The 2021 ACFM Annual Survey

Is your host institution a

University	27
Research Institute	10
Government	1
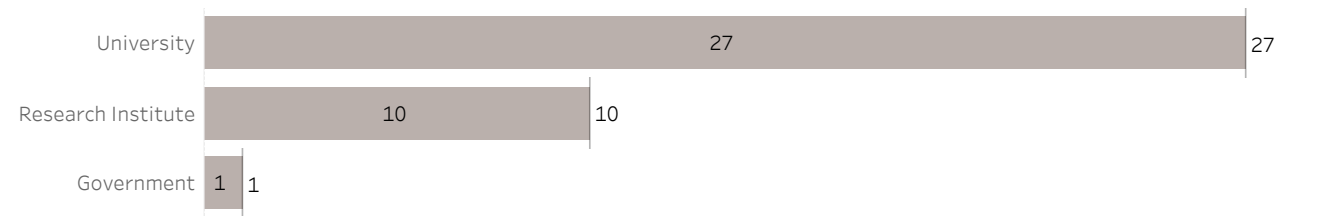
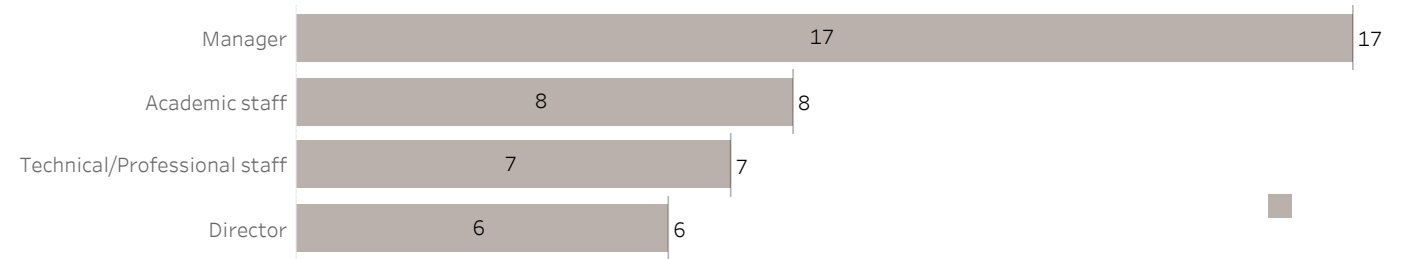## Do you have, or plan to have an accreditation

No - and we don't have plans for accreditation in 2021	30
No - but we plan to apply for accreditation in 2021	5
Yes - we have accreditation	3

Are you a

Manager	17
Academic staff	8
Technical/Professional staff	7
Director	6
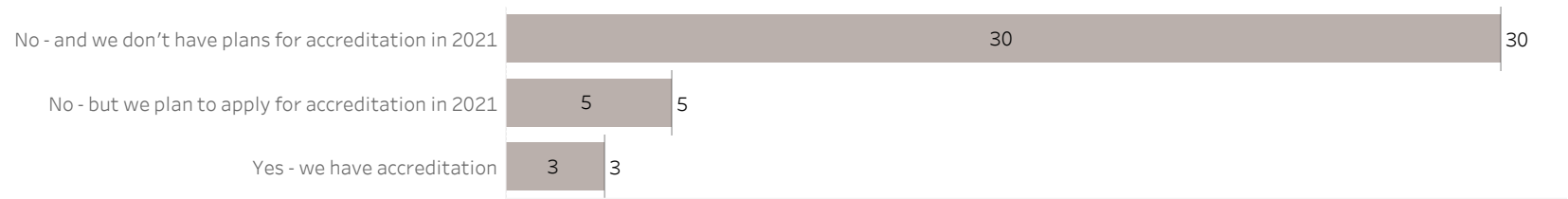
Is there any infrastructure in place at your host institute that supports your facility with the following areas?

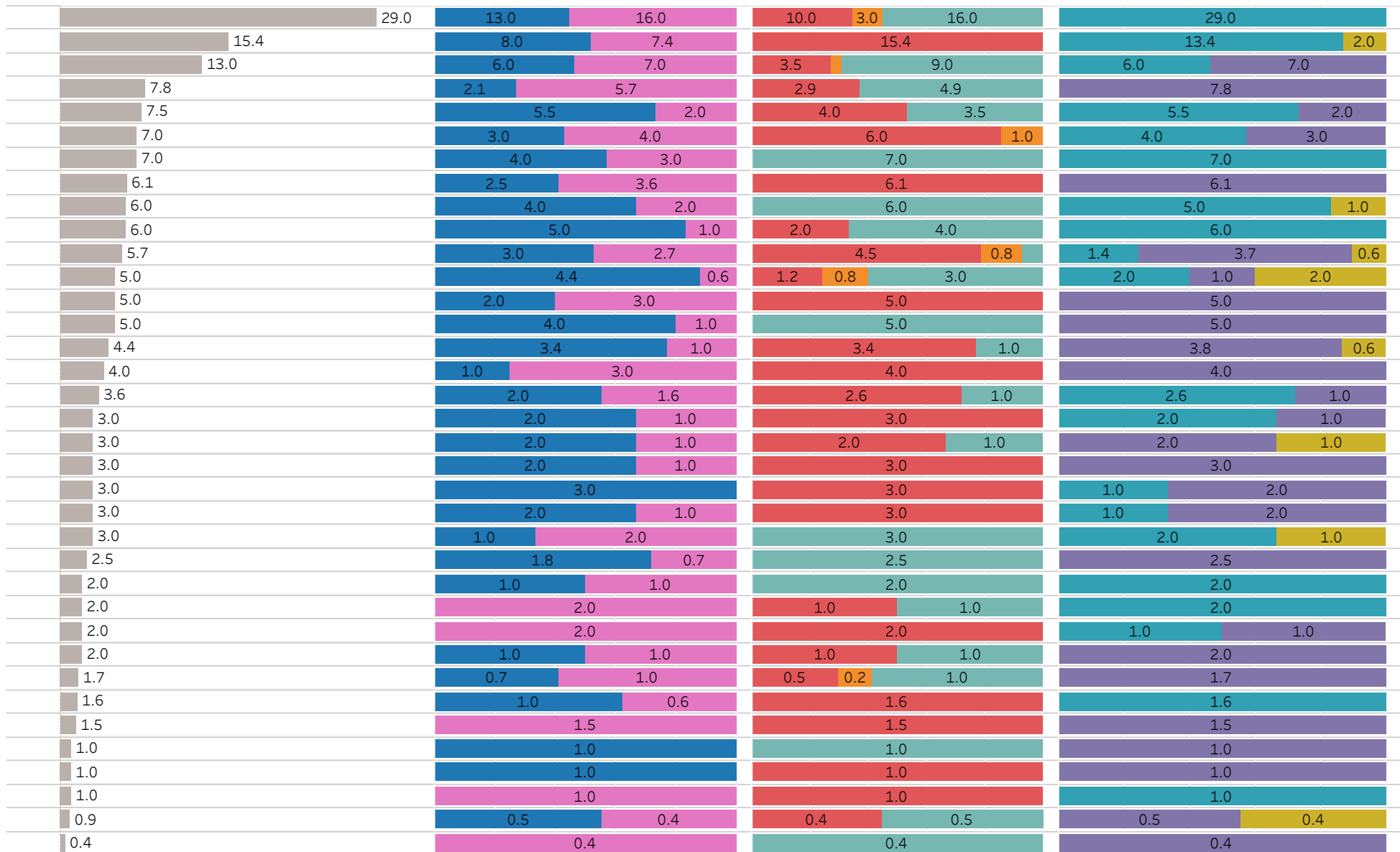| Fundraising	Marketing	Grant-writing support	Ordering	Invoicing	IT	Workshop	Service contract	No support selected	Total support available
								■	1
								■	1
					■				1
				■					1
				■					1
				■					1
			■						2
			■						2
			■	■	■				3
			■		■				3
		■			■				3
		■	■						3
			■						3
	■								3
			■		■	■			3
			■	■	■	■			4
				■		■			4
		■				■			4
	■		■	■	■				4
	■		■	■	■				4
	■		■	■	■				4
			■	■	■	■			4
			■	■	■	■			4
■			■		■	■			5
			■	■	■	■			5
■	■		■		■				5
	■		■	■	■				5
■	■	■	■	■	■				6
■	■		■	■	■				6
	■		■	■	■	■			6
■	■		■	■	■				6
■	■		■	■	■				6
■	■		■	■	■				6
■	■		■	■	■	■			6
■	■		■	■	■				6
■	■	■	■	■	■	■			7
■	■		■	■	■	■			7
■	■	■	■	■	■	■	■		8
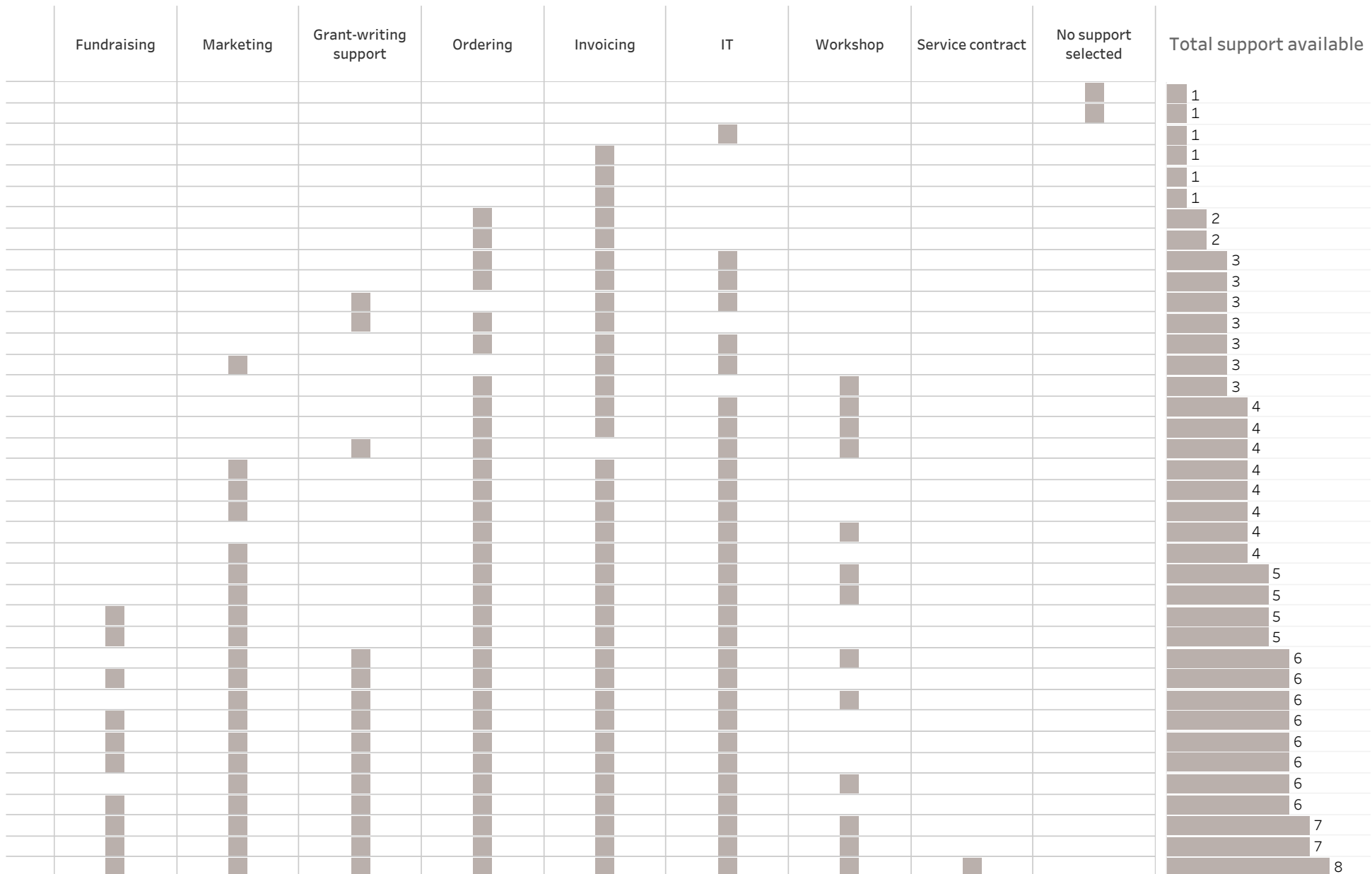
Total Staff (FTE) — Gender / Role / Contract type breakdown

Total Staff (FTE)	Male	Female	Professional staff	Admin staff	Academic staff	FixedTerm staff	Continuing staff	Casual staff
29.0	13.0	16.0	10.0	3.0	16.0	29.0		
15.4	8.0	7.4	15.4			13.4		2.0
13.0	6.0	7.0	3.5	(small)	9.0	6.0	7.0	
7.8	2.1	5.7	2.9		4.9		7.8	
7.5	5.5	2.0	4.0		3.5	5.5	2.0	
7.0	3.0	4.0	6.0	1.0		4.0	3.0	
7.0	4.0	3.0			7.0	7.0		
6.1	2.5	3.6	6.1				6.1	
6.0	4.0	2.0			6.0	5.0		1.0
6.0	5.0	1.0	2.0		4.0	6.0		
5.7	3.0	2.7	4.5	0.8		1.4	3.7	0.6
5.0	4.4	0.6	1.2	0.8	3.0	2.0	1.0	2.0
5.0	2.0	3.0	5.0				5.0	
5.0	4.0	1.0			5.0		5.0	
4.4	3.4	1.0	3.4		1.0		3.8	0.6
4.0	1.0	3.0	4.0				4.0	
3.6	2.0	1.6	2.6		1.0	2.6	1.0	
3.0	2.0	1.0	3.0			2.0	1.0	
3.0	2.0	1.0	2.0		1.0		2.0	1.0
3.0	2.0	1.0	3.0				3.0	
3.0	3.0		3.0			1.0	2.0	
3.0	2.0	1.0	3.0			1.0	2.0	
3.0	1.0	2.0			3.0	2.0		1.0
2.5	1.8	0.7			2.5		2.5	
2.0	1.0	1.0			2.0		2.0	
2.0		2.0	1.0		1.0		2.0	
2.0		2.0	2.0			1.0	1.0	
2.0	1.0	1.0	1.0		1.0		2.0	
1.7	0.7	1.0	0.5	0.2	1.0		1.7	
1.6	1.0	0.6	1.6				1.6	
1.5		1.5	1.5				1.5	
1.0	1.0				1.0		1.0	
1.0	1.0		1.0				1.0	
1.0		1.0	1.0			1.0		
0.9	0.5	0.4	0.4		0.5		0.5	0.4
0.4		0.4			0.4		0.4	

Legend: FEMALE, MALE, Academic staff, Admin staff, Professional staff, Casual staff, Continuing staff, FixedTerm staff

Mass Specs: Total vs **new in 2020**
new equipment are highlighted

Total Mass Specs per Institution
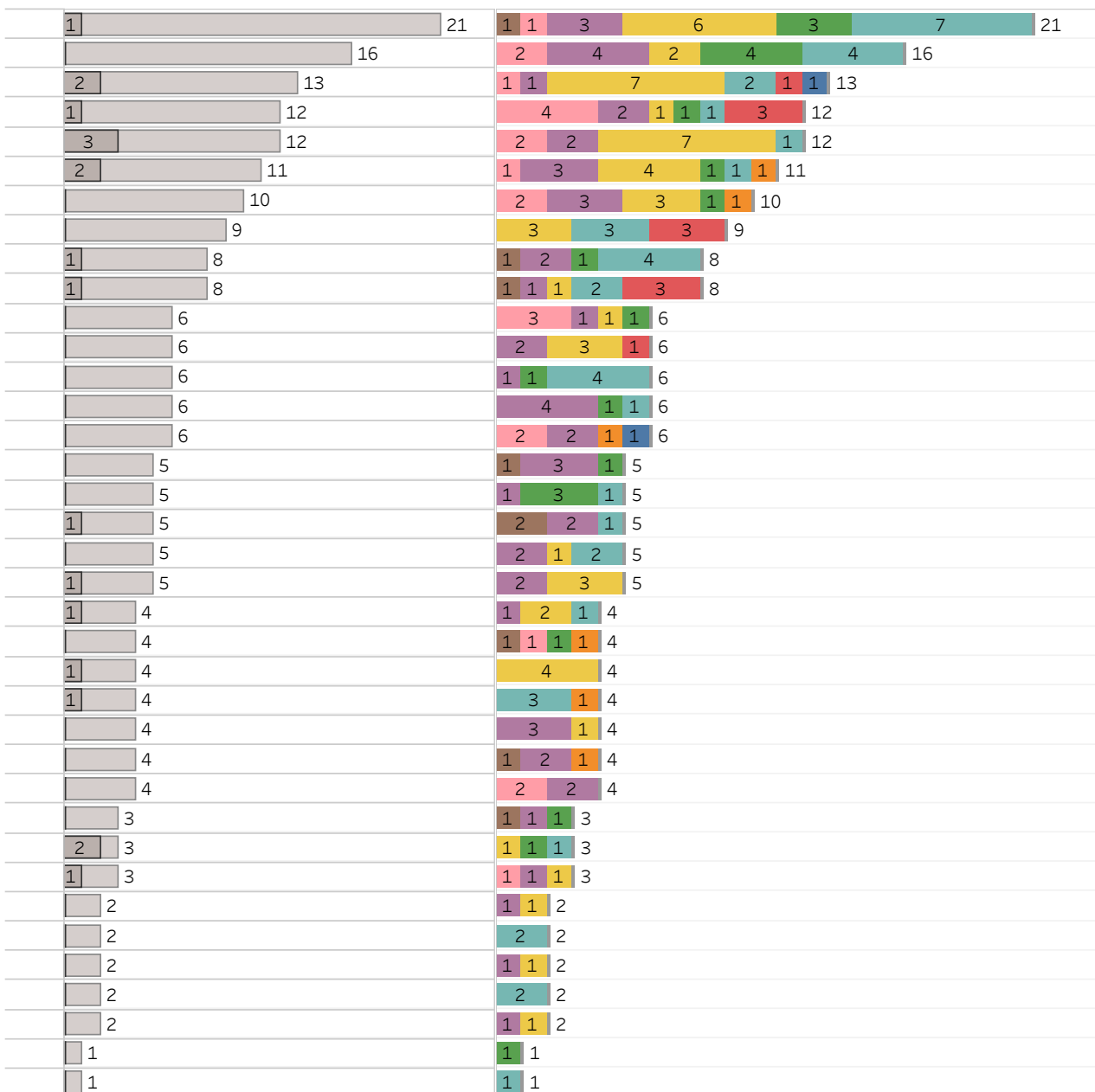
Total equipment across all Institutions
Black bars represent equipment with ion mobility capabilities
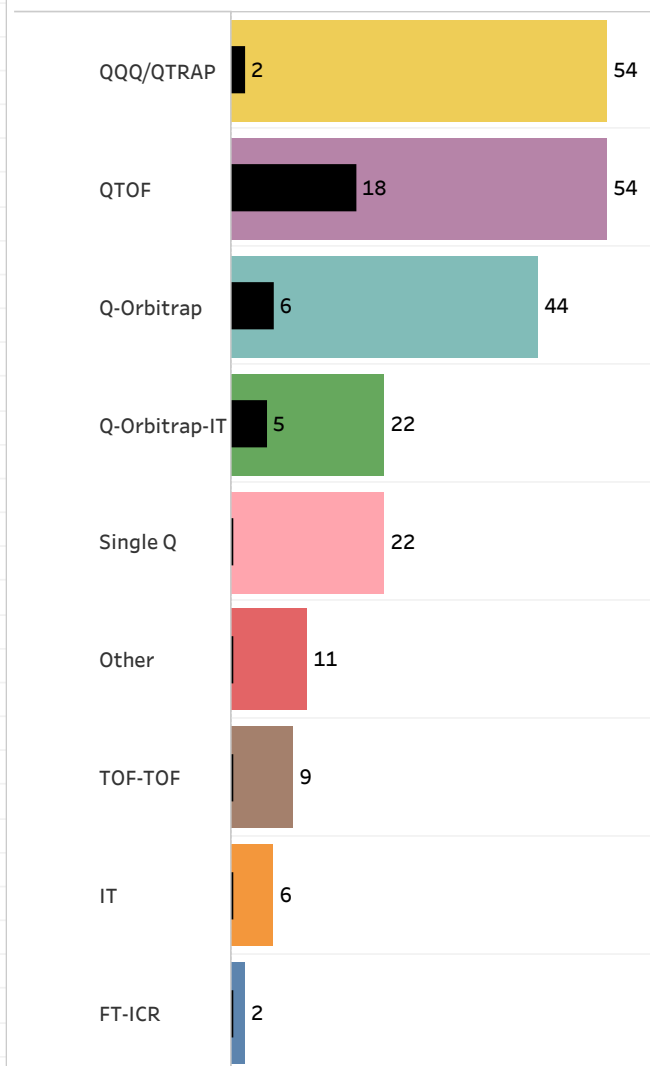
Mass Specs

- QQQ/QTRAP
- QTOF
- Q-Orbitrap
- Q-Orbitrap-IT
- Single Q
- Other
- TOF-TOF
- IT
- FT-ICR

New acquisitions: 2020

Equipment	Value
QQQ/QTRAP	3
QQQ/QTRAP	2
QQQ/QTRAP	1
Single Q	1
Q-Orbitrap-IT	1
QQQ/QTRAP	1
Q-Orbitrap	1
Q-Orbitrap	1
Q-Orbitrap-IT	1
QTOF	1
QTOF	1
QTOF	1
Q-Orbitrap	1
QQQ/QTRAP	1
Q-Orbitrap-IT	1
QTOF	1
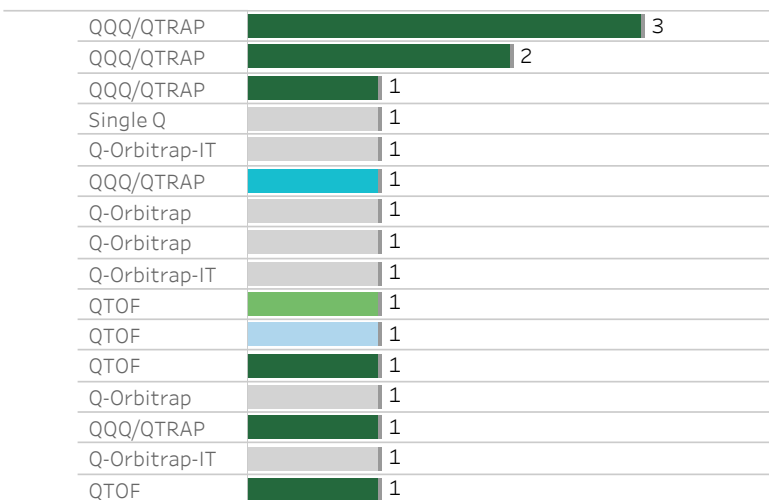
Legend:
- Leased
- New
- Second hand
- Seed/on loan
- acquirement process not specified

Decommissions: 2020

- Velos Pro
- AB Sciex 4800 MALDI-TOF/TOF
- 2x Single Q (MSQ and ISQ)
- Bruker 3D trap ETD / Bruker QToF
- Triple Tof
- QQQ
- QExactive Classic
- Orbitrap Eite
- MALDI TOF/TOF
- Waters Synapt G2
- AB Sciex Qtrap 4000

NOTE:

For acquisitions:

23 Institutions indicated No equipment were acquired in 2020 and **one** Institution did not respond.

For decommissions:

26 Institutions indicated no equipment were decommissioned in 2020.

Maintenances: 2020

Full maintenance	Preventative only	No pre-paid cover	Total
19		2	21
11		5	16
1		11	12
8		3	11
		10	10
10			10
	2	6	8
		7	7
6			6
6			6
6			6
5		1	6
6			6
2		4	6
1	1	4	6
		5	5
1		4	5
2	3		5
3	1		4
4			4
2	2		4
4			4
2		2	4
1	2		3
3			3
2			2
2			2
2			2
2			2
	2		2
1	1		2
2			2
	2		2
1			1
1			1
1			1
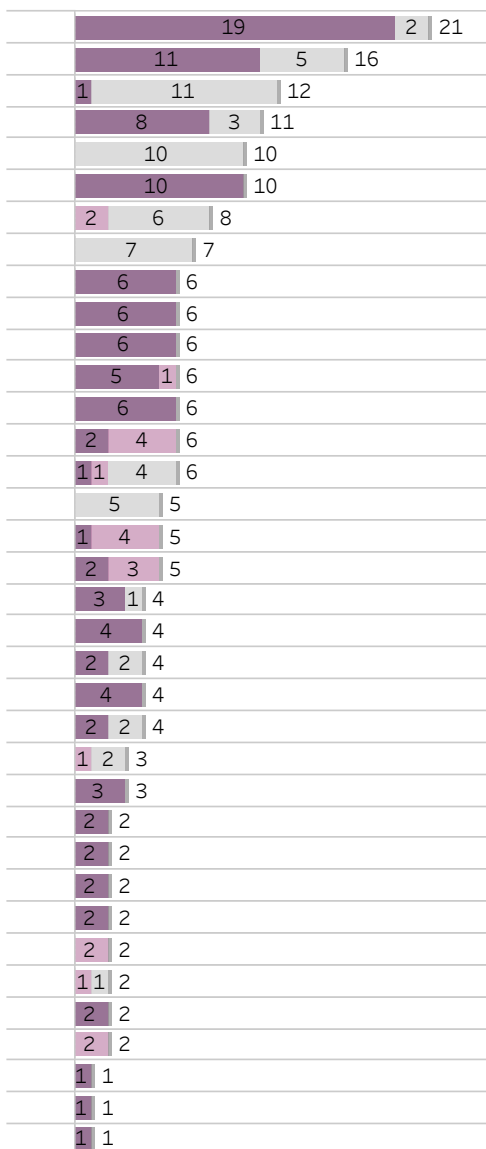
Legend:
- Full maintenance
- Preventative only
- No pre-paid cover

Equipment funding source: 2020

Funding breakdown
100%
20% / 80%
100%
100%
100%
100%
100%
100%
100%
50% / 50%
100%
40% / 20% / 20% / 20%
23% / 42% / 35%
100%
100%
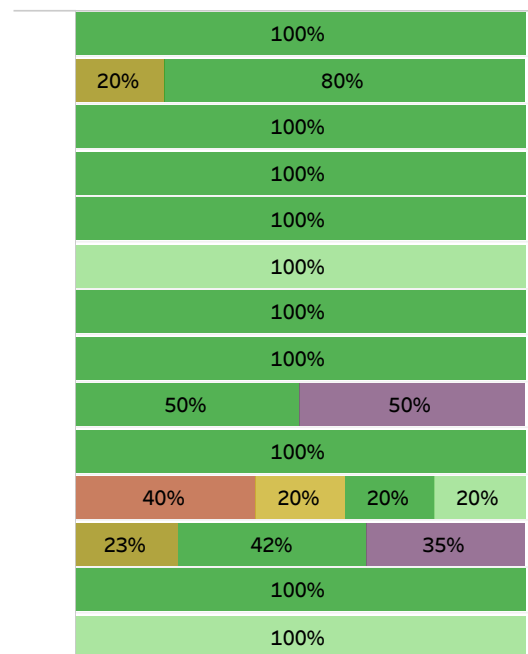
Funding source
- Philanthropy
- Self funded (user fees)
- Host institution funded
- State grant
- Federal grant
- Federal grant (NCRIS/RIIP)

NOTE:

For maintenances:

Two Institutions did not provide any response.

For funding source:

23 Institutions did indicate any funding source in 2020 and **one** Institution did not respond.

Software packages per Institution

Shareware (thin bar)
Licenses (thick bar)

4 2 2 2 3 5 2 2 5 2 2 2 2 48
3 6 10 10 35
2 5 3 5 7 29
5 2 2 2 5 2 26
8 2 8 3 22
4 5 5 5 20
3 2 3 2 3 19
16 17
3 3 6 17
11 14
2 2 3 2 14
3 6 13
3 2 12
2 3 12
3 3 2 2 12
3 2 5 11
2 3 3 10
9
9
2 9
8
8
7
2 7
4 7
2 3 2 7
6
6
5 6
3 5
5
5
3 5
3
3
2 3
3

Legend

Imaging software, SCiIS
Imaging software, HDI
Metabolomics software, Mass Hunter
Metabolomics software, FreeStyle
Metabolomics software, MassLynx
Metabolomics software, Compound Discoverer
Metabolomics software, MS-DIAL
Metabolomics software, LipidSearch
Metabolomics software, Insight
Metabolomics software, Protenesis QI
Metabolomics software, LipidView
Proteomics software, Max Quant
Proteomics software, Proteome Discoverer
Proteomics software, PeakView/SWATH
Proteomics software, Mascot
Proteomics software, ProteinPilot
Proteomics software, DIA-NN
Proteomics software, Peaks
Proteomics software, Scaffold
Proteomics software, Spectronaut
Proteomics software, Mass Dynamics
Proteomics software, Trans-Proteomics Pipeline
Proteomics software, Byonic
Proteomics software, Progenesis QI for Proteomics
Proteomics software, EncyclopaDIA
Proteomics software, Metamorpheus
Proteomics software, OpenMS
Targeted Analysis, Skyline
Targeted Analysis, Qualbrowser
Targeted Analysis, Tracefinder
Targeted Analysis, Multiquant

Total Software packages across all Institutions

Category	Software	Count
Proteomics software	Max Quant	30
	Proteome Discoverer	28
	PeakView/SWATH	26
	ProteinPilot	22
	Mascot	22
	DIA-NN	20
	Peaks	11
	Scaffold	8
	Spectronaut	7
	Trans-Proteomics Pipeline	5
	Mass Dynamics	5
	Progenesis QI for Proteomics	4
	Byonic	4
	OpenMS	3
	Metamorpheus	3
	EncyclopaDIA	3
Metabolomics software	Mass Hunter	33
	FreeStyle	32
	MassLynx	20
	Compound Discoverer	13
	MS-DIAL	12
	LipidSearch	8
	Insight	7
	Protenesis QI	4
	LipidView	3
Targeted Analysis	Skyline	59
	Qualbrowser	24
	Tracefinder	14
	Multiquant	10
Imaging software	SCiIS	9
	HDI	3

Total staff appointments	Total equipment	Staff:Equipment
13.0 (9.0, 3.5)	4 | 4	3.3
3.0 (1)	1	3.0
5.0 (1, 1)	2	2.5
29.0 (16.0, 3.0, 10.0)	2, 2, 7, 1 | 12	2.4
15.4	1, 2, 1, 4 | 8	1.9
3.0, 2.0	2 | 2	1.5
4.4, 3.4	1, 1, 1 | 3	1.5
7.5, 3.5, 4.0	1, 1, 4 | 6	1.3
5.0, 3.0	1, 1, 1, 1 | 4	1.3
3.6, 2.6	1, 1, 1 | 3	1.2
6.1	3, 1, 1, 1 | 6	1.0
2.0	1, 1 | 2	1.0
1.0	1 | 1	1.0
6.0	4, 1, 1 | 6	1.0
2.0	2 | 2	1.0
7.0, 6.0	1, 1, 1, 2, 3 | 8	0.9
2.5	1, 1, 1 | 3	0.8
7.0	3, 3, 3 | 9	0.8
3.0	3, 1 | 4	0.8
3.0	3, 1 | 4	0.8
4.0	2, 2, 1, 1 | 6	0.7
3.0	2, 1, 2 | 5	0.6
7.8, 4.9, 2.9	1, 1, 7, 2, 1, 1 | 13	0.6
6.0, 4.0, 2.0	1, 3, 4, 1, 1, 1 | 11	0.5
1.0	1, 1 | 2	0.5
2.0	2, 3 | 5	0.4
1.5	2, 2 | 4	0.4
1.7	1, 3, 1 | 5	0.3
5.0	2, 4, 2, 4, 4 | 16	0.3
5.7, 4.5	1, 1, 3, 6, 3, 7 | 21	0.3
1.6	2, 3, 1 | 6	0.3
3.0	4, 2, 1, 1, 1, 3 | 12	0.3
0.9	1, 2, 1 | 4	0.2
1.0	1, 3, 1 | 5	0.2
2.0	2, 3, 3, 1, 1 | 10	0.2
	1, 2, 1 | 4	
	2, 2, 1 | 5	

Legend:
- Academic staff
- Admin staff
- Professional staff
- TOF-TOF
- Single Q
- QTOF Ion mobili..
- QTOF
- QQQ/QTRAP Ion..
- QQQ/QTRAP
- Q-Orbitrap-IT io..
- Q-Orbitrap-IT
- Q-Orbitrap ion ..
- Q-Orbitrap
- Other
- IT
- FT-ICR

Billing Model

10%	20%	20%	50%	
75%			10%	15%
60%		10%	30%	
20%	50%		30%	
30%	60%		10%	
5%	80%		15%	
25%	75%			
80%			20%	
30%	70%			
75%		25%		
76%		24%		
80%		20%		
50%	50%			
20%	80%			
20%	80%			
30%	70%			
90%		10%		
70%	30%			
5%	95%			
90%		10%		
50%	50%			
5%	95%			
10%	90%			
80%	20%			
90%		10%		
100%				
100%				
100%				
100%				
100%				
100%				
100%				
100%				
100%				
100%				
100%				
100%				

Direct cost recovery: 2020

10%	10%	25%	20%	25%	10%	
20%	20%	40%	20%			
26%	10%	64%				
30%	40%	30%				
25%	50%	25%				
50%	20%	30%				
40%	60%					
50%	50%					
25%	75%					
90%	10%					
95%	5%					
20%	80%					
20%	80%					
50%	50%					
20%	80%					
10%	90%					
23%	77%					
50%	50%					
30%	70%					
30%	70%					
50%	50%					
40%	60%					
50%	50%					
40%	60%					
33%	67%					
80%	20%					
50%	50%					
29% response available for Institution with 71%						
100%						
100%						
100%						
100%						

Note: FIVE Institutions did not provide any response for direct cost recovery.

Pricing Model
- Other
- Self-service (per hour billing)
- Fee-for-service (per hour billing)
- Subscription
- Fee-for-service (per sample billing)
- Self-service (per sample billing)
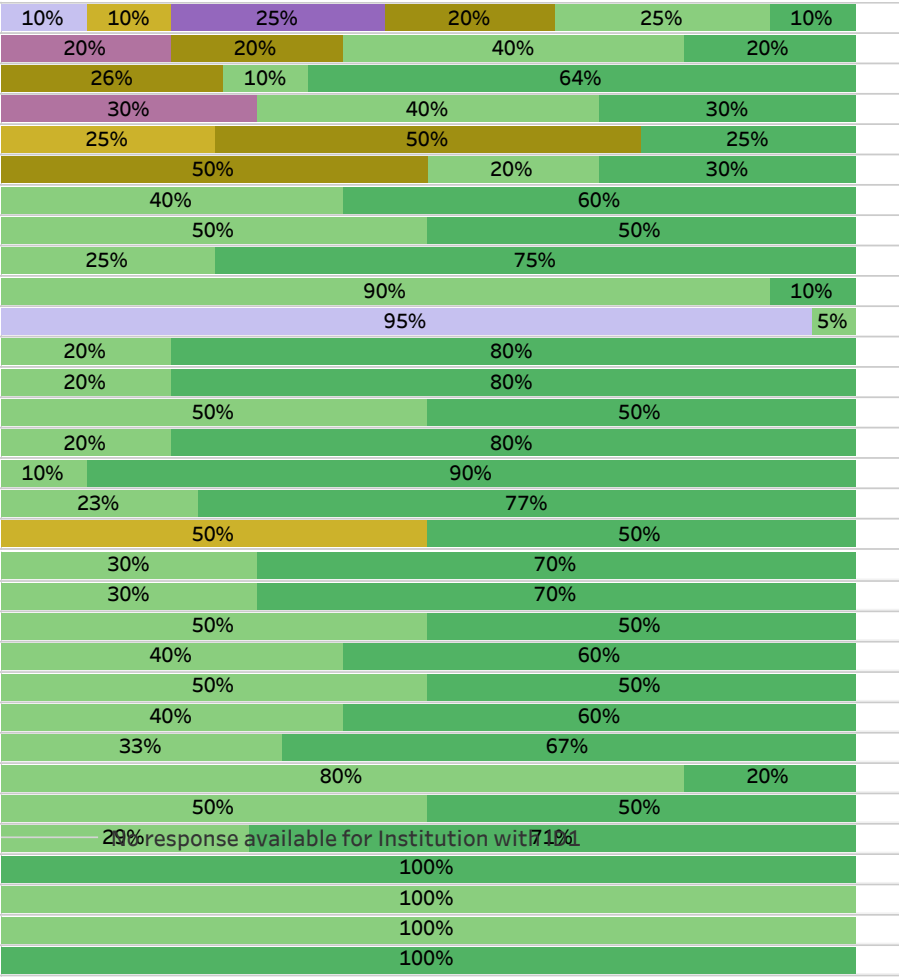
Cost category/Funding source
- Other
- State Grants
- Host philanthropy
- Charity Grants
- Federal Grants
- User fees
- Host subsidy

Client breakdown
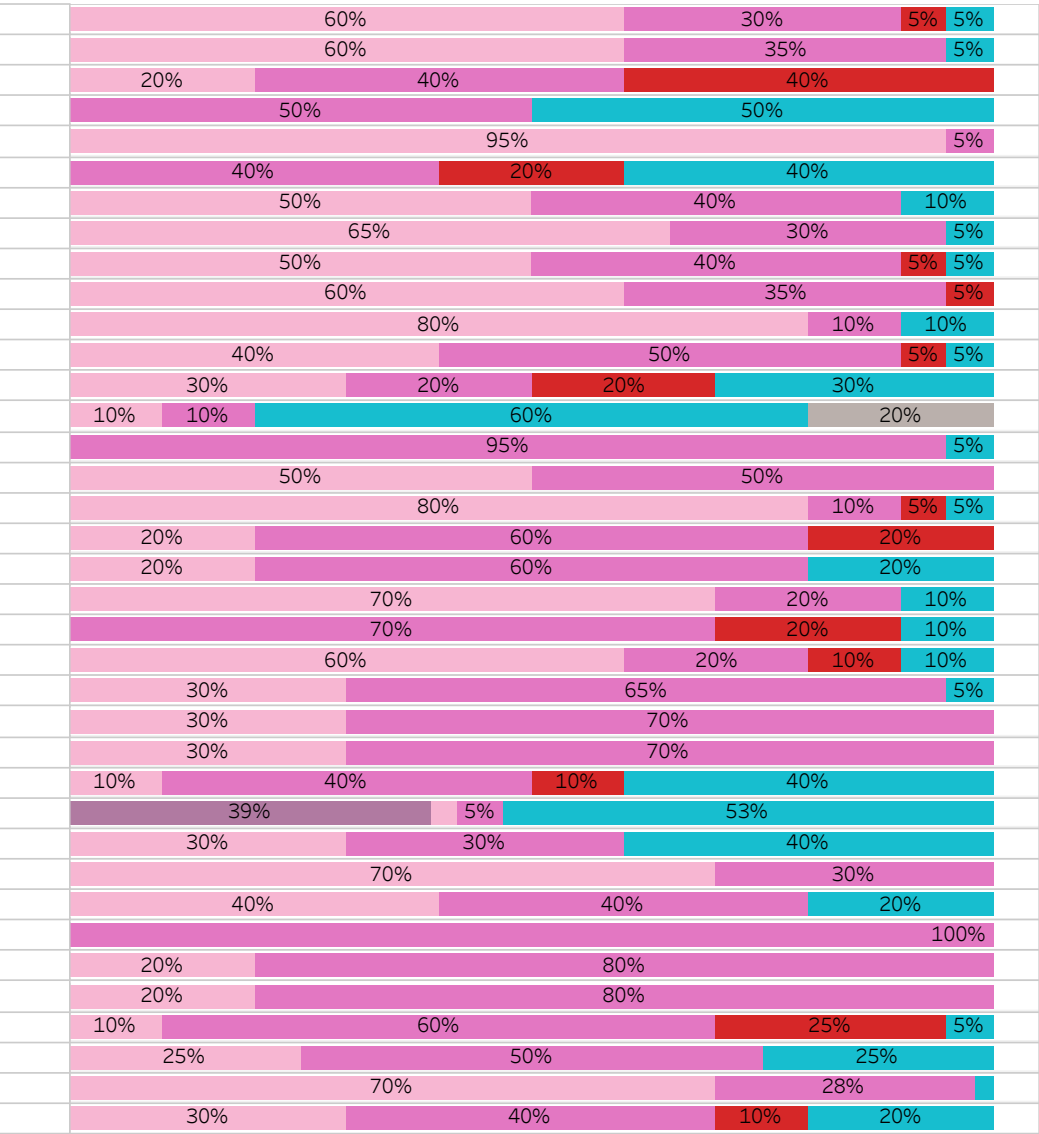
Customer Type
- Research institutes/organisations
- Student
- Academic
- Clinicians
- Commercial
- 'Other customer type' selected, but no respons..

Clilent Origin
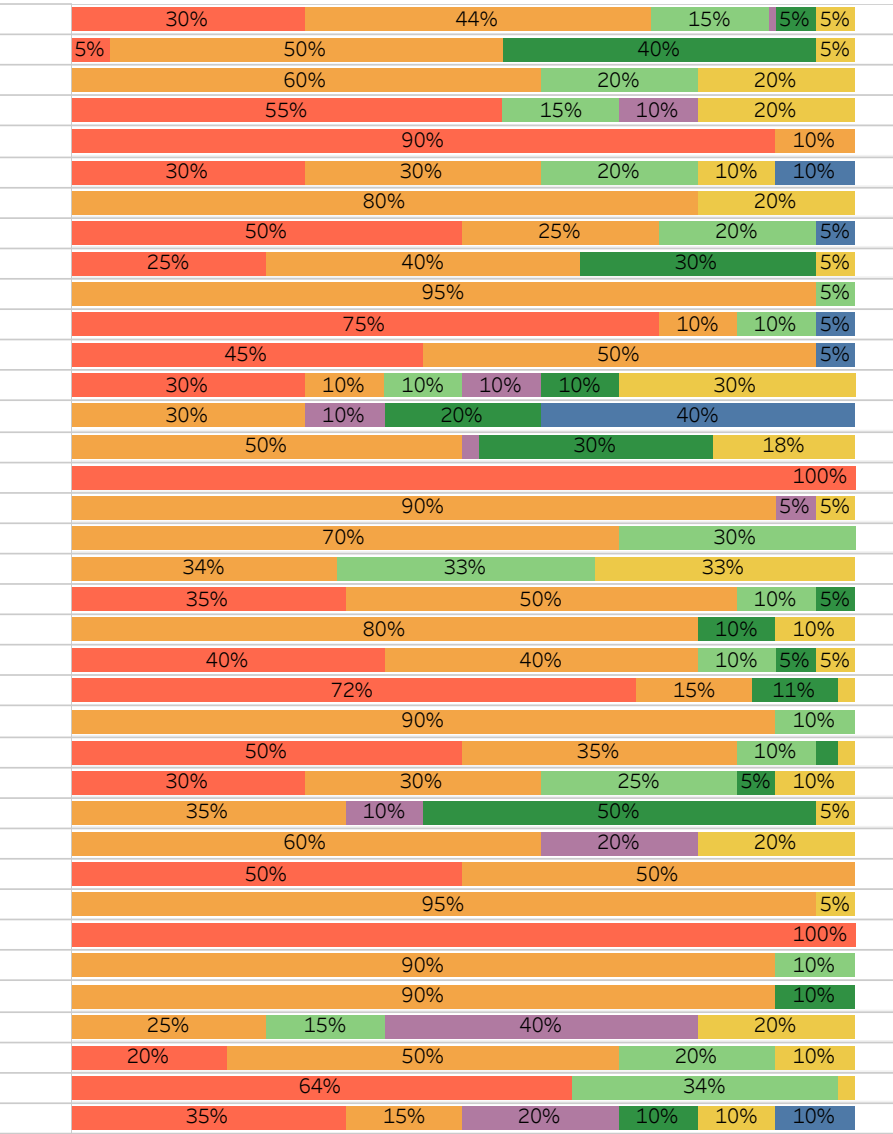
Customer origin
- Host School/Departme..
- Host Institute/Universi..
- Local city
- Rest of world
- Local state
- Rest of Australia
- Asia-Pacific

Marketing & Communications
Do you have a budget for advertising and marketing?

Colour legend:
Red = Yes, have marketing plan
Yellow = No marketing plan & No marketing personnel
Purple = Yes, marketing personnel used

Budget category	Values
No	2 4 24 30
An ad hoc budget less than $10k per annum	4 4
Yes - less than $10k per annum	1 1
Yes - above $10k per annum	1 1
An ad hoc budget above $10k per annum	1 1

Thick bar: used marketing personnel
Thin bar: no marketing personnel used

Have marketing plan?

Yes	8
No	30

Use marketing personnel?

Yes	3
No	34
No response	1

Target market

Rest of world	Asia-Pacific	Rest of Australia	Local city	Local state	Host School/ Department	Host Institute/U..

Prev year marketing platforms

Formal teaching	Paid advertisements	Social media	Trade displays ..	Host institute ..	In-house mailing li..	Lectures/..	Word of mouth	Facility website

Most Institutions do not measure customer satisfaction

No	22
Yes	13
no response	3
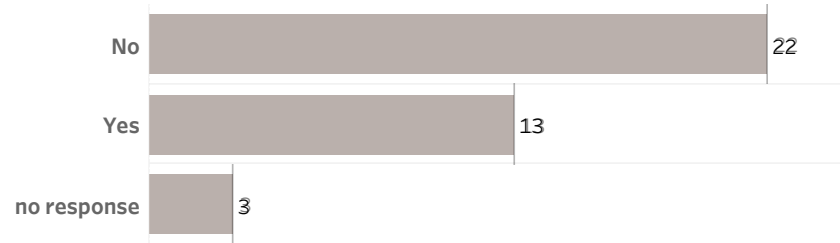
Almost half of all Institutions expect facility staff to apply for research funding

No	17
Yes	14
no response	2

Most institution have an annual income/revenue target

Yes	20
No	13
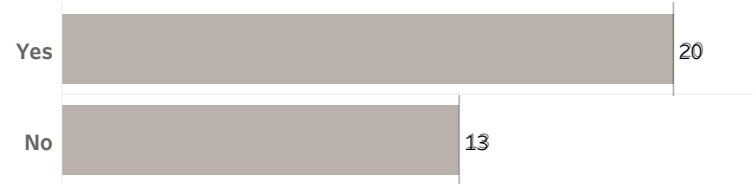
Compared to prev year, revenue target for this year has stayed the same for most Institutions

Stayed the same	16
no response	8
Gone up	7
Gone down	2
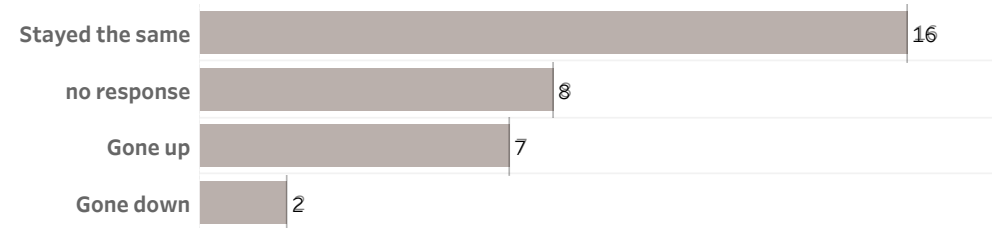
Advance planning

No. of years planned ahead per service/measure is shown on the **bottom** x-axis

0 years = not planned ahead/no response
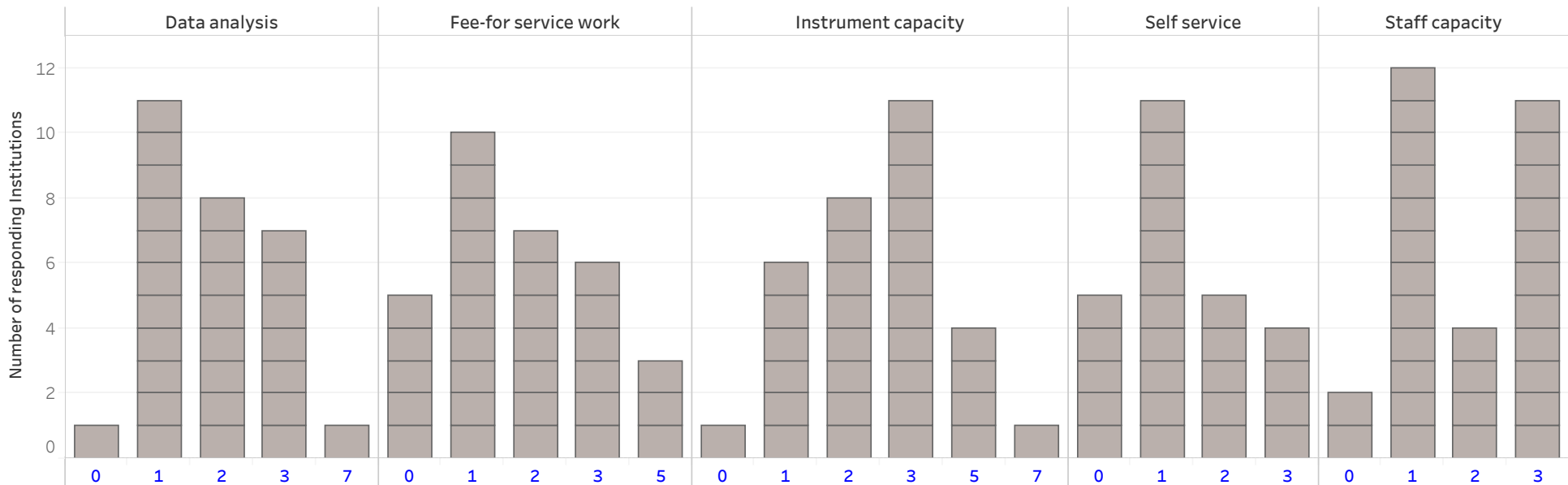
Which mechanism best matches how you set your internal rates? (3)

Bubble size indicates total response count

	Not a driver	5	4	3	2	1	No details
Cover direct costs	2	2		2	9	22	
What the host will subsidise	7	1	3	4	12	8	
What the market will bare	10		6	8	7	3	
Maximum profit	18	7	4	5			
Other driver(s)	18	1		1	1	3	
No details							1

ONE institution(s) did not provide any details for drivers that set internal rates.
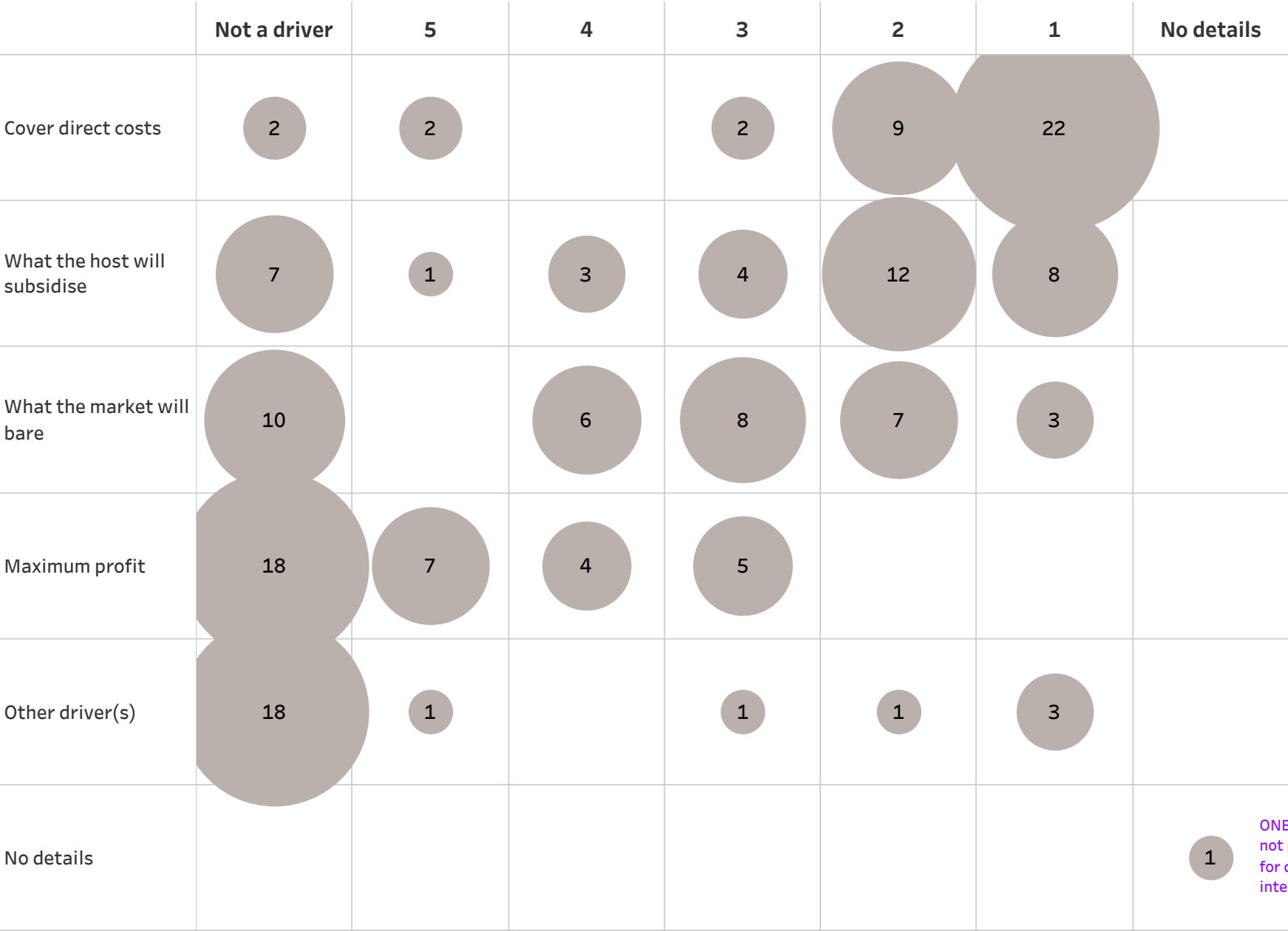
How do you deal with fiscal constraints? (3)
Bubble size indicates total response count

	Don't use	10	9	8	7	6	5	4	3	2	1
Delay spend: equipment	2	2	1	1			2	3	2	2	12
Increasing utilisation	3	2	1					2	5	9	5
Delay spend: infrastructure	6	1	1	2		1			2	7	7
Increasing prices	4	3	1	3		2	4	2	4	1	2
Reduce services	4	2	1	2	1	2	3	3	1	3	2
No fiscal constraints	10		2	1		2	4	2		1	5
Reduce staff	7	3	3	1	1		1	2	2	1	3
Delay the project	6	3	1	2			1	5	4		1
Reduce prices	11	2	1	1		1	4		1		
Subcontract services out	13	3		2	1			1		2	
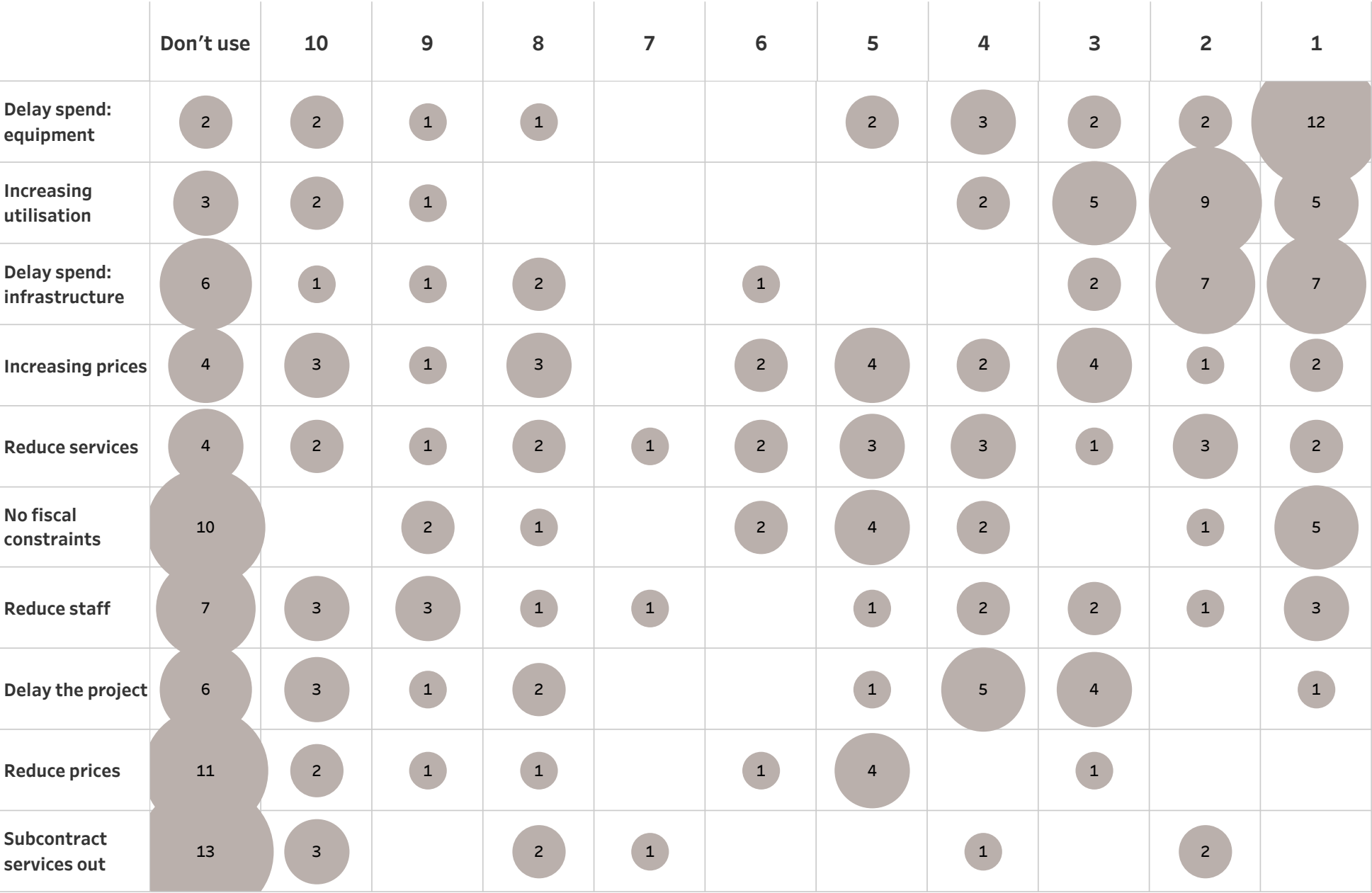
What mechanisms do you use to facilitate the sign up of new facility users? (3)
Bubble size indicates total response count

	Don't use	8	7	6	5	4	3	2	1
e-mail/phone	2		2	1	2			5	23
Off the shelf CRM package	18	1	1				3	1	6
Part of someone's job	5	3	1	2	1	1	6	3	10
Part of project management system	18	1	2				1	3	5
We don't use anything	22	2						1	
Custom build software package	22	1	1				1		1
Spreadsheet or other generic system	9				3	2	5	2	8
Other	20							1	1

TWO institution(s) indicated 'Other' methods for new user signup, but no details provided.
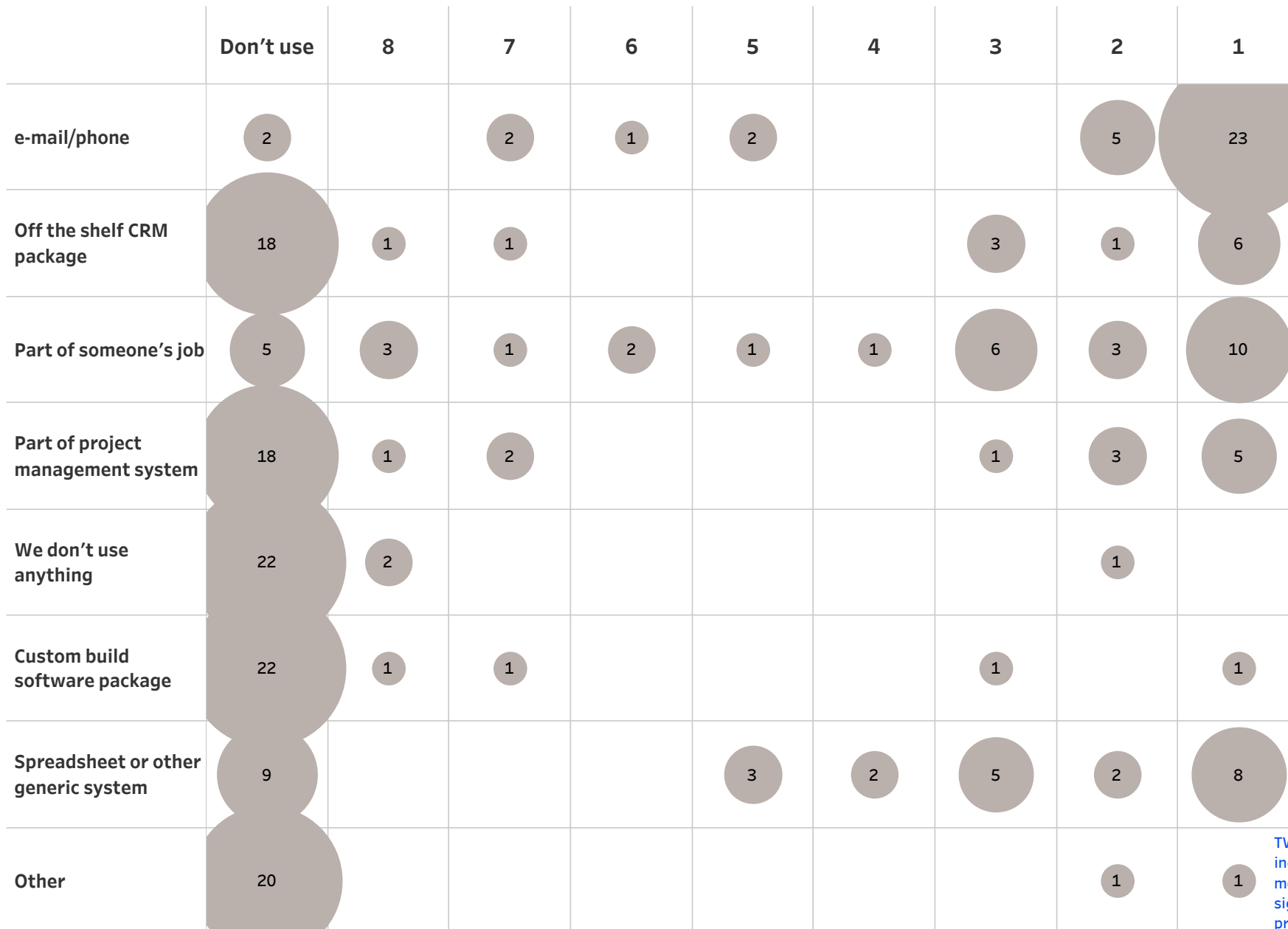
What training do you usually offer your customers? (3)

Bubble size indicates total response count
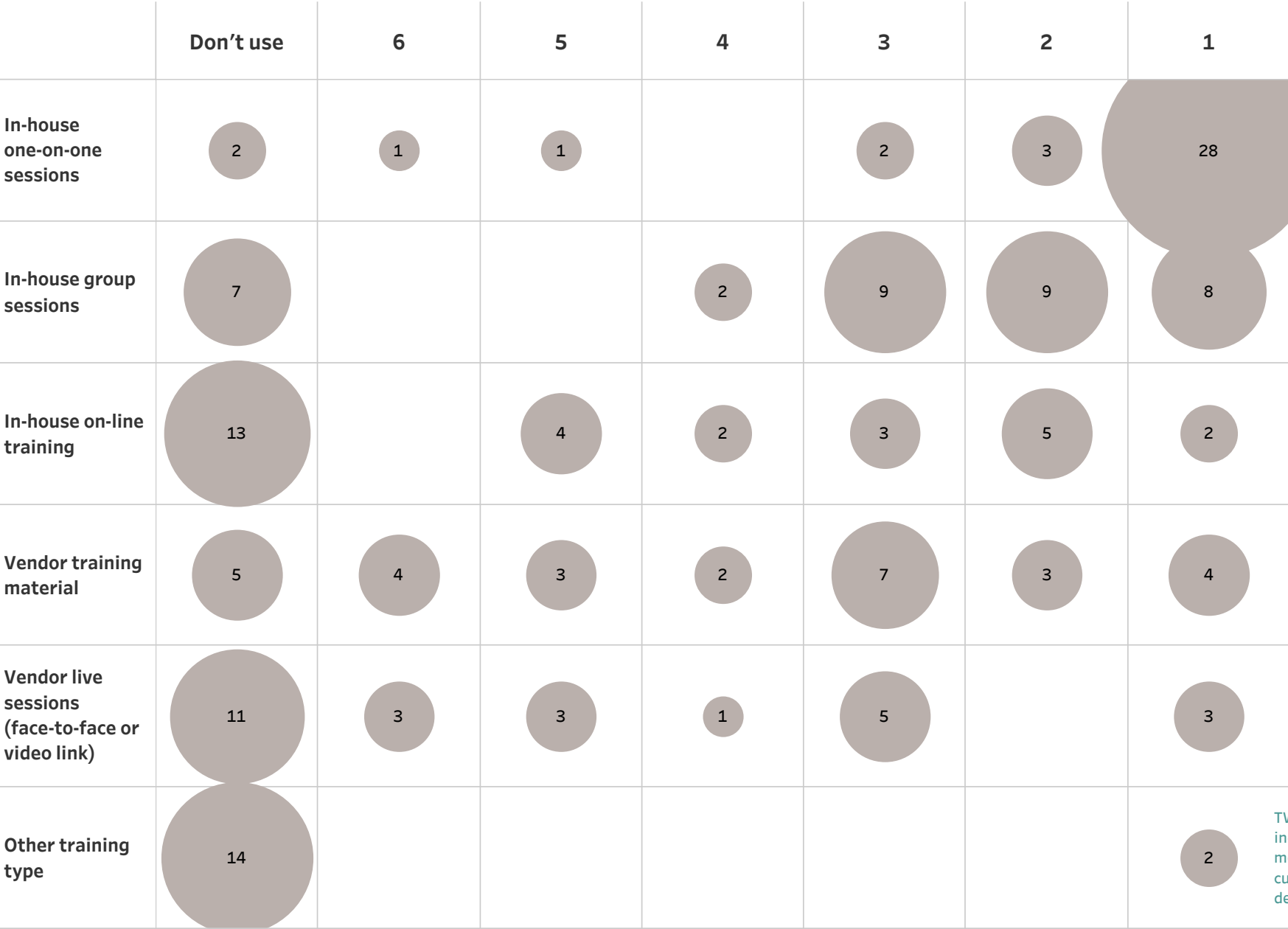
	Don't use	6	5	4	3	2	1
In-house one-on-one sessions	2	1	1		2	3	28
In-house group sessions	7			2	9	9	8
In-house on-line training	13		4	2	3	5	2
Vendor training material	5	4	3	2	7	3	4
Vendor live sessions (face-to-face or video link)	11	3	3	1	5		3
Other training type	14						2

TWO institutions indicated 'Other' methods for training customers, but no details provided.
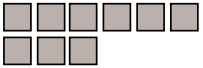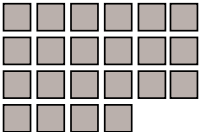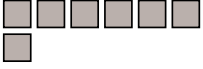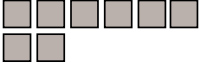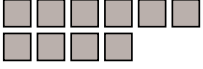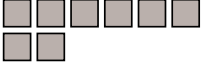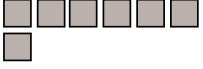
How do you track and manage projects? (3)
Bubble size indicates total response count

	Don't use	5	4	3	2	1
Excel or other generic system	4			3	5	19
Part of someone's job	6		1	2	6	15
Customer build software package	17	1				5
Off the shelf dedicated package	13	2	1	1	1	8
We don't use anything	15				1	2
Other	17					
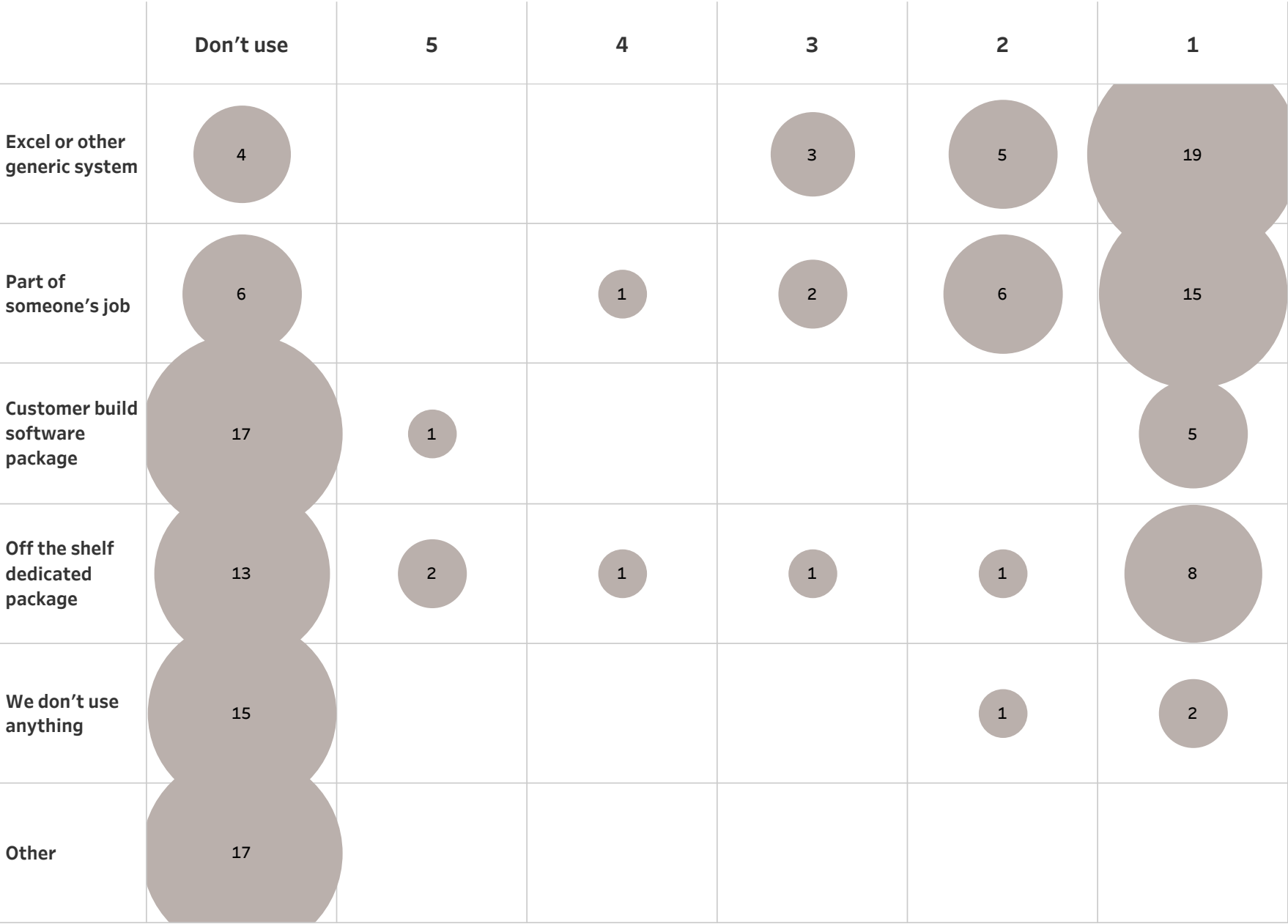
Which mechanism best matches how you set your internal rates? (2)

rank 1=most used, rank 5 = least used; 'Don't use' responses are assigned a value of 6

	Not a driver	5	4	3	2	1	No details
Cover direct costs	▢▢	▢▢		▢▢	▢▢▢▢▢ ▢▢▢	▢▢▢▢▢▢ ▢▢▢▢▢ ▢▢▢▢▢ ▢▢▢	
Maximum profit	▢▢▢▢▢ ▢▢▢▢▢ ▢▢▢▢▢	▢▢▢▢▢▢ ▢	▢▢▢▢	▢▢▢▢▢			
Other driver(s)	▢▢▢▢▢ ▢▢▢▢▢ ▢▢▢▢▢	▢		▢	▢	▢▢▢	
What the host will subsidise	▢▢▢▢▢▢ ▢	▢	▢▢▢	▢▢▢▢	▢▢▢▢▢▢ ▢▢▢▢▢	▢▢▢▢▢▢ ▢▢	
What the market will bare	▢▢▢▢▢▢ ▢▢▢		▢▢▢▢▢▢	▢▢▢▢▢▢ ▢▢	▢▢▢▢▢▢ ▢	▢▢▢	
No details							▢

Some Institutions indicated 'Other' rate drivers are important, but no details were provided.

How do you deal with fiscal constraints? (2)

rank 1=most used, rank 10 = least used; 'Don't use' responses are assigned a value of 11

	Don't use	10	9	8	7	6	5	4	3	2	1
Delay spend: equipment	2	2	1	1			2	3	2	2	12
Increasing utilisation	3	2	1					2	5	9	5
Delay spend: infrastructure	6	1	1	2		1			2	7	7
Reduce staff	7	3	3	1	1		1	2	2	1	3
Reduce services	4	2	1	2	1	2	3	3	1	3	2
Delay the project	6	3	1	2			1	5	4		1
Increasing prices	4	3	1	3		2	4	2	4	1	2
Reduce prices	11	2	1	1		1	4		1		
Subcontract services out	13	3		2	1			1		2	
No fiscal constraints	10		2	1		2	4	2		1	5

What mechanisms do you use to facilitate the sign up of new facility users? (2)

rank 1=most used, rank 8 = least used; 'Don't use' responses are assigned a value of 9

	Don't use	8	7	6	5	4	3	2	1
e-mail/phone	2		2	1	2			5	23
Part of someone's job	5	3	1	2	1	1	6	3	10
Spreadsheet or other generic system	8				3	2	5	2	8
Part of project management system	16	1	2				1	3	5
Custom build software package	14	1	1				1		1
Off the shelf CRM package	17	1	1				3	1	6
We don't use anything	16	2						1	
Other	18							1	

Some Institutions indicated 'Other' methods for new user signup, but no details provided.

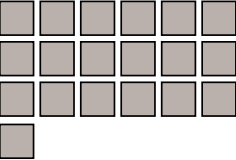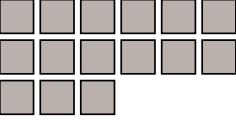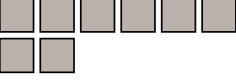# What training do you usually offer your customers? (2)

rank 1=most used, rank 6 = least used; 'Don't use' responses are assigned a value of 7

Training type	Don't use	6	5	4	3	2	1
In-house one-on-one sessions	■■	■	■		■■	■■■	■■■■■ ■■■■■ ■■■■■ ■■■■■ ■■■■
In-house group sessions	■■■■■■ ■			■■	■■■■■ ■■■	■■■■■ ■■■	■■■■■■ ■■
In-house on-line training	■■■■■ ■■■■■ ■		■■■■	■■	■■■	■■■■■	■■
Vendor training material	■■■■■	■■■■	■■■	■■	■■■■■ ■	■■■	■■■■
Vendor live sessions (face-to-face or video link)	■■■■■■ ■■■■■	■■■	■■■	■	■■■■■		■■■
Other training type	■■■■■■ ■■■■■ ■■						■■

Some Institutions indicated they use 'Other' training method(s)

How do you track and manage projects? (2)

rank 1=most used, rank 5 = least used; 'Don't use' responses are assigned a value of 6

	Don't use	5	4	3	2	1
Excel or other generic system	4			3	5	17
Part of someone's job	6		1	2	6	14
Customer build software package	16	1				5
Off the shelf dedicated package	12	2	1	1	1	8
We don't use anything	13				1	2
Other	15					

Which mechanism best matches how you set your internal rates?
Bubble size indicates total response count

	Not a driver	5	4	3	2	1	No details
Cover direct costs	2	2		2	9	22	
What the host will subsidise	7	1	3	4	12	8	
What the market will bare	10		6	8	7	3	
Maximum profit	18	7	4	5			
Other driver(s)	18	1		1	1	3	
No details							

ONE institution(s) did not provide any details for drivers that set internal rates.
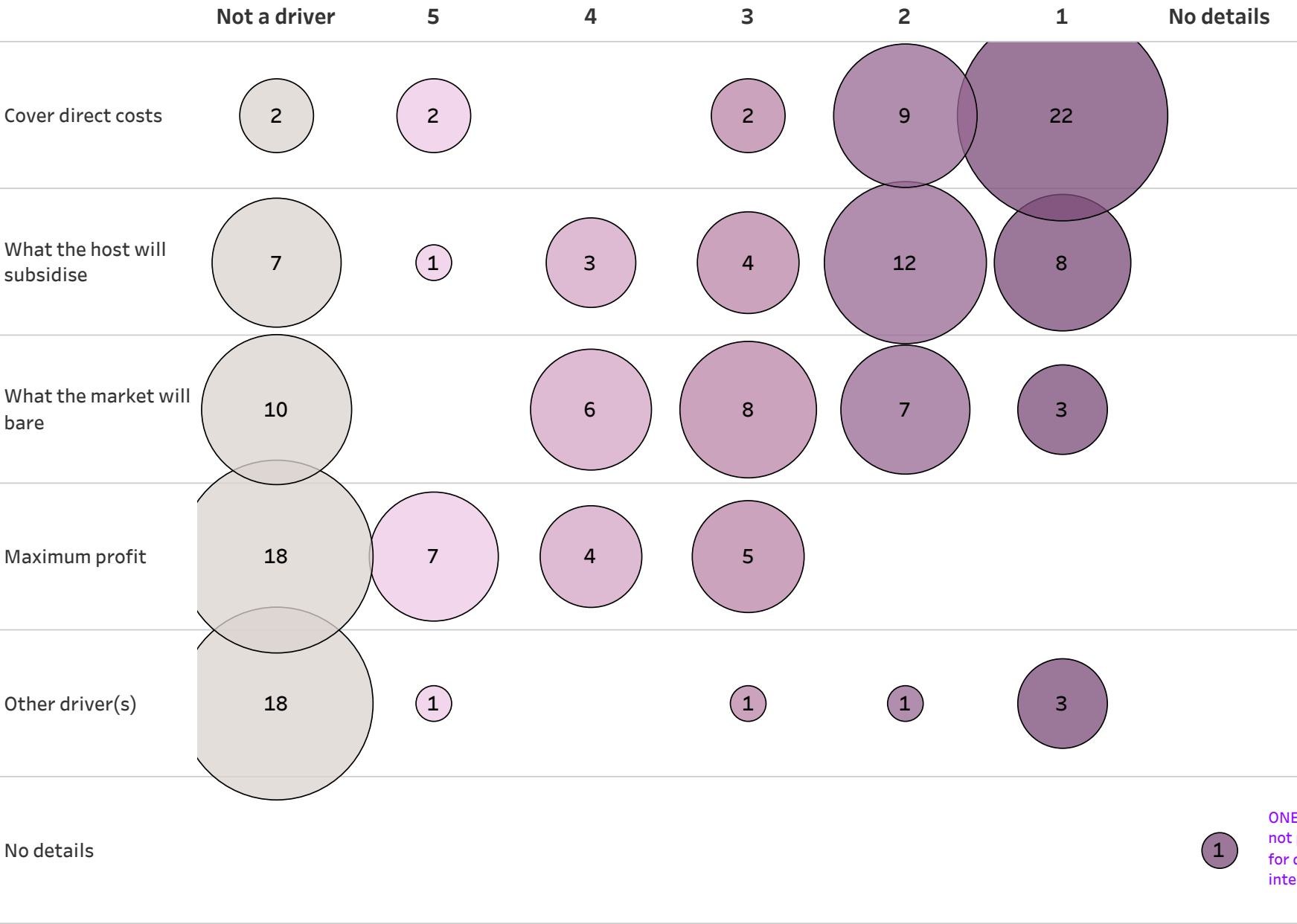
How do you deal with fiscal constraints?
Bubble size indicates total response count

	Don't use	10	9	8	7	6	5	4	3	2	1
Delay spend: equipment	2	2	1	1			2	3	2	2	12
Increasing utilisation	3	2	1					2	5	9	5
Delay spend: infrastructure	6	1	1	2		1			2	7	7
Increasing prices	4	3	1	3		2	4	2	4	1	2
Reduce services	4	2	1	2	1	2	3	3	1	3	2
No fiscal constraints	10		2	1		2	4	2		1	5
Reduce staff	7	3	3	1	1		1	2	2	1	3
Delay the project	6	3	1	2			1	5	4		1
Reduce prices	11	2	1	1		1	4		1		
Subcontract services out	13	3		2	1			1		2	
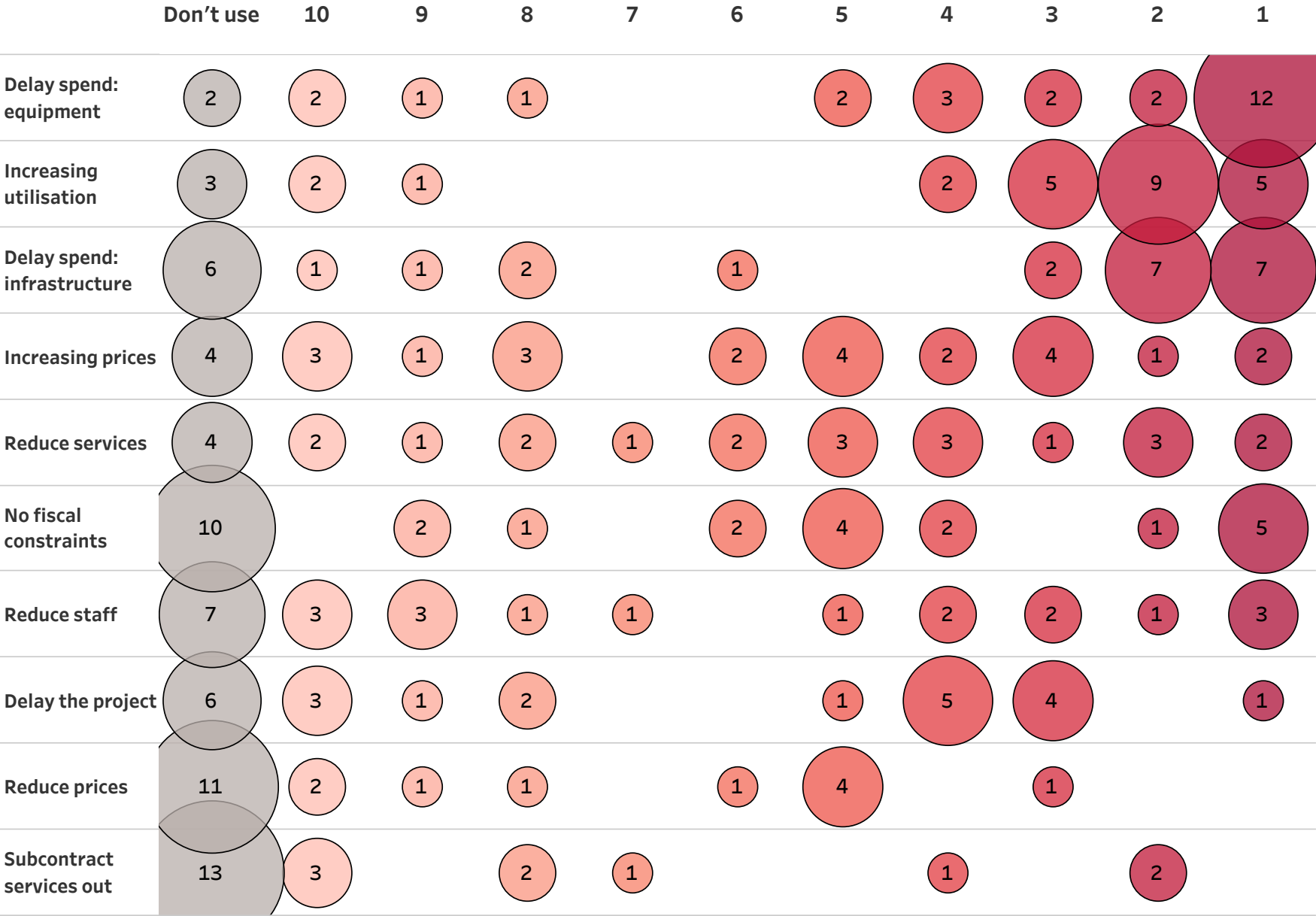
What mechanisms do you use to facilitate the sign up of new facility users?
Bubble size indicates total response count
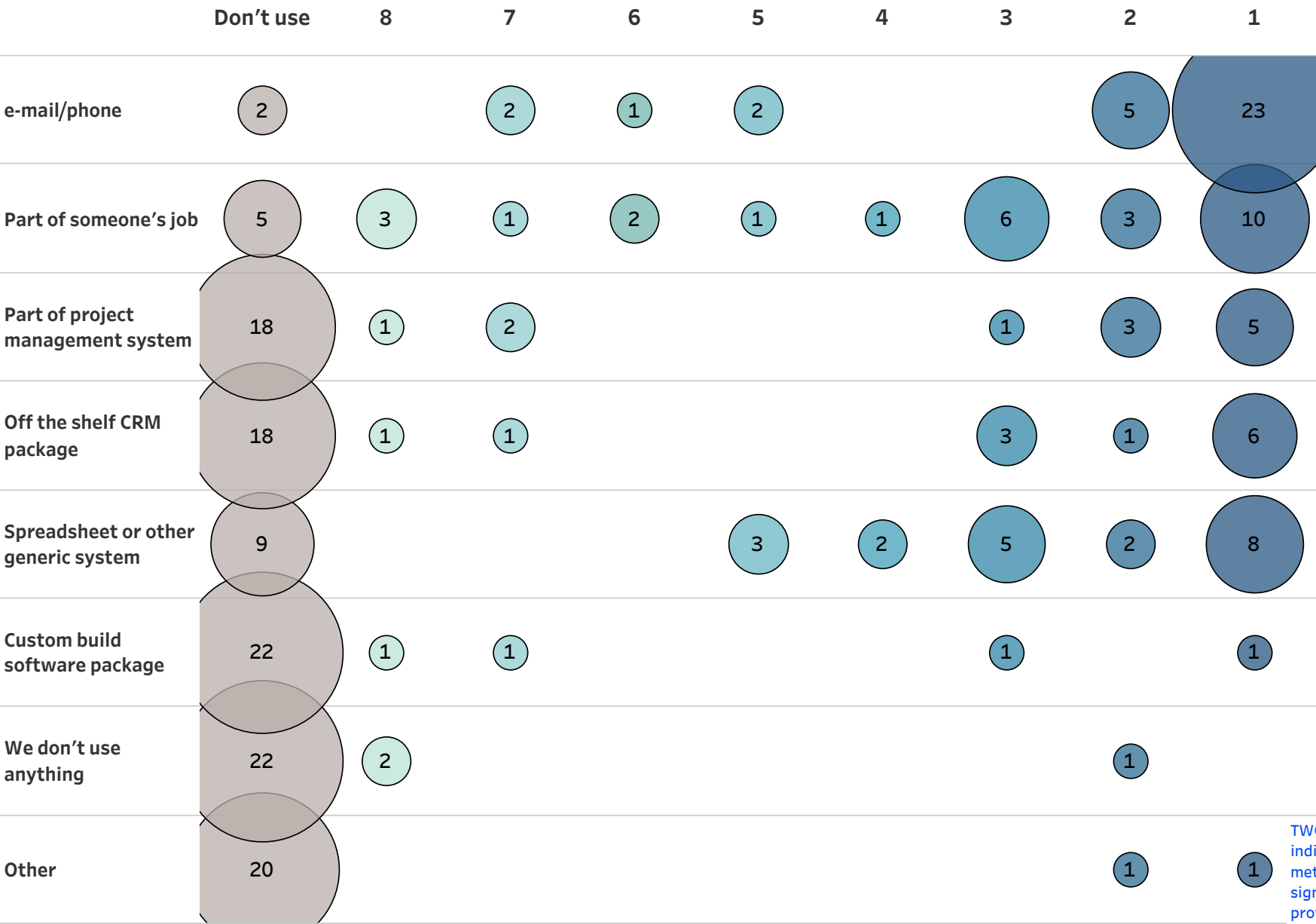
	Don't use	8	7	6	5	4	3	2	1
e-mail/phone	2		2	1	2			5	23
Part of someone's job	5	3	1	2	1	1	6	3	10
Part of project management system	18	1	2				1	3	5
Off the shelf CRM package	18	1	1				3	1	6
Spreadsheet or other generic system	9				3	2	5	2	8
Custom build software package	22	1	1				1		1
We don't use anything	22	2						1	
Other	20							1	1

TWO institution(s) indicated 'Other' methods for new user signup, but no details provided.

What training do you usually offer your customers?
Bubble size indicates total response count

	Don't use	6	5	4	3	2	1
In-house one-on-one sessions	2	1	1		2	3	28
In-house group sessions	7			2	9	9	8
In-house on-line training	13		4	2	3	5	2
Vendor training material	5	4	3	2	7	3	4
Vendor live sessions (face-to-face or video link)	11	3	3	1	5		3
Other training type	14						2

TWO institutions indicated 'Other' methods for training customers, but no details provided.

How do you track and manage projects?
Bubble size indicates total response count

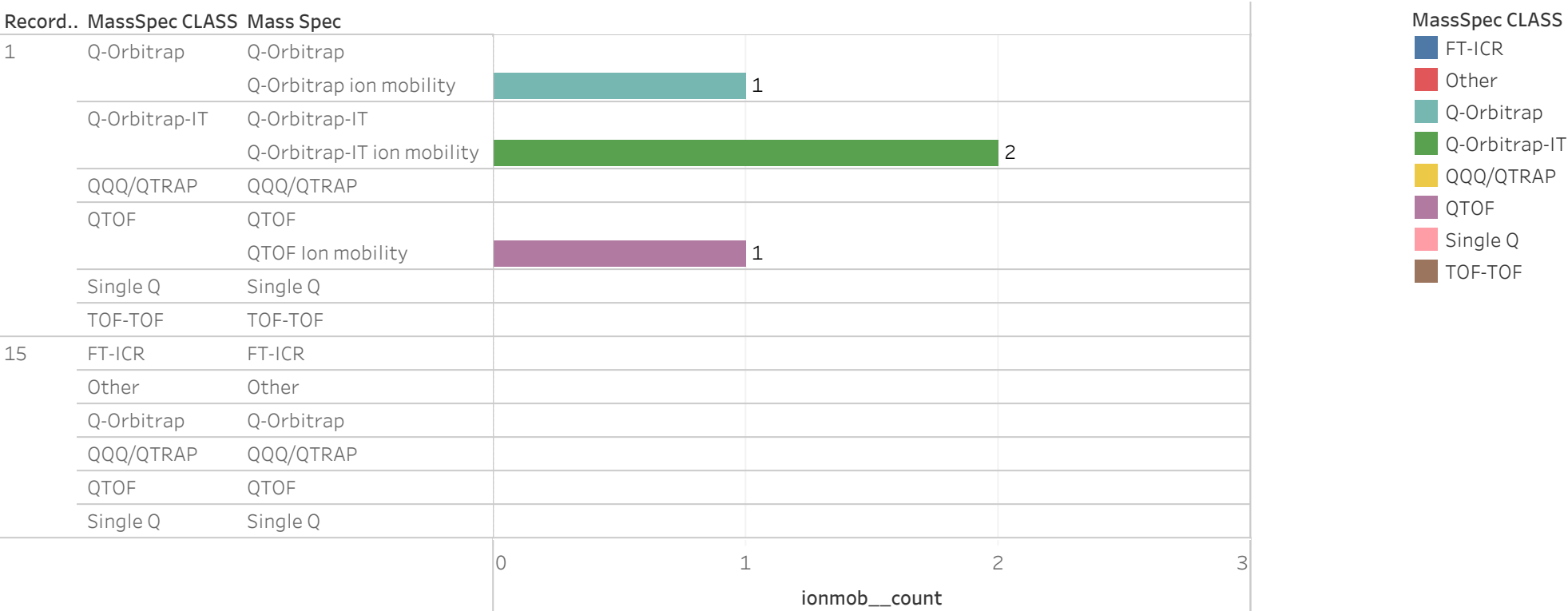|	Don't use	5	4	3	2	1
Excel or other generic system	4			3	5	19
Part of someone's job	6		1	2	6	15
Off the shelf dedicated package	13	2	1	1	1	8
Customer build software package	17	1				5
We don't use anything	15				1	2
Other	17					
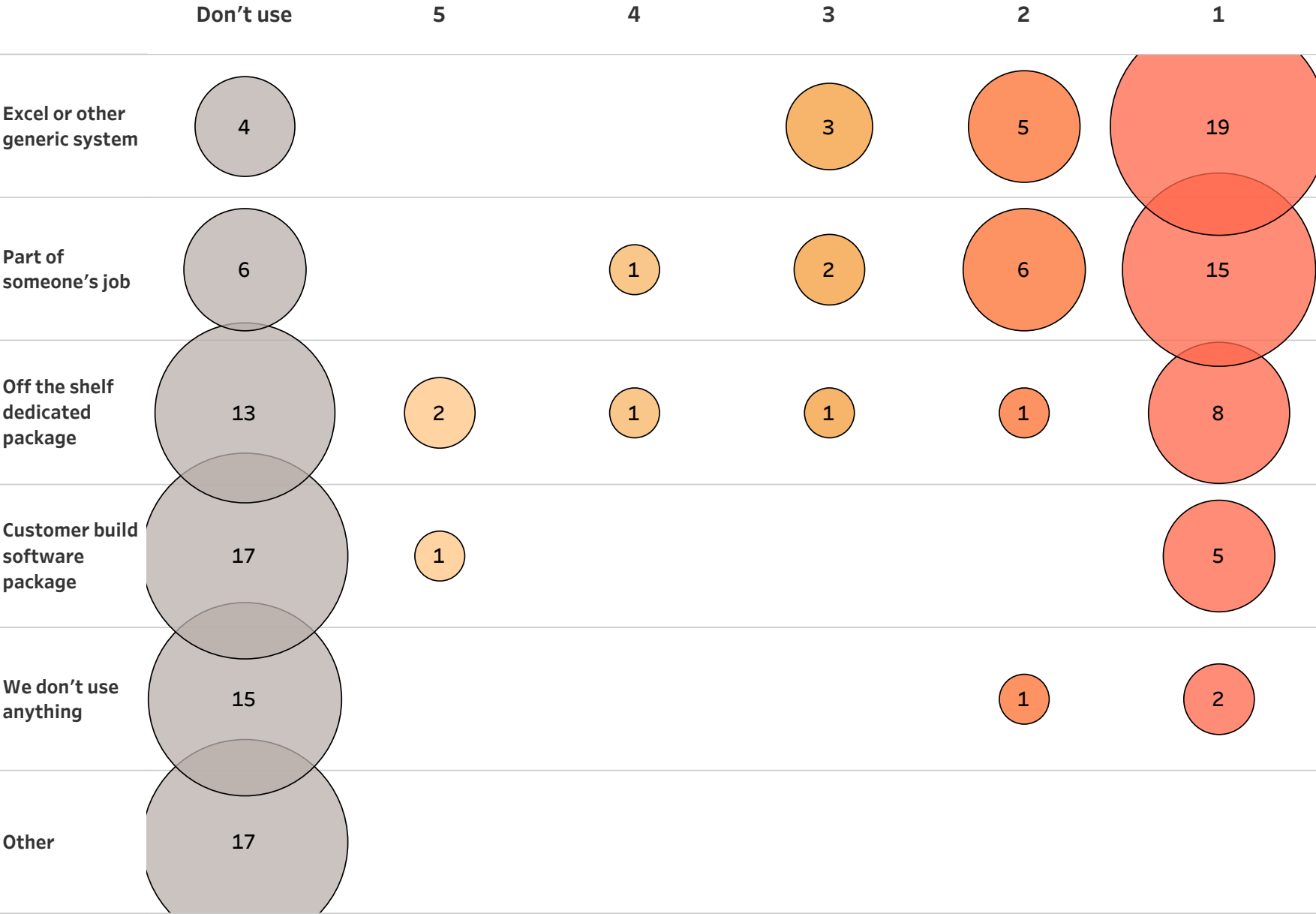
Rate multipliers

All Institutions (**except 22 and 28**) have internal academic rate on which the external academic and commercial rate multipiers are applied
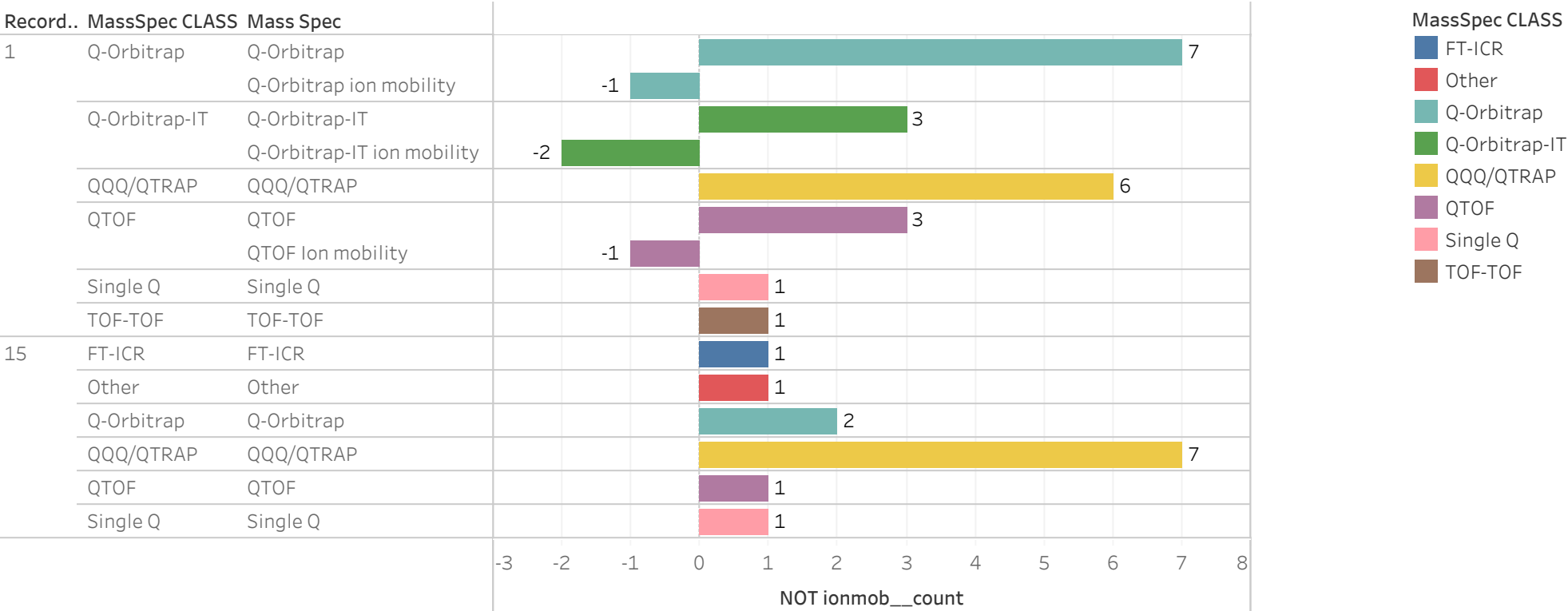
Academia (external) rate	Commercial customer rate	Null	Other rate	State based rate
50	100			
	1.75%			
20%	50%			
	300			
150	300			
	2.5			
	150			
10				
30	500			
			Centrally supported - Users provi..	
	50			
35	300			
			'Other rate' selected, but no resp..	
1.5-2	3			
Rates multiplier not specified	Rates multiplier not specified			
200				
	300%			
30				
30	100			
5				
100				
100	300			
30	60			
Rates multiplier not specified	Rates multiplier not specified			
5	40			
33	80			
150%	200%			State based rate
1.5	2			
Infinite (free for internal users)	Infinite (free for internal users)			
50	200			
Rates multiplier not specified	Rates multiplier not specified			
125	190			
	170			
1.5X	5X			
20%	300%			

chkMScounts1

Record..	MassSpec CLASS	Mass Spec	ionmob__count
1	Q-Orbitrap	Q-Orbitrap	
		Q-Orbitrap ion mobility	1
	Q-Orbitrap-IT	Q-Orbitrap-IT	
		Q-Orbitrap-IT ion mobility	2
	QQQ/QTRAP	QQQ/QTRAP	
	QTOF	QTOF	
		QTOF Ion mobility	1
	Single Q	Single Q	
	TOF-TOF	TOF-TOF	
15	FT-ICR	FT-ICR	
	Other	Other	
	Q-Orbitrap	Q-Orbitrap	
	QQQ/QTRAP	QQQ/QTRAP	
	QTOF	QTOF	
	Single Q	Single Q	

MassSpec CLASS

- FT-ICR
- Other
- Q-Orbitrap
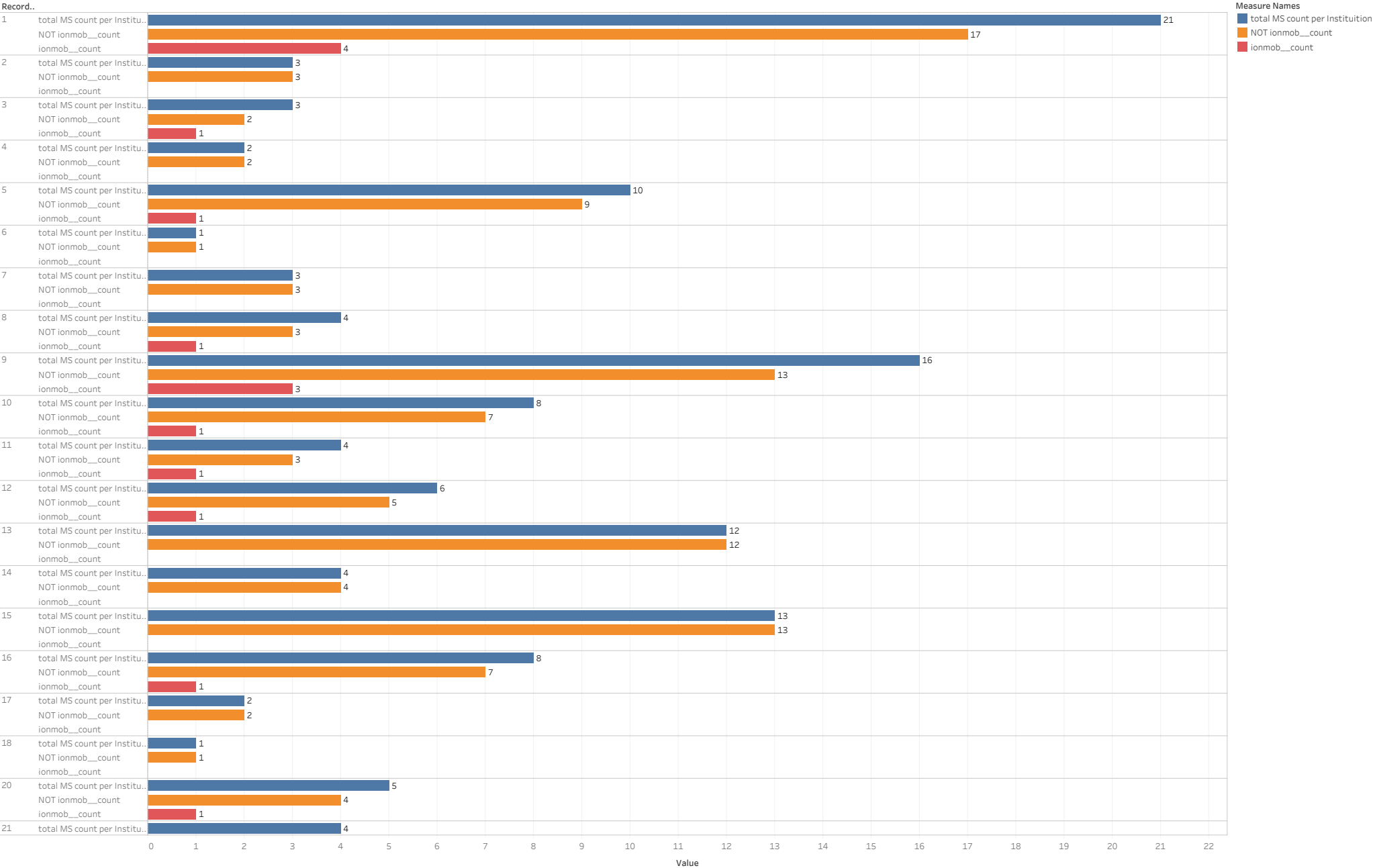- Q-Orbitrap-IT
- QQQ/QTRAP
- QTOF
- Single Q
- TOF-TOF

Sum of ionmob__count, NOT ionmob__count and sum of total MS count per Instituition for each Mass Spec broken down by Record Id and MassSpec CLASS. Color shows details about MassSpec CLASS. The view is filtered on Record Id, which keeps 1 and 15.
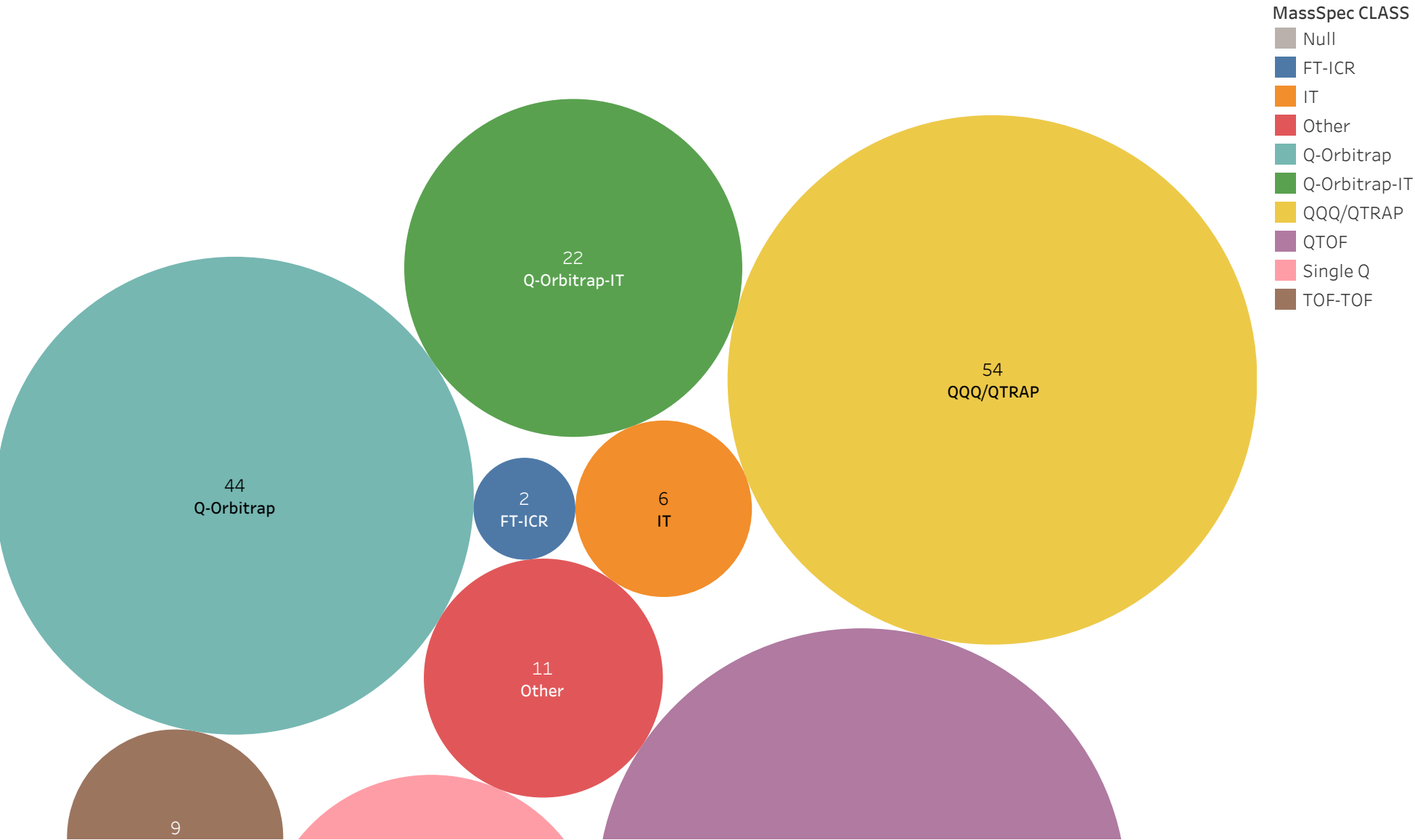
chkMScounts1

Record..	MassSpec CLASS	Mass Spec	NOT ionmob__count
1	Q-Orbitrap	Q-Orbitrap	7
		Q-Orbitrap ion mobility	-1
	Q-Orbitrap-IT	Q-Orbitrap-IT	3
		Q-Orbitrap-IT ion mobility	-2
	QQQ/QTRAP	QQQ/QTRAP	6
	QTOF	QTOF	3
		QTOF Ion mobility	-1
	Single Q	Single Q	1
	TOF-TOF	TOF-TOF	1
15	FT-ICR	FT-ICR	1
	Other	Other	1
	Q-Orbitrap	Q-Orbitrap	2
	QQQ/QTRAP	QQQ/QTRAP	7
	QTOF	QTOF	1
	Single Q	Single Q	1

NOT ionmob__count

MassSpec CLASS
- FT-ICR
- Other
- Q-Orbitrap
- Q-Orbitrap-IT
- QQQ/QTRAP
- QTOF
- Single Q
- TOF-TOF

Sum of ionmob__count, NOT ionmob__count and sum of total MS count per Instituition for each Mass Spec broken down by Record Id and MassSpec CLASS. Color shows details about MassSpec CLASS. The view is filtered on Record Id, which keeps 1 and 15.

chkMScounts1

Record..	MassSpec CLASS	Mass Spec	total MS count per Instituition
1	Q-Orbitrap	Q-Orbitrap	7
		Q-Orbitrap ion mobility	0
	Q-Orbitrap-IT	Q-Orbitrap-IT	3
		Q-Orbitrap-IT ion mobility	0
	QQQ/QTRAP	QQQ/QTRAP	6
	QTOF	QTOF	3
		QTOF Ion mobility	0
	Single Q	Single Q	1
	TOF-TOF	TOF-TOF	1
15	FT-ICR	FT-ICR	1
	Other	Other	1
	Q-Orbitrap	Q-Orbitrap	2
	QQQ/QTRAP	QQQ/QTRAP	7
	QTOF	QTOF	1
	Single Q	Single Q	1

total MS count per Instituition

MassSpec CLASS
- FT-ICR
- Other
- Q-Orbitrap
- Q-Orbitrap-IT
- QQQ/QTRAP
- QTOF
- Single Q
- TOF-TOF

Sum of ionmob__count, NOT ionmob__count and sum of total MS count per Instituition for each Mass Spec broken down by Record Id and MassSpec CLASS.
Color shows details about MassSpec CLASS. The view is filtered on Record Id, which keeps 1 and 15.

chkMScounts2

Total MS count per Instituition, NOT ionmob__count and ionmob__count for each Record Id. Color shows details about total MS count per Instituition, NOT ionmob__count and ionmob__count.

chkMScounts2
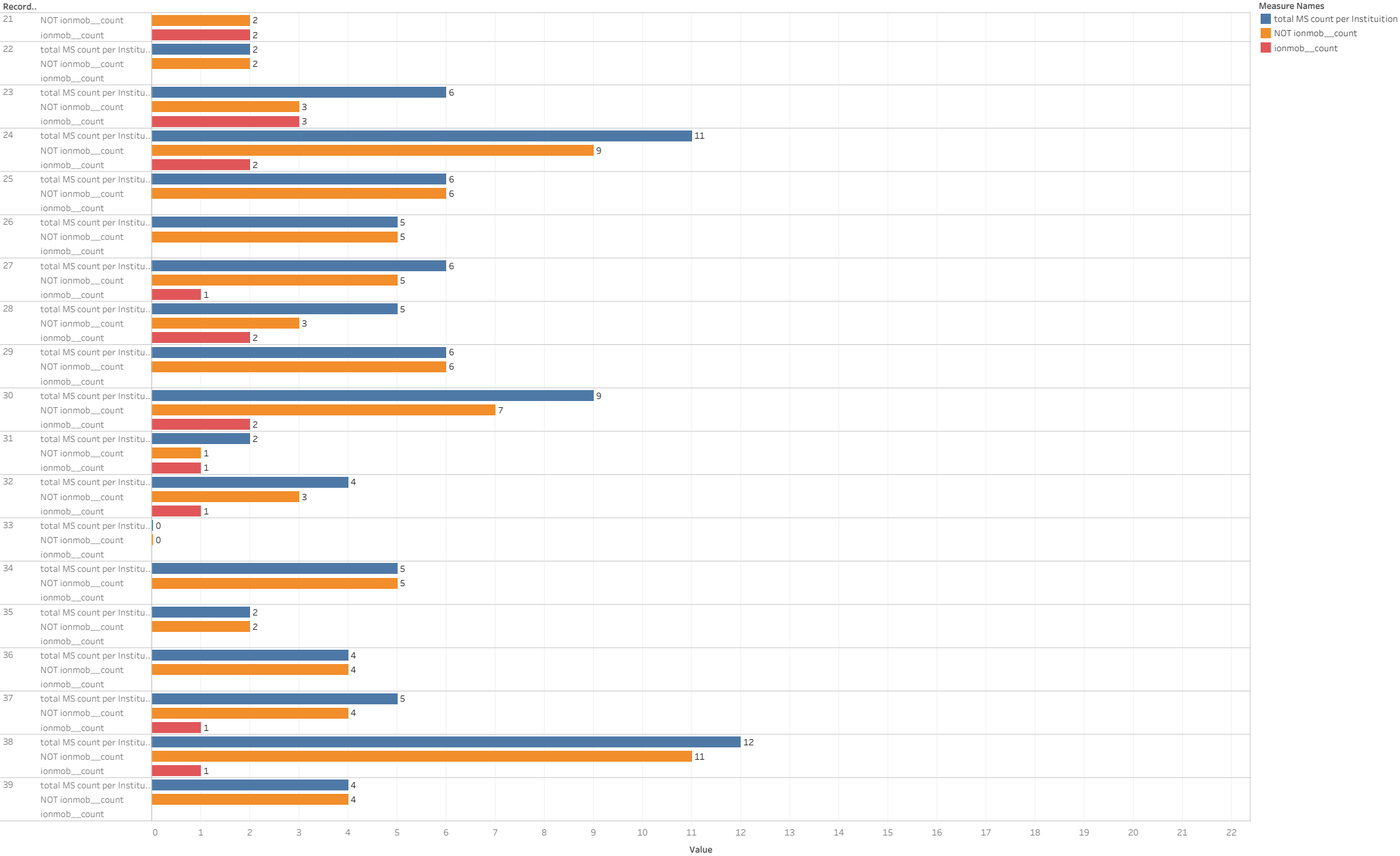
Total MS count per Instituition, NOT ionmob__count and ionmob__count for each Record Id. Color shows details about total MS count per Instituition, NOT ionmob__count and ionmob__count.

Total equipment across all Institutions

MassSpec CLASS
- Null
- FT-ICR
- IT
- Other
- Q-Orbitrap
- Q-Orbitrap-IT
- QQQ/QTRAP
- QTOF
- Single Q
- TOF-TOF

22
Q-Orbitrap-IT

54
QQQ/QTRAP

44
Q-Orbitrap

2
FT-ICR

6
IT

11
Other

9

Sum of total MS count per Instituition and MassSpec CLASS. Color shows details about MassSpec CLASS. Size shows sum of total MS count per Instituition. The marks are labeled by sum of total MS count per Instituition and MassSpec CLASS. The data is filtered on Record Id, which keeps 39 of 39 members.

Total equipment across all Institutions
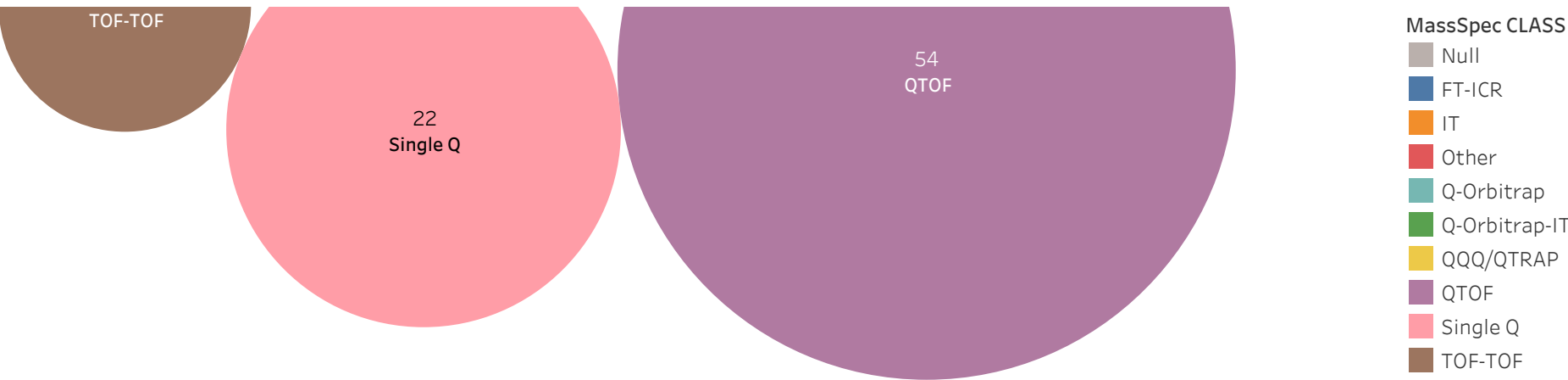
TOF-TOF

54
QTOF

22
Single Q

MassSpec CLASS
- Null
- FT-ICR
- IT
- Other
- Q-Orbitrap
- Q-Orbitrap-IT
- QQQ/QTRAP
- QTOF
- Single Q
- TOF-TOF

Sum of total MS count per Instituition and MassSpec CLASS. Color shows details about MassSpec CLASS. Size shows sum of total MS count per Instituition. The marks are labeled by sum of total MS count per Instituition and MassSpec CLASS. The data is filtered on Record Id, which keeps 39 of 39 members.

Overall Ranked response
**rank 1=most important,
rank 5 = least important**

1
1.9
2.4
2.6
5.7
5.8
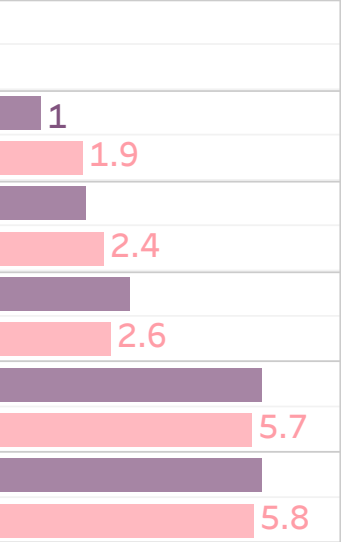
Overall (median) rank

No details	
What the market will bare	1
What the host will subsidise	2
Cover direct costs	3
Maximum profit	6
Other driver(s)	6

Overall Ranked response
**rank 1=most important,
rank 9 = least important
rank 11 = Don't use**
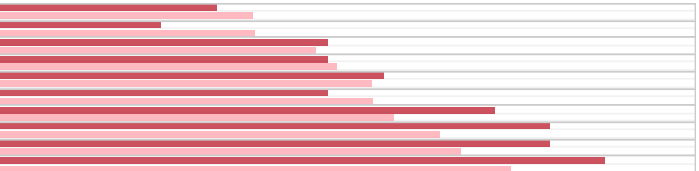
Planned ahead in years

Data analysis	3
Fee-for service..	
Instrument ca..	
Self service	3 0 3 1 1
Staff capacity	

Measure Names
■ MEDIAN rank
■ AVG rank

Measure Names
■ MEDIAN rank
■ AVG rank

Measure Names
■ MEDIAN rank
■ AVG rank
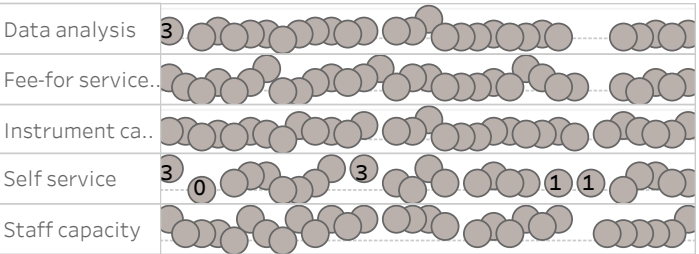
Overall Ranked response
**rank 1=most used,
rank 6 = least used,
rank 7 = Don't use**

1.6
3.2
5.1
4.7
7
5.6
7
6.4
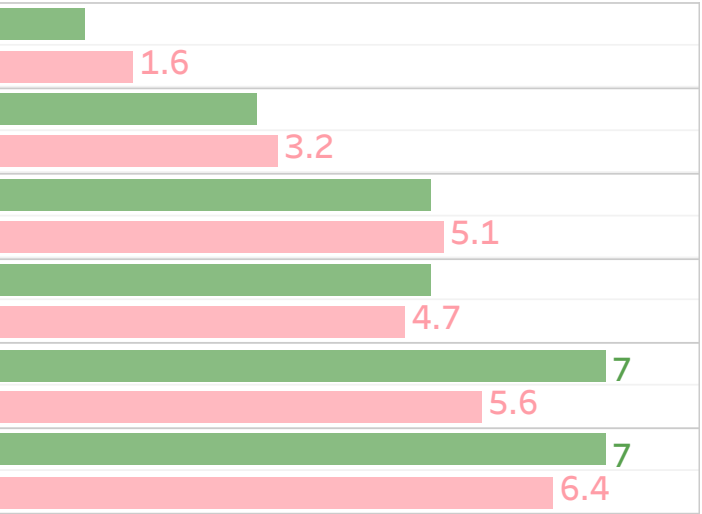
Overall Ranked response
**rank 1=most used,
rank 5 = least used,
rank 6 = Don't use**

1
2.2
2
2.8
6
5.4
6
5.1
6
4.6
6
6.0
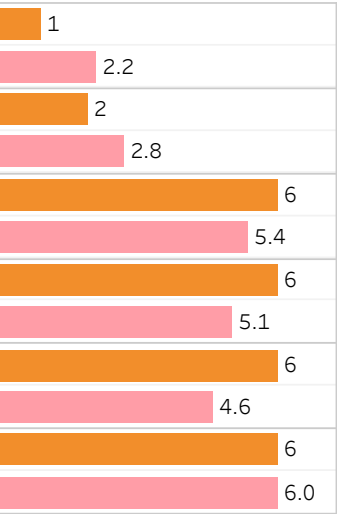
Overall Ranked response
**rank 1=most used,
rank 8 = least used,
rank 9 = Don't use**

2.2
3.8
4.2
9
9
9
9
8.8
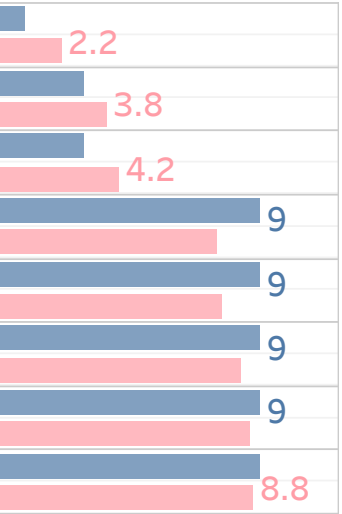
Staff Costs in 2020:
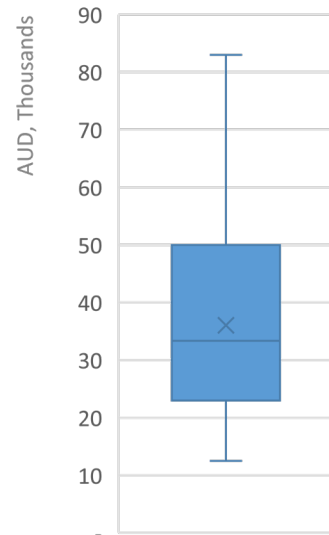
N=29 Total $ per year
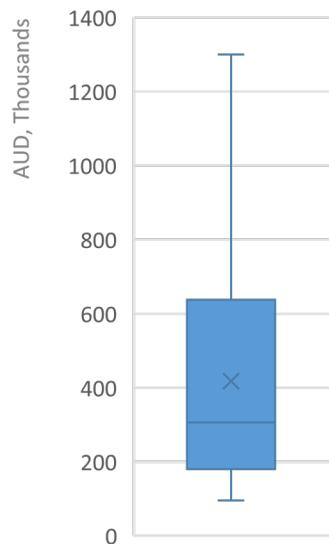
$ per year per FTE
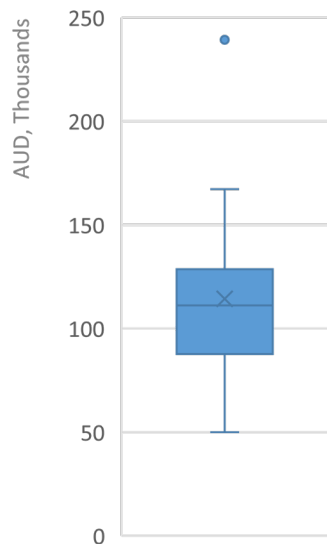
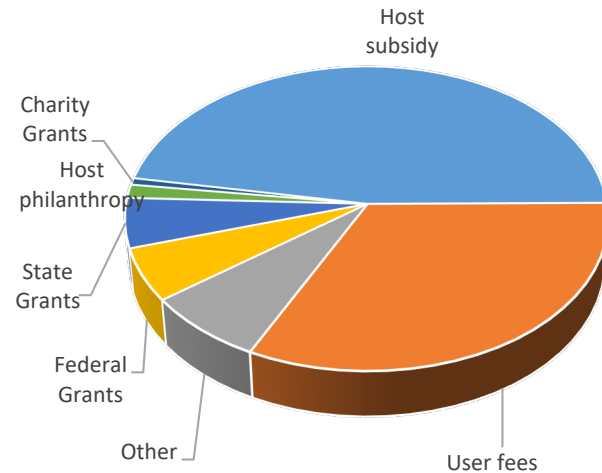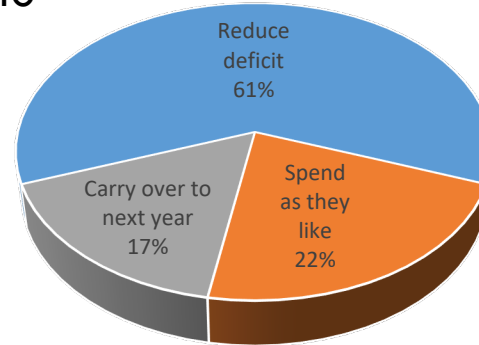**Maintenance:**

N=23 $ per year per instrument

Are staff expected to apply for funding?
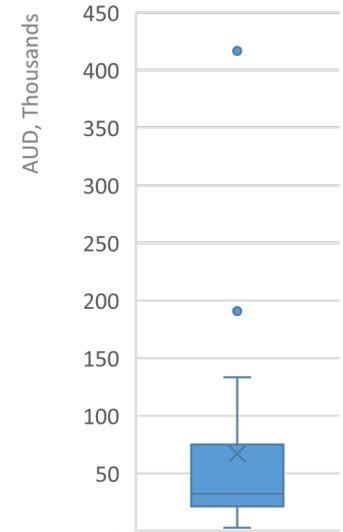
Yes: 49% (17)
No: 51% (18)

Revenue

What happens to user revenue?

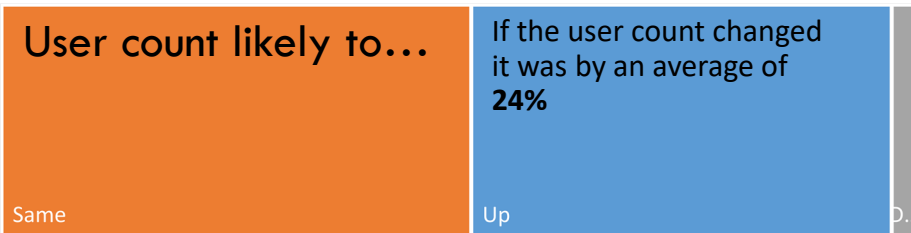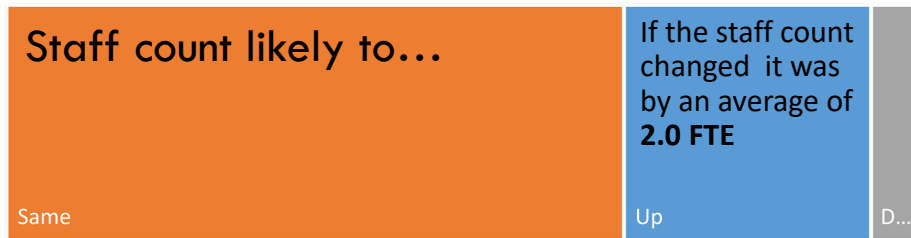In 2020, what % of your direct costs were covered by…

Revenue (AUD) per instrument N=22


N=35.

During the calendar year of 2021…

Staff count likely to…
Same | If the staff count changed it was by an average of **2.0 FTE** | Up | D…

Fee-for-service work likely to…
Same | If the fee-for-service work changed it was by an average of **66%** | Up | D…

User count likely to…
Same | If the user count changed it was by an average of **24%** | Up | D…

41% have funding for an equipment purchase of over $50k, the shopping list includes:

Automation system, UPLC
Byonic update & (subjet to funding) 2 x MS instruments and a CGE-LIF
cyclic IMS
Evosep One
Exploris and Eclipse
Exploris480
Fluxomics system
GC QQQ and/or QTOF
HDX system
high resolution LC-MS platform for metabolomics
Maldi TOF
refresh current capital
SCIEX Cloud services
Tip puller, beveller

Who is doing how much of what?

Do a lot	7
Do a bit	6
Getting	5
Would Like	4
No plans	3
Don't know	2
Don't want	1
Shut it down	0
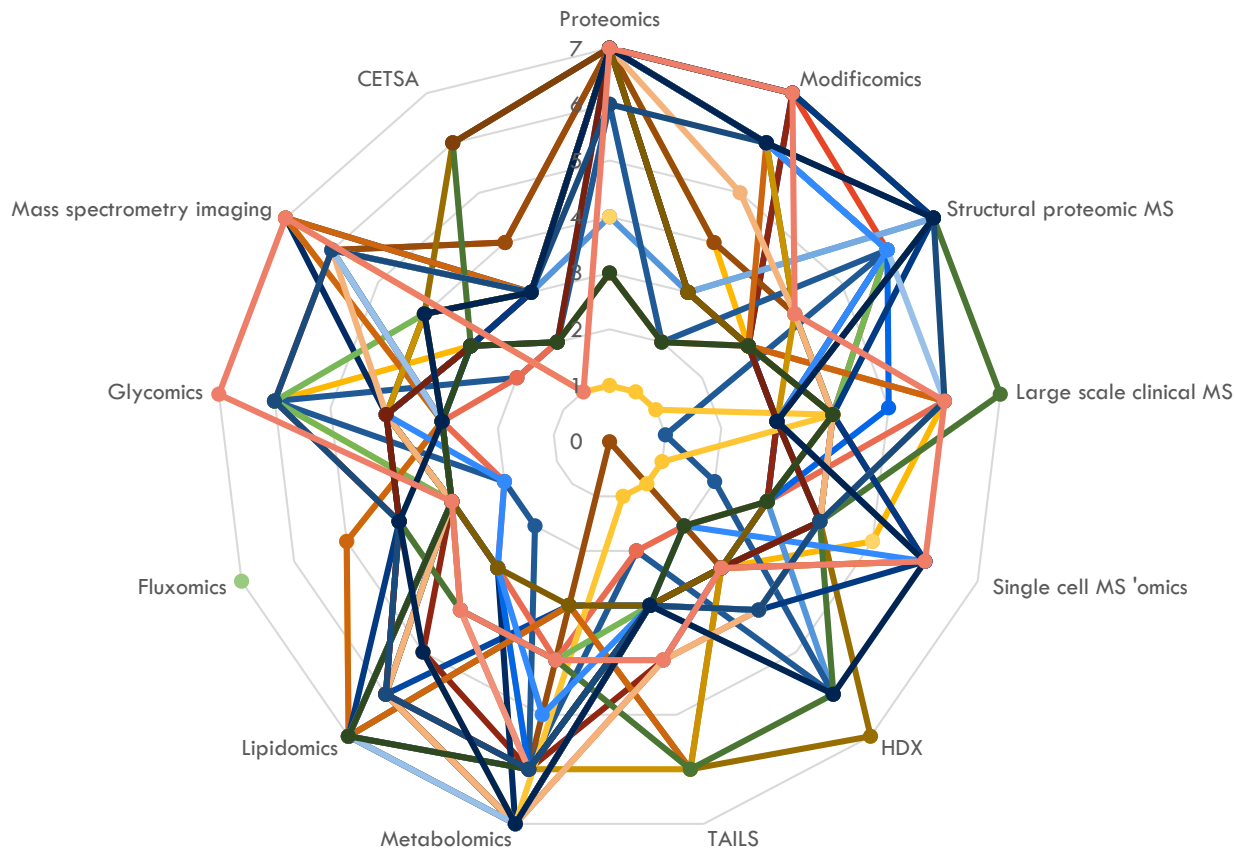
If money was no object, what *one* would you buy (and why)?

Eclipse	6.8
QQQ	5
Exploris 480	4.5
QTOF	4
timsTOF Pro 2	3.3
Imaging instrument	3
Lumos	2
7600 ZenoTOF	2
timsTOF Flex	1.5
7500 QTRAP	1
Orbitrap IDX	1
MALDI TOF	1
cyclic IMS	1
Waters-DESI /MALDI	0.5

— The 'whys' ranged form 'love the current one' to 'it breaks down so much I need a back up'

What is your biggest challenge in the next 3 years?
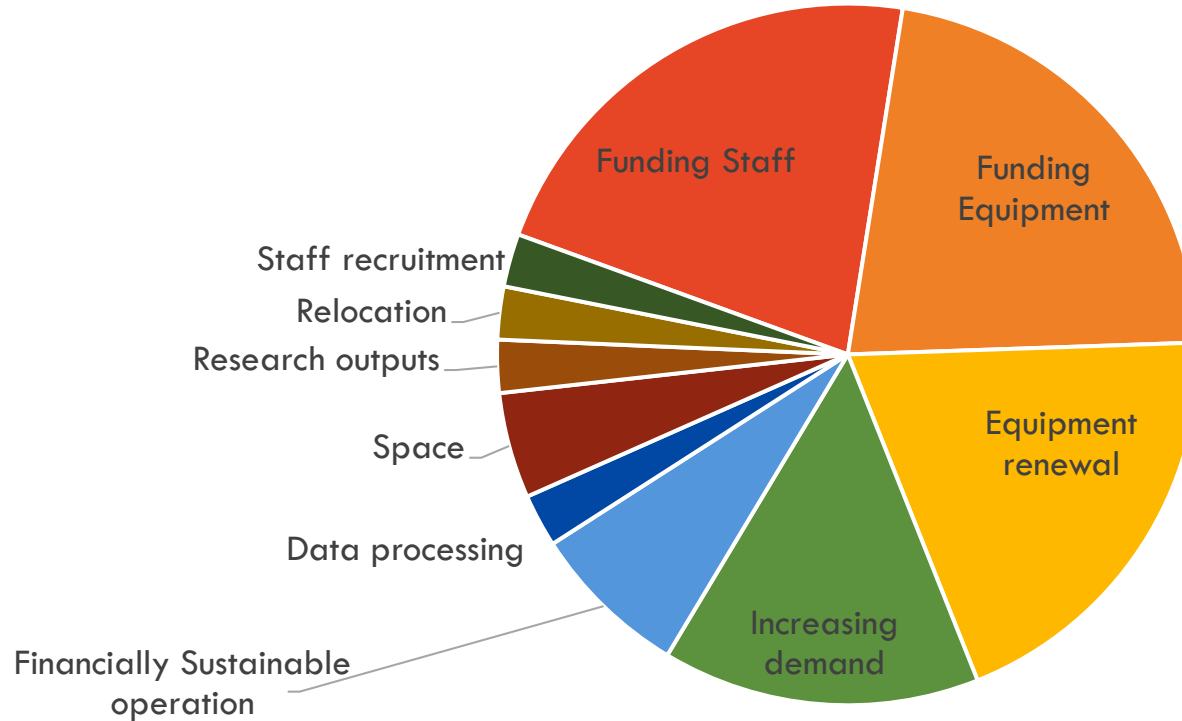
If you were the average mass spec facility…

Less than 10% McSpec facilities have accreditation, but 13% planning on getting accreditation in 2020

- 2/3rd Uni, 1/3rd research institute
- You would have 4.7 staff, 2 are academics, just under 3 professional and 0.16 admin
- You would have nearly 2 QTOFs, 1.5 QQQ, 1.3 Q-Orbi and 0.7 of tribrid
- There is a 50% chance one MS would be new in 2020

Acknowledgements