50,000

¹ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

7. What type of data centers does your company operate? ☐ Server rooms or closets ☐ Enterprise/corporate data centers ☐ Cloud/hyperscale computing ☐ High-performance/scientific computing ☐ Multi-tenant/colocation data centers
8. Which sectors does your data center support? (Name top three)
a. IT services
b. Energy and utilities
c. Media and telecommunications
d. Banking and financial services
e. Health care
f. Education
g. Co-location/shared h. Other:
h. Other: WEB SERVICES
9. What state(s) are your data centers located in? Enter states here: VA, CA
10. When did you last pursue a major equipment purchase/upgrade for your data center? a. Within the last 3 years
b. 3-5 years ago
c. More than 5 years ago
11. How often do you replace servers in your data centers? HAVENT REACHED THAT POINT
12. How often do you make major infrastructure upgrades to your data centers? 6-Month
13. Do you actively participate in the EnergySTAR Buildings, Green Grid, or another third-party energy-efficiency program?
□ Yes No

² This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

14. Have yo	u had an energy audit performed by	a third party	within the	last three y	ears?
□ Yes	No				
15. Do you t	track energy use on a regular basis?	45		_	
a.	What is the typical annual electricit	ty consumptio	n (kwh) o1	fone of you	r data centers?
	rack power usage effectiveness (PU			-	
a.	If so, what is the average PUE of yo	ur data center	s?,		
	rack server utilization?	ate of your da	ta centers	? 70-809	%
	ent data center space <i>from another</i>				□ No
If yes, wh	at percentage of your data center no	eeds are met b	y renting	space from	others?
19. Do you le	ease or outsource <i>from another con</i>	<i>npany</i> any of t	he followi	ng elements	s of your data
		Yes	No	Som	etimes
	Servers		Ø		
	Facility management			<u>~</u>	
	Maintenance & repairs Other, specify:				
20. Do you le	ease space in your data center(s) to	other compan	ies?	☐ Yes	∑ No
If yes, wh	nat percentage of your racks are leas	sed to other co	ompanies î		%
21. If you lea	se DC space to or from another com lectricity costs?	pany, does th	e tenant o	or facility ow	ner typically

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	Has	Has used		Never used	
	would use again	would not use again	would consider in the future	would not consider	know
Facility Management					
solating hot/cold aisles	X				
Blanking panels)A				
Enclose server racks (e.g., strip curtains)	M				
Data center infrastructure management (DCIM) software	X				
Raising temperature set points List typical facility temperature:			×		
Variable speed fan drives	ø,				
Energy-efficient air handling units	X				
Modular facility design for data center expansion			X		
Air-side economizer	\mathbf{X}				
Water-side economizer	A				
Energy-efficiency lighting	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		_		
Predictive modeling of future IT deployments	<i>2</i> 5				
Other, specify:	, 🗖				
Servers Servers					
Energy-efficient server hardware (e.g., power supply, fans,) \				
etc.)					
Underclocking					À
Virtualization	X				
Decommission idle servers	\mathbf{x}				
Consolidate lightly used servers			`\ \		
Improve data storage efficiency	X				
IT power management software			Y		
Other, specify:					
[Multi-tenant DCs] Adjust pricing models to incentivize					
energy efficiency	_			_	_
Space-based pricing					
Space and power block pricing (differentiate power and energy)	Æ				
Space and actual power pricing (differentiate power and					
energy)					
Other, specify:			\\ \		

⁴ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

First name: Dave
1. Which of the following do you do in your position?
a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)? Yes No
b. Participate in decisions about servicing or maintaining equipment for your data center?
Yes
2. How many How many data centers, server rooms, and server closets does your company own or operate?
Enter number here
3. [If more than one data center] For how many data centers are you involved in major equipment purchase and maintenance decisions? Enter number here
4. The majority of the data centers you help manage are:
a. Server closets or rooms (less than 500 square feet)
b. Localized data centers (500 – 5,000 square feet)
c. Enterprise data centers (> 5,000 square reet)
 c. Enterprise data centers (> 5,000 square feet) d. Mega or utility-scale data centers (>10,000 square feet)
Mega or utility-scale data centers (>10,000 square feet)
Mega or utility-scale data centers (>10,000 square feet) 5. What is the average number of racks in your typical data center?

7.	A DA	f data centers does your company operate? Server rooms or closets Enterprise/corporate data centers Cloud/hyperscale computing High-performance/scientific computing Multi-tenant/colocation data centers
8.	Which secto	rs does your data center support? (Name top three)
	(a)	IT services
	b.	Energy and utilities
	c.	Media and telecommunications
	d.	Banking and financial services
	e.	Health care
	f.	Education
	g.	Co-location/shared
	h.	Other:
	Enter states h	s) are your data centers located in? Dere:
	. When did yo	ou last pursue a major equipment purchase/upgrade for your data center?
_	o. 3-5 years a	
	. More than !	
		, ea.s age
11	_	lo you replace servers in your data centers?
12	. How often o	lo you make major infrastructure upgrades to your data centers? 15-20 years
13	-	vely participate in the EnergySTAR Buildings, Green Grid, or another third-party iency program?
7	Yes	□ No

² This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

14. Have you had an energy audit performed by a third party within the last three years?
□ Yes □ No (Do Mend)
15. Do you track energy use on a regular basis?
a. What is the typical annual electricity consumption (kwh) of one of your data centers?
16. Do you track power usage effectiveness (PUE) or any other energy efficiency measures? \sqrt{v}
a. If so, what is the average PUE of your data centers?
17. Do you track server utilization? a. Is so, what is the average server utilization rate of your data centers? 18. Do you rent data center space <i>from another company</i> ?
18. Do you rent data center space <i>from another company</i> ? ☐ Yes ☐ No
If yes, what percentage of your data center needs are met by renting space from others?
19. Do you lease or outsource <i>from another company</i> any of the following elements of your data centers?
b. Servers c. Facility management d. Maintenance & repairs e. Other, specify:
20. Do you lease space in your data center(s) to other companies?
If yes, what percentage of your racks are leased to other companies?%
21. If you lease DC space to or from another company, does the tenant or facility owner typically pay for electricity costs?

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	Has	used			Don't
	would use again	would not use again	would consider in the future	would not consider	know
Facility Management	ugu	- B	1 44	00,131	
Isolating hot/cold aisles					
District a second					
Enclose server racks (e.g., strip curtains)	4		□ ne		
Data center infrastructure management (DCIM) software	75				
Enclose server racks (e.g., strip curtains) Data center infrastructure management (DCIM) software Raising temperature set points List typical facility temperature: Variable speed fan drives Energy-efficient air handling units	M				
Variable speed fan drives	ΙQ̈́				
Energy-efficient air handling units	Ŗ				
Modular facility design for data center expansion	12 0				
Air-side economizer	囡				
Water-side economizer		[2]			
Energy-efficiency lighting	∑				
Predictive modeling of future IT deployments	ď				
Other, specify:					
Servers	Ø	-		_	п
Energy-efficient server hardware (e.g., power supply, fans, etc.)	I CI√				
Underclocking				43	
Virtualization	Z				
Decommission idle servers	B B C C				
Consolidate lightly used servers	×				
Improve data storage efficiency					
IT power management software					
Other, specify:					
[Multi-tenant DCs] Adjust pricing models to incentivize					I
energy efficiency	_		_	_	_
Space-based pricing					
Space and power block pricing (differentiate power and					
energy)	-	_	_	_	
Space and actual power pricing (differentiate power and					Ц,
energy)	_	_	_	_	_
Other, specify:			🗆		

⁴ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

Focus Group Questionnaire
First name:
1. Which of the following do you do in your position?
a. Participate in decisions about purchasing equipment for your data center (e.g., servers, software, racks, lighting, cooling equipment)? ✓ Yes ☐ No
b. Participate in decisions about servicing or maintaining equipment for your data center?
Yes
2. How many How many data centers, server rooms, and server closets does your company own or operate?
Enter number here
3. [If more than one data center] For how many data centers are you involved in major equipment purchase and maintenance decisions?
Enter number here
4. The majority of the data centers you help manage are:
a. Server closets or rooms (less than 500 square feet)
b. Localized data centers (500 – 5,000 square feet)
c. Enterprise data centers (> 5,000 square feet) d. Mega or utility-scale data centers (>10,000 square feet)
5. What is the average number of racks in your typical data center?
Enter number here
 6. How many servers are there in your organization as a whole? □ < 2000 □ 2000 - 10,000 □ 10,000 - 50,000 □ > 50,000
JU,000

¹ This project is approved by U.S. Office of Management and Budget. The clearance # is 2090-0028.

7.	What type of data centers does your company operate?
	☐ Server rooms or closets
	Enterprise/corporate data centers
	Cloud/hyperscale computing
	High-performance/scientific computing
	Multi-tenant/colocation data centers
8.	Which sectors does your data center support? (Name top three)
	a. IT services
	(b.) Energy and utilities
	Media and telecommunications
	d. Banking and financial services
	e. Health care
	f. Education
	(g.) Co-location/shared
	h. Other:
9.	What state(s) are your data centers located in?
E	inter states here: MN, TN, OH, NC, MA
10	. When did you last pursue a major equipment purchase/upgrade for your data center?
P	.) Within the last 3 years
k	o. 3-5 years ago
C	More than 5 years ago
4.4	II 6. I a see leave leave le constant de la content de la
ΤΤ	. How often do you replace servers in your data centers?
12	. How often do you make major infrastructure upgrades to your data centers?
13	. Do you actively participate in the EnergySTAR Buildings, Green Grid, or another third-party energy-efficiency program?
	√vee □ Ne
1	7 Yes
- 1	

14. Have you had an energy audit performed by a third party within the last three years?
□ Yes No
15. Do you track energy use on a regular basis?
a. What is the typical annual electricity consumption (kwh) of one of your data centers?
16. Do you track power usage effectiveness (PUE) or any other energy efficiency measures?
a. If so, what is the average PUE of your data centers?
17. Do you track server utilization?
a. Is so, what is the average server utilization rate of your data centers?
18. Do you rent data center space <i>from another company</i> ? ☐ Yes No
If yes, what percentage of your data center needs are met by renting space from others?
19. Do you lease or outsource <i>from another company</i> any of the following elements of your data centers?
Yes `No Sometimes b. Servers □ ★ □
c. Facility management
d. Maintenance & repairs \square \square \square \square
20. Do you lease space in your data center(s) <i>to other companies</i> ? ☐ Yes ☐ No
If yes, what percentage of your racks are leased to other companies? $\underline{\hspace{1cm}/\hspace{1cm}\mathcal{O}}$ %
21. If you lease DC space to or from another company, does the tenant or facility owner typically pay for electricity costs?
Terant

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	Has used		Never used		Don't
	would use again	would not use again	would consider in the future	would not consider	know
Facility Management	~	:-			
Isolating hot/cold aisles Blanking panels Enclose server racks (e.g., strip curtains) Data center infrastructure management (DCIM) software Raising temperature set points List typical facility temperature:	A BABA			0 0 0 0	0000
Variable speed fan drives Energy-efficient air handling units Modular facility design for data center expansion Air-side economizer Water-side economizer Energy-efficiency lighting Predictive modeling of future IT deployments Other, specify:	- NEW PRINCE				
<u>Servers</u> Energy-efficient server hardware (e.g., power supply, fans,					
etc.) Underclocking Virtualization Decommission idle servers Consolidate lightly used servers Improve data storage efficiency IT power management software Other, specify:					AND DOBA
[Multi-tenant DCs] Adjust pricing models to incentivize energy efficiency Space-based pricing Space and power block pricing (differentiate power and energy) Space and actual power pricing (differentiate power and	M DA			0	
energy) Other, specify:	<i>(</i>				

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