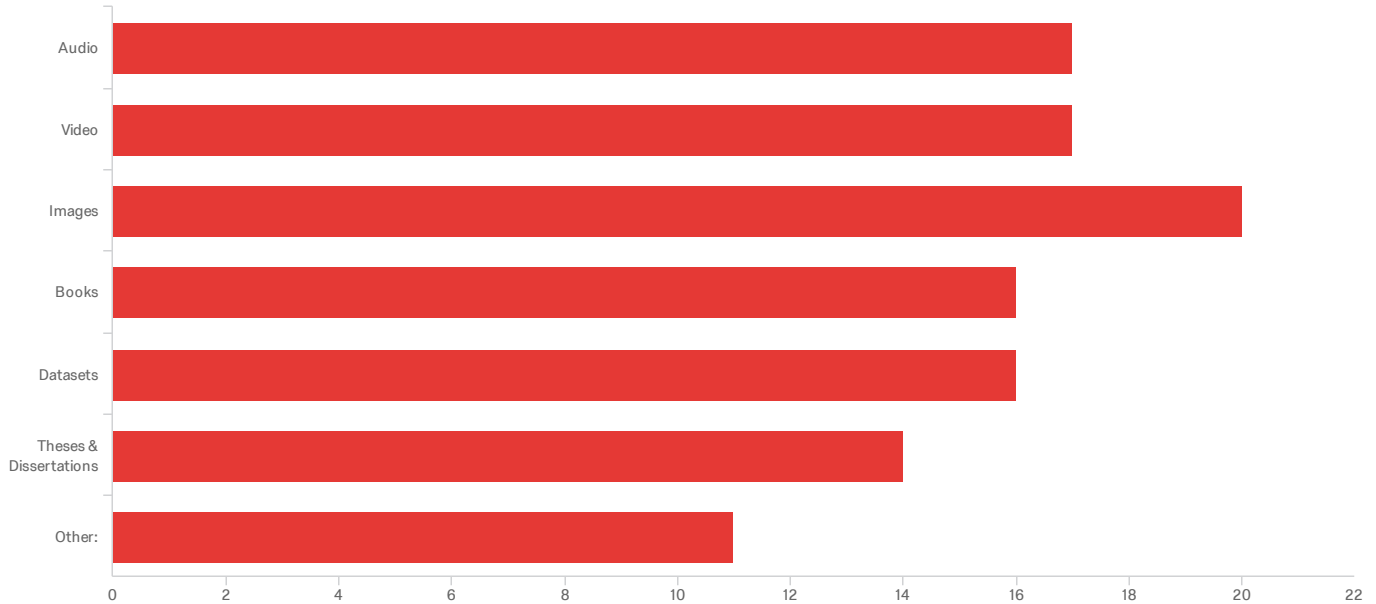# Hyrax-Valkyrie Survey Summary

Hyrax-Valkyrie Samvera Community Survey

January 7, 2019 9:56 AM MST

Q5 - What type of content do/will your institution host in your repository?

#	Field		Choice Count
1	Audio	15.32%	17
2	Video	15.32%	17
3	Images	18.02%	20
4	Books	14.41%	16
5	Datasets	14.41%	16
6	Theses & Dissertations	12.61%	14
7	Other:	9.91%	11
			111

Showing rows 1 - 8 of 8

Other:

Other:
EADs, EACs
3D Content / Virtual Reality / Spatial data

Other:

all the things

Learning materials, Exam papers

Web archiving, Geo, 3D Models

articles

Maps/Geodata, Ephemera, Coins

Citations

Articles

PDFs and Offices docs from Archival Collections

Q6 - What is the size (number of works) of your institution's repository?

What is the size (number of works) of your institution's repository?

160,000

120,000+

22k

on the order of 10,000

200,000 (ish)

2,540,000 works spread over several repositories

200,000

15,000

40000

all repositories > 150k

1.6 million works, 500TB

8000

70,000

100,000

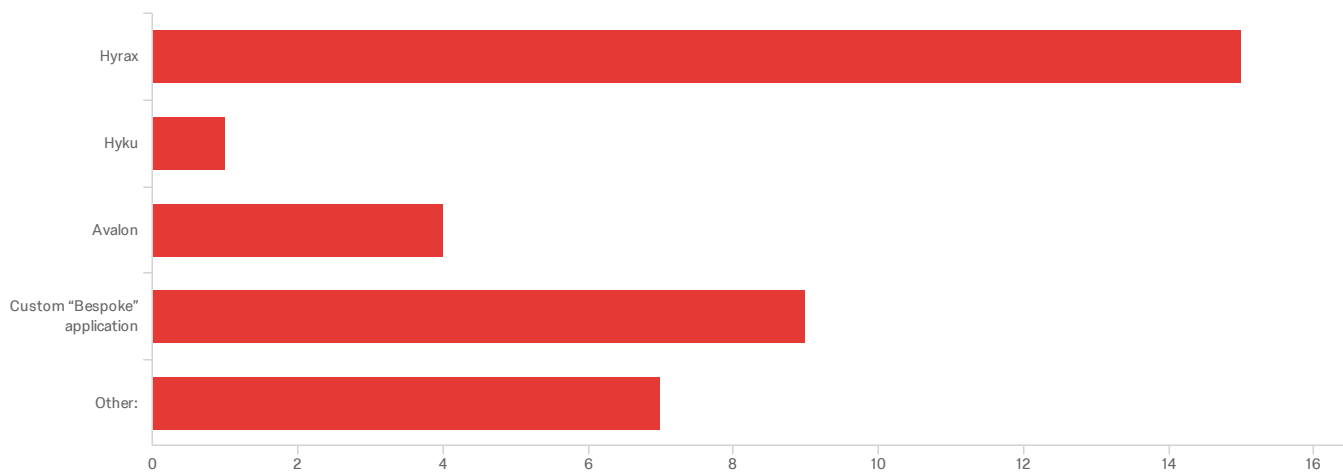we currently have one hosted repo with 1800 works (made up of 130k images)

14,000

maybe 30,000 after everything is migrated in, but haven't tested with anything near that number

~125,000

10K+

Showing records 1 - 19 of 19

Q7 - What Samvera Community applications are your institution currently running or actively pursuing?

#	Field		Choice Count
1	Hyrax	41.67%	15
2	Hyku	2.78%	1
3	Avalon	11.11%	4
4	Custom "Bespoke" application	25.00%	9
5	Other:	19.44%	7
			36

Showing rows 1 - 6 of 6

Q7_5_TEXT - Other:

Other:

Hydra head, custom backend

Phydo

we run a custom python application and are investigating hyrax

Currently running Sufia 6 and bespoke applications. Looking at using Hyrax in the future.
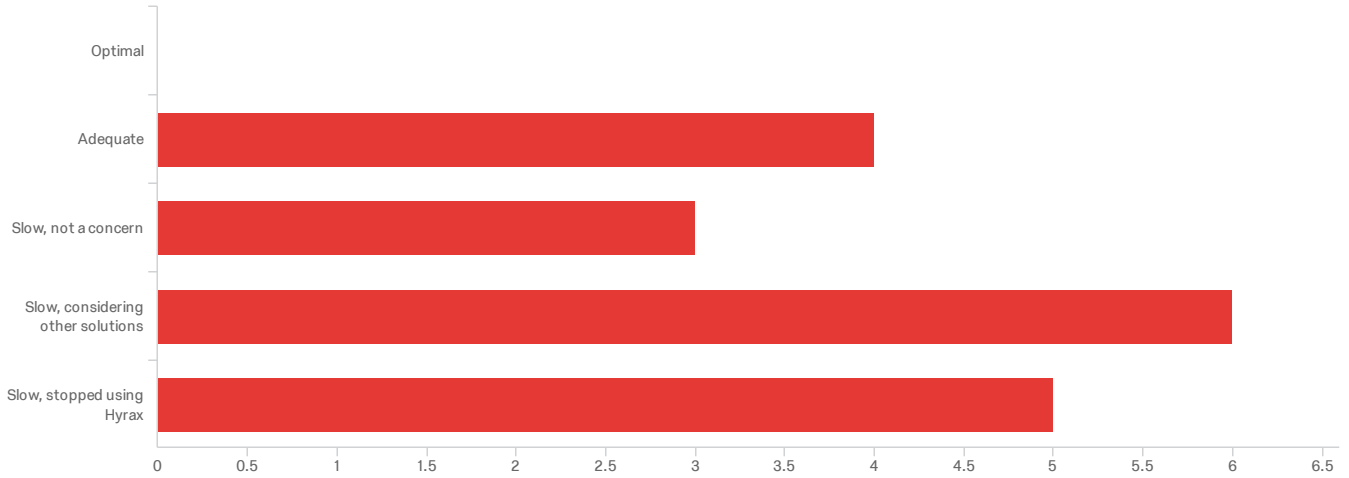
Fedora 3 based early hydra (hydra-head)

Valkyrie, and Sufia

Other:

Curation Concerns

Q8 - If your institution used or currently is using Hyrax for test or production, rate the impact of performance issues currently experienced. Hyrax performance is:

| #	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If your institution used or currently is using Hyrax for test or production, rate the impact of performance issues currently experienced. Hyrax performance is:	2.00	5.00	3.67	1.11	1.22	18

#	Field		Choice Count
1	Optimal	0.00%	0
2	Adequate	22.22%	4
3	Slow, not a concern	16.67%	3
4	Slow, considering other solutions	33.33%	6
5	Slow, stopped using Hyrax	27.78%	5
			18

Showing rows 1 - 6 of 6

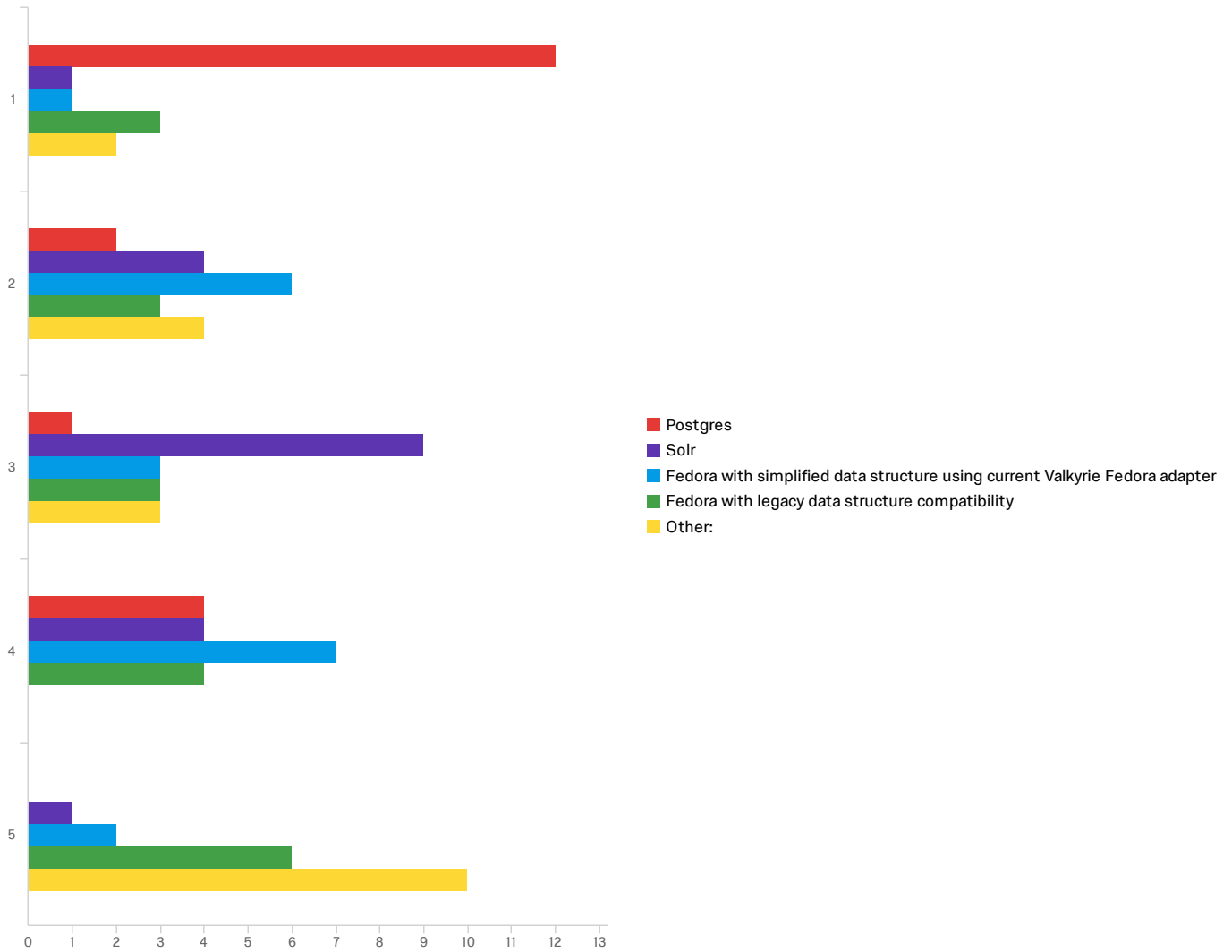## Q9 - What is the status of applications your institution has that could benefit from Valkyrie in Hyrax? (check all that apply)
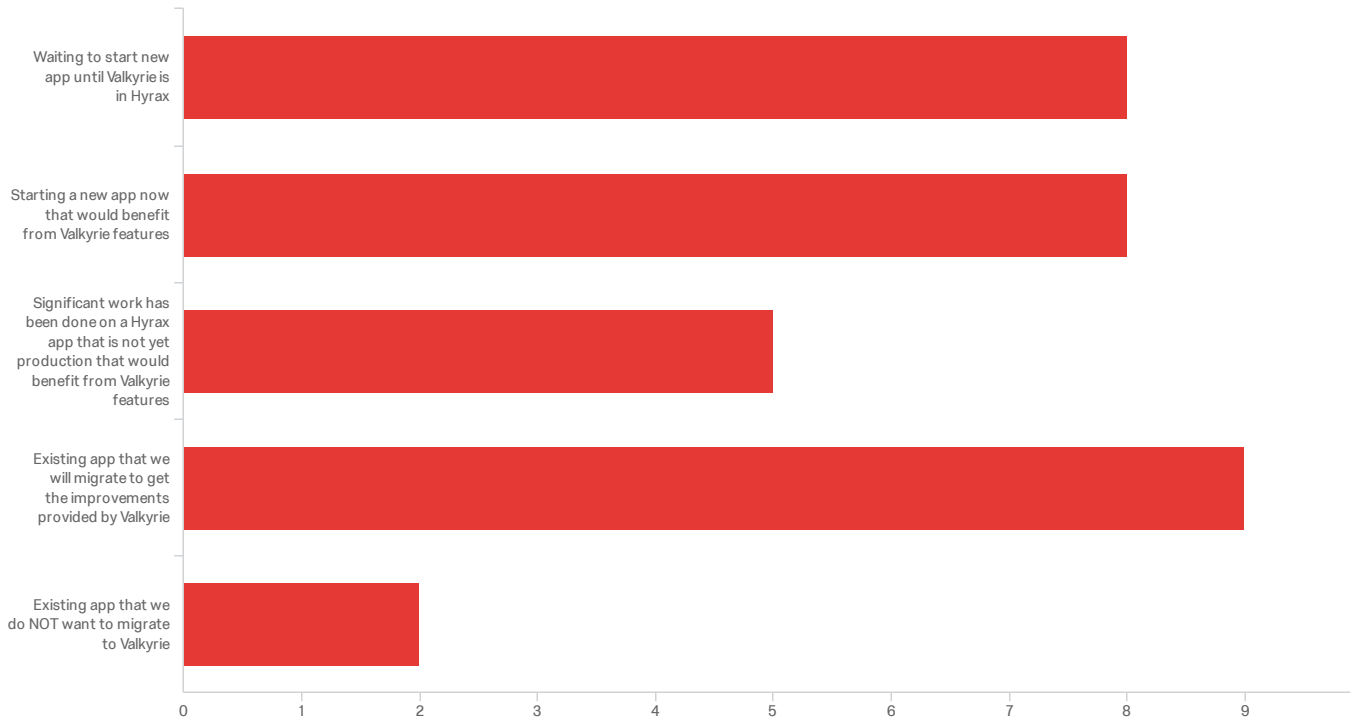
#	Field	Choice Count	
1	Waiting to start new app until Valkyrie is in Hyrax	25.00%	8
2	Starting a new app now that would benefit from Valkyrie features	25.00%	8
3	Significant work has been done on a Hyrax app that is not yet production that would benefit from Valkyrie features	15.63%	5
4	Existing app that we will migrate to get the improvements provided by Valkyrie	28.13%	9
5	Existing app that we do NOT want to migrate to Valkyrie	6.25%	2
			32

Showing rows 1 - 6 of 6

Q10 - Rank the metadata backend you would want to use with Hyrax (with 1 being the most desired)

Legend:
- Postgres
- Solr
- Fedora with simplified data structure using current Valkyrie Fedora adapter
- Fedora with legacy data structure compatibility
- Other:

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Postgres	1.00	4.00	1.84	1.23	1.50	19
2	Solr	1.00	5.00	3.00	0.92	0.84	19
3	Fedora with simplified data structure using current Valkyrie Fedora adapter	1.00	5.00	3.16	1.14	1.29	19
4	Fedora with legacy data structure compatibility	1.00	5.00	3.37	1.46	2.13	19
5	Other:	1.00	5.00	3.63	1.53	2.34	19

#	Field	1		2		3		4		5		Total
1	Postgres	63.16%	12	10.53%	2	5.26%	1	21.05%	4	0.00%	0	19
2	Solr	5.26%	1	21.05%	4	47.37%	9	21.05%	4	5.26%	1	19
3	Fedora with simplified data structure using current Valkyrie Fedora adapter	5.26%	1	31.58%	6	15.79%	3	36.84%	7	10.53%	2	19
4	Fedora with legacy data structure compatibility	15.79%	3	15.79%	3	15.79%	3	21.05%	4	31.58%	6	19
5	Other:	10.53%	2	21.05%	4	15.79%	3	0.00%	0	52.63%	10	19

Showing rows 1 - 5 of 5

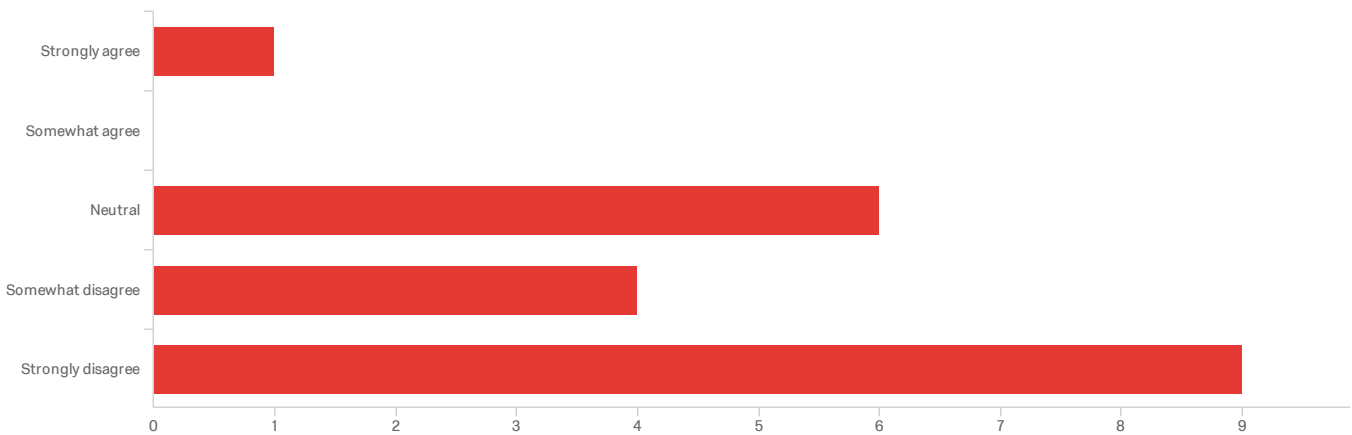# Q11 - DiskFedora using current Valkyrie Fedora storage adapterFedora using an ActiveFedora storage adapter
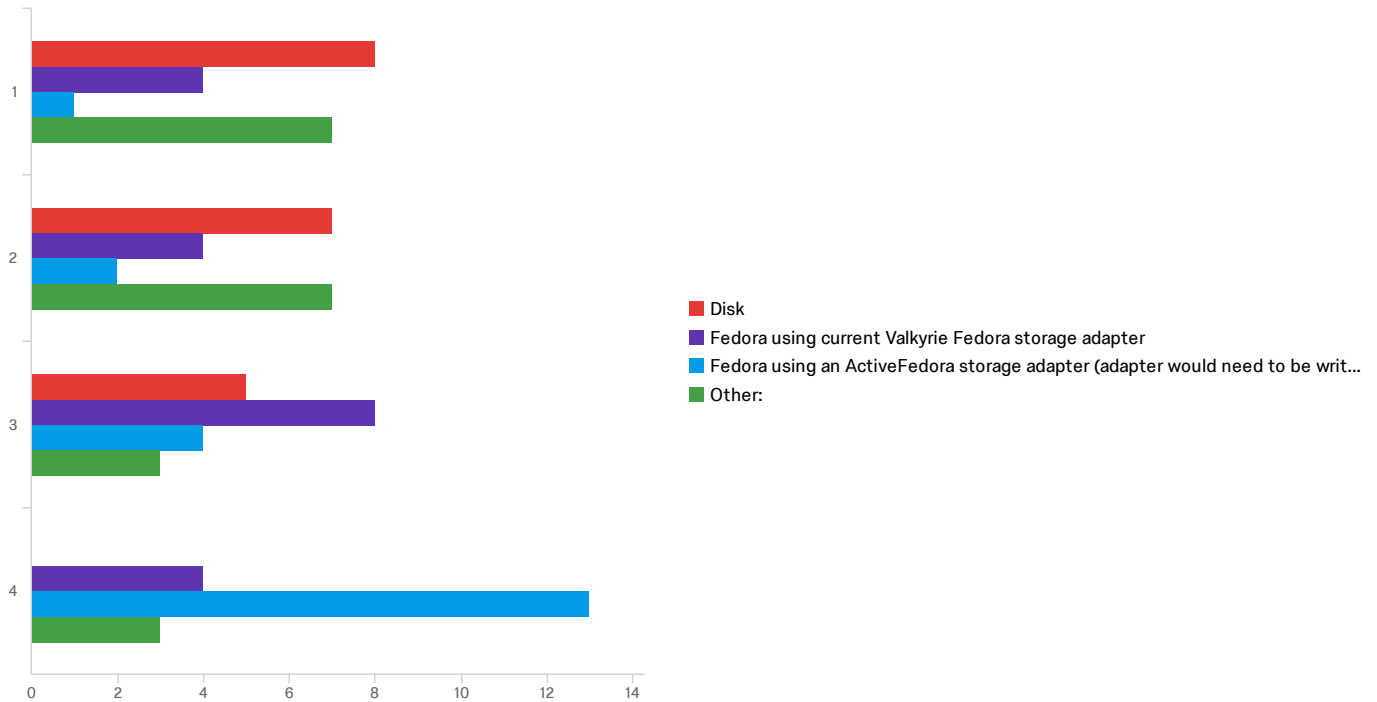
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Disk	1.00	3.00	1.85	0.79	0.63	20
2	Fedora using current Valkyrie Fedora storage adapter	1.00	4.00	2.60	1.02	1.04	20
3	Fedora using an ActiveFedora storage adapter (adapter would need to be written to mimic current Hyrax implementation)	1.00	4.00	3.45	0.86	0.75	20
4	Other:	1.00	4.00	2.10	1.04	1.09	20

#	Field	1		2		3		4		Total
1	Disk	40.00%	8	35.00%	7	25.00%	5	0.00%	0	20
2	Fedora using current Valkyrie Fedora storage adapter	20.00%	4	20.00%	4	40.00%	8	20.00%	4	20
3	Fedora using an ActiveFedora storage adapter (adapter would need to be written to mimic current Hyrax implementation)	5.00%	1	10.00%	2	20.00%	4	65.00%	13	20
4	Other:	35.00%	7	35.00%	7	15.00%	3	15.00%	3	20

Showing rows 1 - 4 of 4

Q12 - If it takes significantly longer to develop support for the ActiveFedora data structure in Valkyrie, I still want that supported. NOTE: ActiveFedora data structure is the structure of data stored by Hyrax before Valkyrie support is added. Support for writing in this data structure does not currently exist and is expected to be a significant implementation effort. Support for ActiveFedora means data will not need to be migrated. Data stored using an ActiveFedora data structure is not expected to be more performant. Valkyrie supports other persistence adapters that store data in backends which will require data migration for existing apps and is expected to be more performant.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If it takes significantly longer to develop support for the ActiveFedora data structure in Valkyrie, I still want that supported. NOTE: ActiveFedora data structure is the structure of data stored by Hyrax before Valkyrie support is added. Support for writing in this data structure does not currently exist and is expected to be a significant implementation effort. Support for ActiveFedora means data will not need to be migrated. Data stored using an ActiveFedora data structure is not expected to be more performant. Valkyrie supports other persistence adapters that store data in backends which will require data migration for existing apps and is expected to be more performant.	1.00	5.00	4.00	1.10	1.20	20

#	Field	Choice Count	
1	Strongly agree	5.00%	1
2	Somewhat agree	0.00%	0
3	Neutral	30.00%	6
4	Somewhat disagree	20.00%	4
5	Strongly disagree	45.00%	9
			20

Showing rows 1 - 6 of 6

Q13 - What is the reason for your response to question 8?

What is the reason for your response to question 8?

We've been using AF for a long time, but we're not committed to it at the expense of a better solution.

Never used ActiveFedora

Not a concern for our migrations

We believe that Valkyrie is good and desirable. We look forward to the simplified code and more reliable behavior it will provide. However, Hyrax with ActiveFedora is currently mission critical for us. We are concerned that committing to a move to Valkyrie with anything less than full ActiveFedora support is too risky, and until it has been demonstrated that Valkyrie can replace ActiveFedora with full support well, we don't feel we can support anything less.

We have significant concerns that if we DO NOT develop a way to make it so data doesn't need to be migrated, we could tear apart the community.

If it takes significantly longer, the scarce dev resources should be used to address some of the other priorities.

the questions aren't numbered but i'm assuming this means the question about activefedora data structure in valkyrie. this is not relevant to us because we are not migrating from a hyrax app.

It seems to be too much of a bottleneck in enabling well performing repositories.

We will migrate all the content anyway so no need for backwards compatibility

We don't think it's efficient data structure. We can work with Valkrie's data structure.

We do not want ActiveFedora, or the fedora data models

I'm not sure I understand that question above (is that 8?)

Not using ActiveFedora currently

If we keep ActiveFedora we are just making the stack more complicated.

We will not use ActiveFedora even if it is available as an option.

We would probably just move to disk even if it takes a migration to stop having to support Fedora and Tomcat.

Given the option of using Valkyrie in Hyrax, I'm not certain what would be gained from using ActiveFedora outside of not needing to migrate data. As our current intended use for Valkyrie is for migration, I think we're happy for solutions to expedite that process.

ActiveFedora is the wrong data pattern. We have Fedora 3, and through migration of ActiveFedora, are left to our own devices. We understand that we'd likely need to write our own adapter.

Showing records 1 - 18 of 18

Q14 - Having Valkyrie in Hyrax is important for my institution's applications.
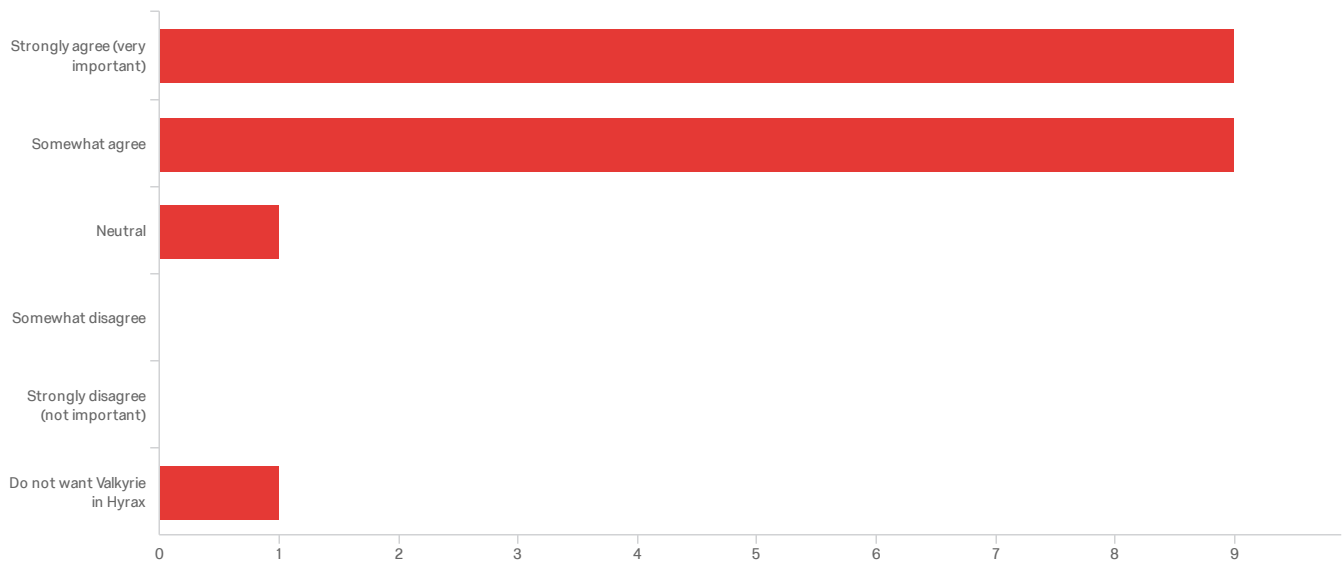
| #	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Having Valkyrie in Hyrax is important for my institution's applications.	1.00	6.00	1.80	1.12	1.26	20

#	Field	Choice Count	
1	Strongly agree (very important)	45.00%	9
2	Somewhat agree	45.00%	9
3	Neutral	5.00%	1
4	Somewhat disagree	0.00%	0
5	Strongly disagree (not important)	0.00%	0
6	Do not want Valkyrie in Hyrax	5.00%	1
			20

Showing rows 1 - 7 of 7

Q15 - If you responded that you do NOT want Valkyrie in Hyrax, what are the reasons (check all that apply)
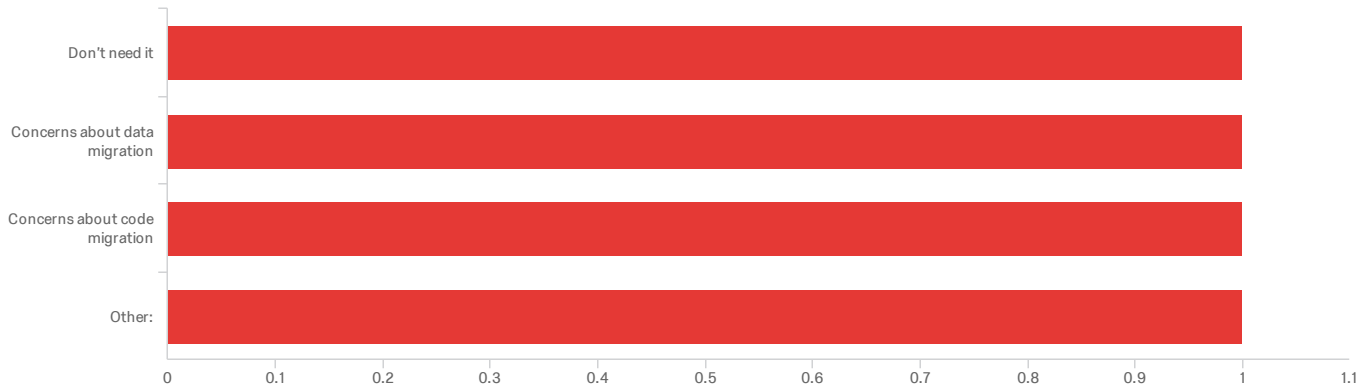
#	Field		Choice Count
1	Don't need it	25.00%	1
2	Concerns about data migration	25.00%	1
3	Concerns about code migration	25.00%	1
4	Other:	25.00%	1
			4

Showing rows 1 - 5 of 5
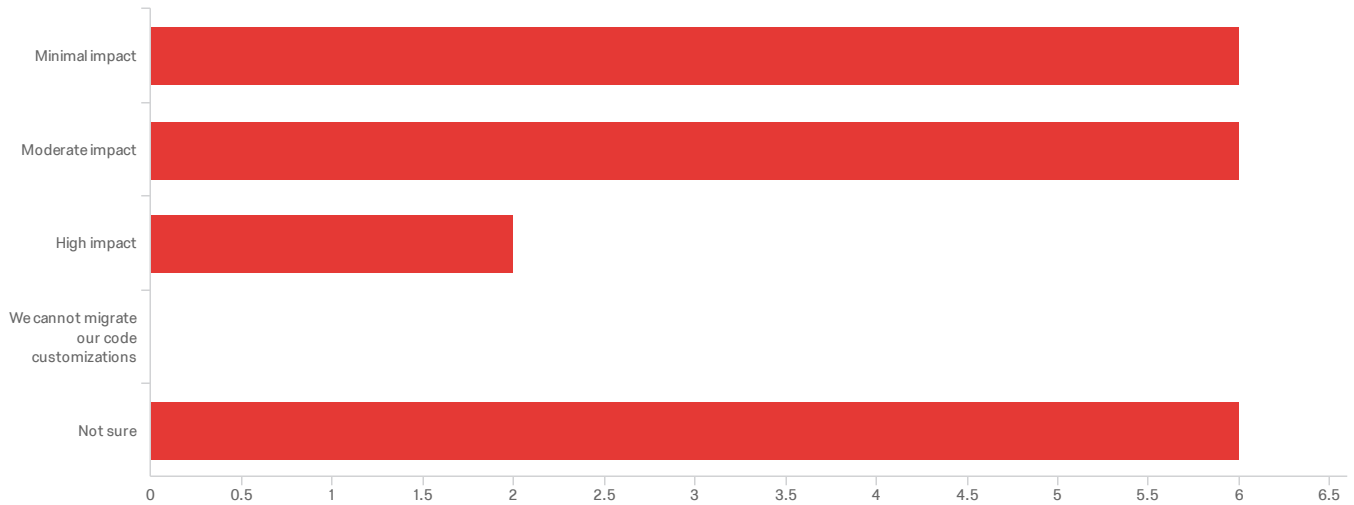
Q15_4_TEXT - Other:

Other:

Something should replace ActiveFedora but it could also be something else than Valkyrie

Showing records 1 - 1 of 1

Q16 - How big an impact will the Hyrax/Valkyrie code migration have on your ability to use Hyrax?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How big an impact will the Hyrax/Valkyrie code migration have on your ability to use Hyrax?	1.00	5.00	2.70	1.62	2.61	20

#	Field		Choice Count
1	Minimal impact	30.00%	6
2	Moderate impact	30.00%	6
3	High impact	10.00%	2
4	We cannot migrate our code customizations	0.00%	0
5	Not sure	30.00%	6
			20

Showing rows 1 - 6 of 6

Q17 - Please comment on the impact of the Hyrax/Valkyrie code migration as well as any needs regarding code migration:

Please comment on the impact of the Hyrax/Valkyrie code migration as well a...

It will have to be a clear and concise path at this point, I don't see management supporting anything similar to what we've just undertaken rewriting our bespoke Hydra on Fedora 3 applications to Hyrax on Fedora 4 and migrating all our metadata from XML to RDF again.

None needed

Migration tools and batch import/export

We are able to handle code migrations, generally, but we are concerned that the code and data migrations will be so signifcant that we will get stuck on the ActiveFedora version of Hyrax.

It will have an impact on our upgrade process since it will affect customizations.

minimal impact as we have not started development work on a hyrax app

We will need to rewrite most of our existing Sufia 6 based and bespoke applications anyway

I think that the current issues with Fedora backed Hyrax are requiring a lot of work arounds anyway.

Hyrax/Valkyrie would make Hyrax a usable solution for our needs. Hyrax alone is a non-starter.

Not using Hyrax. Will reevaluate after Valkyrie support

WE don't have a ton of code so migration should be OK. There will be quite a lot of work on metadata to do, but that's OK.

I hope our customizations are surface/superficial, but we'll find out.

We do not currently have much in the way of customization.

We will not be moving to Fedora 4 as it does not provide preservation analogues to what we had with Fedora 3. We know that we need to move past Fedora 3, so need an egress into something community supported. We understand and accept that impact.

Showing records 1 - 14 of 14

Q18 - How big an impact will a data migration have on your ability to move to Hyrax/Valkyrie?
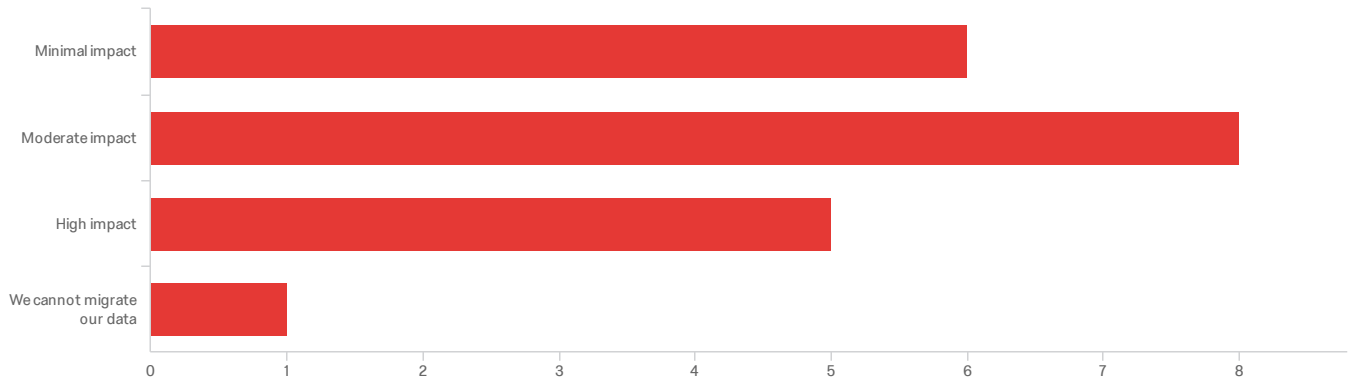
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How big an impact will a data migration have on your ability to move to Hyrax/Valkyrie?	1.00	4.00	2.05	0.86	0.75	20

#	Field		Choice Count
1	Minimal impact	30.00%	6
2	Moderate impact	40.00%	8
3	High impact	25.00%	5
4	We cannot migrate our data	5.00%	1
			20

Showing rows 1 - 5 of 5

Q19 - Please comment on the impact of a data migration due to a move to Hyrax with Valkyrie as well as any needs regarding data migration:

Please comment on the impact of a data migration due to a move to Hyrax wit...

It will have to be a clear and concise path at this point, I don't see management supporting anything similar to what we've just undertaken rewriting our bespoke Hydra on Fedora 3 applications to Hyrax on Fedora 4 and migrating all our metadata from XML to RDF again.

We are actually not sure..

If performance of the migration process is as slow as migrating from fedora 3 to fedora 4, impact will be very high. If it is fast, impact may be reduced. In addition, managing an upgrade/migration requires resources and coordination of work, so there is significant impact regardless.

i think the data migration will be easier with valkyrie

We will need to migrate all data anyway

We would migrate quickly. That said there are other issues that continue to surface with Hyrax

This depends on the development hours on our side required for a data migration.

Want to move Fedora 3 external content to OCFL

There has to be a relatively straightforward data migration pathway.

We would like to improve upon our capability to migrate our data into Hyrax, and support Valkyrie as a means to accomplish that effort.

We are considering a lazy migration, in which we could read from Fedora 3 and write to another system.

Showing records 1 - 11 of 11

Q20 - It is a significant development effort to bring Valkyrie into Hyrax and I believe it is important that institutions support the effort with developer time.
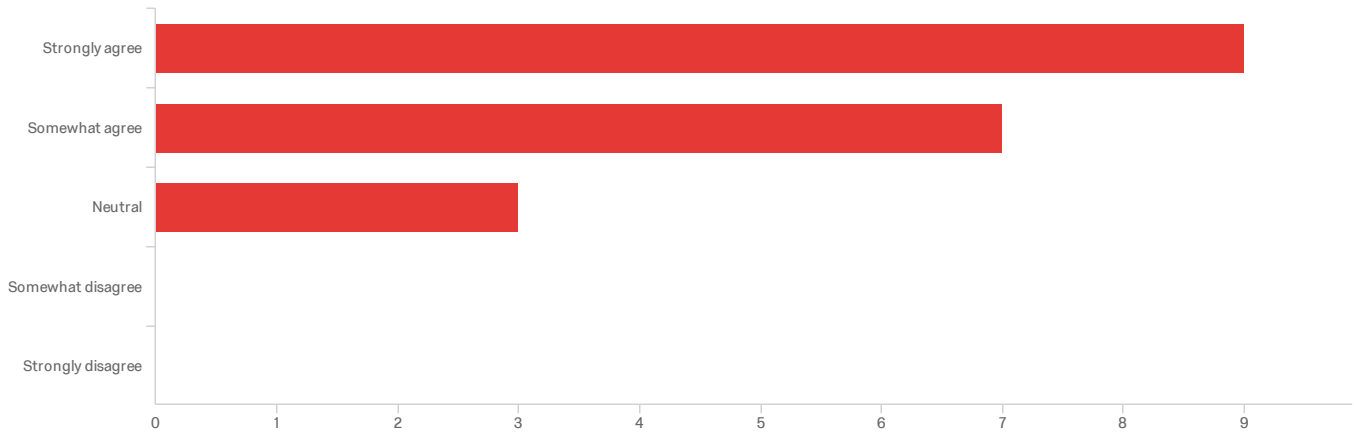
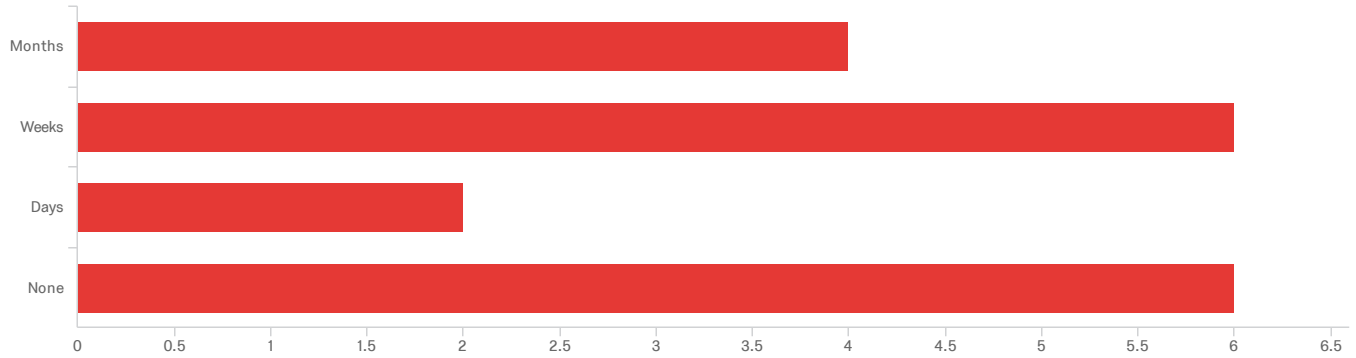| #	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	It is a significant development effort to bring Valkyrie into Hyrax and I believe it is important that institutions support the effort with developer time.	1.00	3.00	1.68	0.73	0.53	19

#	Field	Choice Count	
1	Strongly agree	47.37%	9
2	Somewhat agree	36.84%	7
3	Neutral	15.79%	3
4	Somewhat disagree	0.00%	0
5	Strongly disagree	0.00%	0
			19

Showing rows 1 - 6 of 6

Q21 - Roughly how much developer FTE could you devote to your upgrade to Hyrax with Valkyrie (including addressing migration-needs due to data and code customizations)?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Roughly how much developer FTE could you devote to your upgrade to Hyrax with Valkyrie (including addressing migration-needs due to data and code customizations)?	1.00	4.00	2.56	1.17	1.36	18

#	Field		Choice Count
1	Months	22.22%	4
2	Weeks	33.33%	6
3	Days	11.11%	2
4	None	33.33%	6
			18

Showing rows 1 - 5 of 5

Q22 - If you are considering using a version of Hyrax with Valkyrie support: What will be the deciding factor for your decision to migrate to Hyrax/Valkyrie or something else?

If you are considering using a version of Hyrax with Valkyrie support: What...

the migration path

Would like the community to get away from ActiveFedora, so anything that an help that.

We are not currently on Hyrax yet but want to move to Hyrax from other applications

Timing. If Hyrax/Valkyrie is finished in summer 2019 we will use it.

The existence of a proven and performant migration tool.

Performance and it becoming available in a suitable timescale

Whether or not Hyrax continues to mature. We have dedicated significant resources but continue to have work around major issues.

Ease of writing Valkyrie adapters for interacting with our custom middleware via API. We would like to see modularization of the hyrax code.

Performance, Accessibility, Stability of the codebase moving forward

Performance, support for Fedora 5 without MODESHAPE but OCFL

Valkyrie support in Hyrax is very important part of our decision making process for adopting Hyrax.

Hopefully reducing complexity by removing Fedora as a backend. Performance increases would be cool too.

Community support and transparency

The ease of which we could write an adapter to point to Fedora 3 for reading data.

Showing records 1 - 14 of 14

Q23 - If you are considering standing up a new Hyrax repository (not migrating): What will be the deciding factor for your decision to stand up a new repository on Hyrax instance or something else?

If you are considering standing up a new Hyrax repository (not migrating):...

Standing up a new Hyrax depends on Valkyrie being implemented, I just don't want to use Fedora

Batch import/export tools, ease of upgrades

We will be standing up a new application with Hyrax regardless.

Support by vendors

Performance and it becoming available in a suitable timescale

Ease of writing Valkyrie adapters for interacting with our custom middleware via API. We would like to see modularization of the hyrax code.

N/A

support for Valkyrie.

None, we will be using Hyrax with migration in mind.

Showing records 1 - 9 of 9

Please include any other comments you would like to make about including Va...

I think this is important for the future of Hyrax

Long term, we are willing and interested in Valkyrie in Hyrax. We do support the community, but in the short term, we are not looking to have Valkyrie in Hyrax because we are currently very dependent on ActiveFedora. There is so much ambiguity in the plans to add Valkyrie to Hyrax, and this survey, that we are uncomfortable responding in a more supportive way to the idea transitioning. This has pushed us to respond overall negatively, not because we are against Valkyrie, but we are concerned that we would be put in a compromised situation to forcefully migrate. We would like to see the Fedora adapter developed fully before the community engaging in plans to replace ActiveFedora in Hyrax.

This survey very much feels like the in order to implement Valkyrie, you can't really use Hyrax. That may not have been the intention but there it is. I have significant concerns that if a path forward for Hyrax/Valkyrie/Fedora is NOT found, then the community will be torn apart.

For question 15, we would have answered differently if the text said "... it is important that institutions **that have an interest in this effort** support the effort with developer time."

There's merit in the argument that something more similar to ActiveRecord rather than Valkyrie would be a better replacement for ActiveFedora. If most institutions are anticipating to move away from Fedora anyway then there's no need to keep Fedora as a backend option.

NU is committed to helping the community. As you know we have dedicated significant resources

It would be nice to see specific software architecture before jumping into code. Because we do not currently use Hyrax, migrations are less of a concern for us.

Valkyrie support in Hyrax is critical to avoiding a split in the community

We hope to start contributing time eventually, but I don't think we have the skills in house right now to do much more than follow.

I would like to contribute to this or other Hyrax work, but we have limitations as a small (predominantly, one developer) group.

Showing records 1 - 10 of 10

Q5_7_TEXT - Topics

Unknown

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
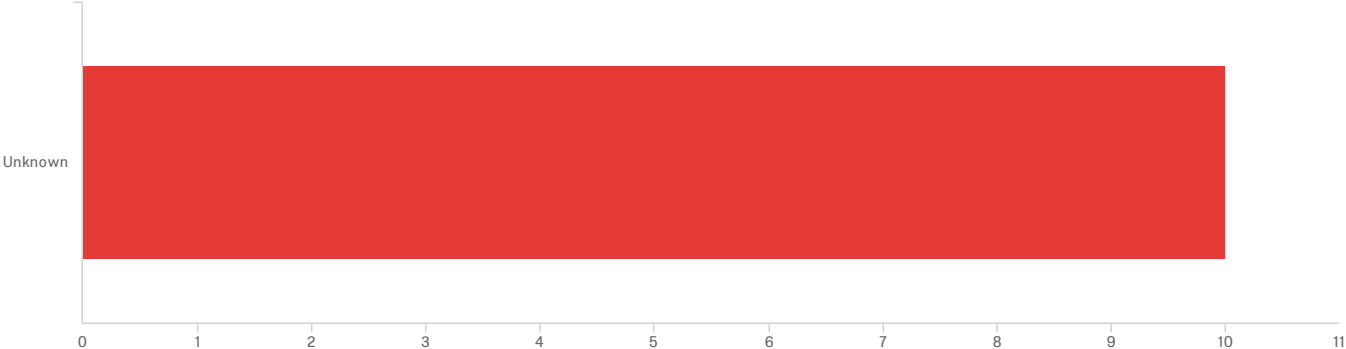
#	Field		Choice Count
1	Unknown	100.00%	10

Showing rows 1 - 1 of 1

End of Report