OpenAthens

Librarians' experiences in providing access to digital content

Key findings of research sponsored by OpenAthens

November 2018

Contents
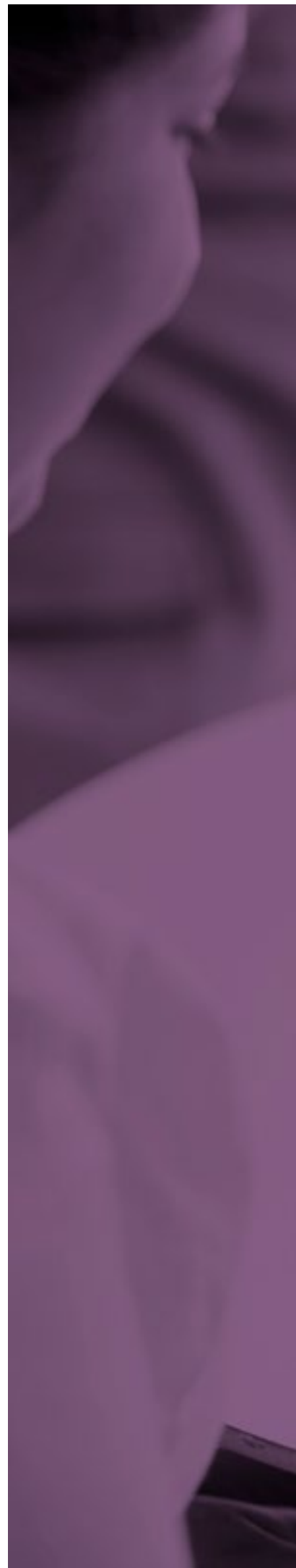
We spend millions of dollars on our digital collection; if our patrons are unable to access it then that's wasted money – even if only for a moment.

Library director, UK Higher Education

Introduction

Librarians understand the value of information better than most. They are acutely aware of the challenges involved in sourcing, licensing, curating and distributing information to those who need it, when they need it.

Effective access management plays a vital role in helping to provide library users with quick and easy access to relevant material while also protecting that same valuable content from misuse.

It is about getting the right resources to the right people as efficiently as possible.

Success in access management can be simply defined as how well it stays out of the end user's way. But this is not always easy when access to content needs to be limited to those with the necessary permissions.

E-resources now form the majority of library collections and librarians have the difficult task of successfully balancing the needs of their users with those of publishers. Users want a seamless user experience offering a quick single sign-on solution to access the full range of library content they are entitled to. For publishers, the content must be adequately protected from misuse to ensure it retains its value.

These competing demands are set against a backdrop of rapidly changing technology and user behavior meaning access management systems must also constantly evolve and integrate with an ever-wider range of related technologies. As the trend in remote and mobile working rises, library users increasingly expect to access institutionally licensed resources outside the networks of the licensing institution. At the same time, data protection and security are growing issues with stricter rules around what user information institutions can collect and store.

All this creates new challenges but also new opportunities for librarians and the organisations in which they work.

OpenAthens commissioned this survey of more than 900 librarians in Spring 2018 across a range of sectors and countries to get a clear insight into their experiences, concerns, hopes and future aims in this rapidly evolving industry. This was a follow-up to a similar survey carried out in 2015. The aim was to use resulting information to further improve identity and access management for everyone. This report presents the findings.

Key takeaways

- **Access management is 'critical'** if librarians are to meet end-user needs, maximize investment in resources and improve outcomes, as 99.2% of 725 respondents agreed – a small increase from 98.3% of 424 respondents surveyed in 2015.

- This is largely driven by changes in the way people consume content with **98% of librarians seeing a rise in people accessing their resources remotely** from home, via mobile devices and in off-site labs and clinics.

- **The rise in off-site access to content presents an opportunity** to increase the use of licensed information sources, 87.5% of librarians believe.

- **Off-site access also requires library staff to have greater technical expertise** than ever before in order to support and advise users remotely, according to 77.3% of respondents, but more than half (54%) said the **skills implications of the changing landscape were not recognized** by those in charge of hiring and training staff.

- **Library users also require more technical expertise** in order to successfully navigate their library resources, 70.9% of librarians say.

- Less than a third of librarians (30.9%) feel that **decisions about access management are given the necessary priority** by other stakeholders within their organization.

- **Managing access to digital library content is a source of 'friction'** for 60.7% of librarians, two thirds of whom (68.8%) put this down to varying publisher access options creating complications.

- The **provision of effective personalized online services is more important** to users than protecting their anonymity, more than half (58.6%) of librarians believe.

- **Creating a seamless user experience is the top priority** for the future for 78.6% of librarians.

Join the debate

OpenAthens will be at the following events, join us to discuss these results:

- **ALA Midwinter** – Seattle, WA, USA, 25-29 January 2019

- **ALIA Information Online** – Sydney, Australia, 11-15 February 2019

- **ER&L** – Austin, TX, USA, 3-6 March 2019

- **OpenAthens Conference** – London, UK, 19 March 2019

- **MLA '19** – Chicago, IL, USA, 4-6 May 2019

- **ALA Annual** – Washington, DC, USA, 20-25 June 2019

If you have any questions about the survey and its findings, please contact us at **contact@openathens.net**

Respondent profile

The survey received 906 responses (up from 545 in 2015) from librarians working across the following sectors:

Please give us a broad sense of the type of organization in which you work:

Sector	Percentage
Healthcare	25.2%
Pharma and bio-medical	0.8%
School	2.5%
Further education	6.0%
Higher education	52.7%
Public library	1.9%
Law	3.1%
Government	2.2%
Corporate research	0.8%
Other	4.9%
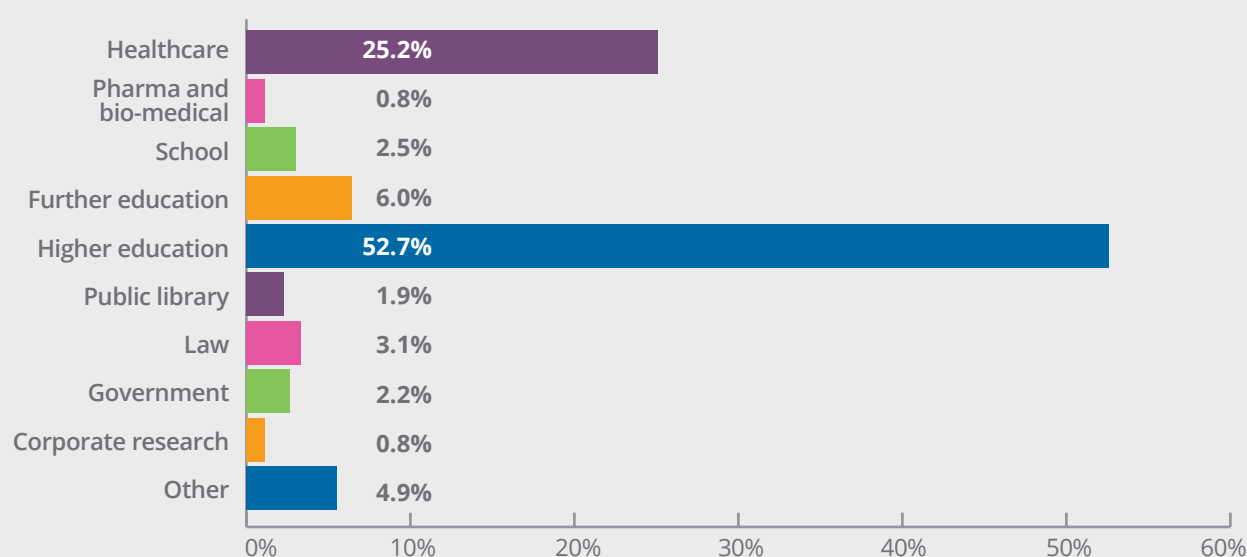
Some organizations can be classified in multiple sectors, so respondents were able to select more than one option.

Respondents came from around the world. Of the 637 who provided a country, the regional split was:

Region	Percentage
Africa	0.94%
Asia	1.57%
Australasia	1.26%
Europe	63.42%
Middle East	0.31%
North America	32.34%
South America	0.16%
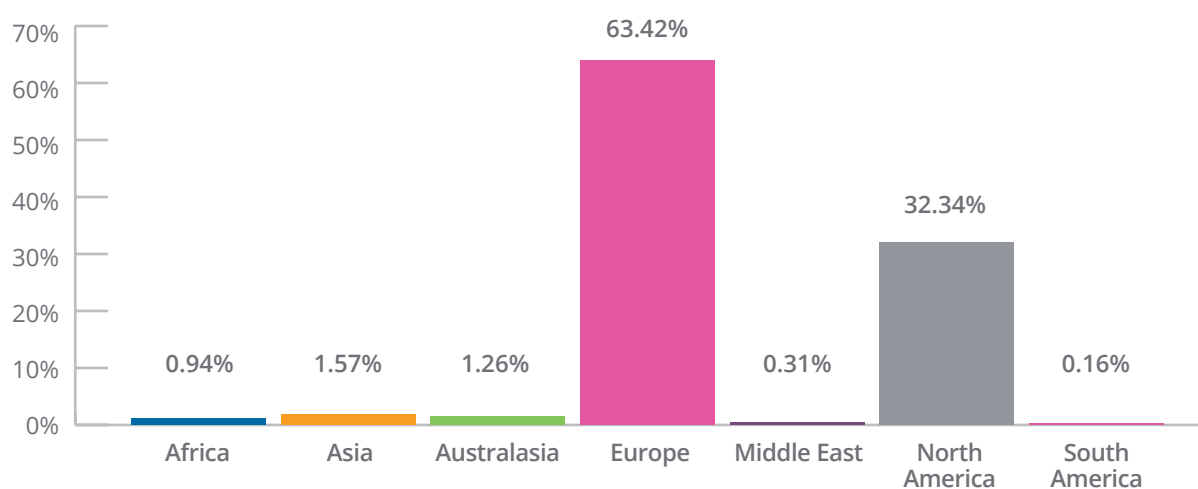
Respondent profile (cont.)

Access is currently managed in my institution by:

Category	On-site	Off-network
IP address	599	141
Username and password	432	354
Shibboleth	202	206
OpenAthens	276	276
Pingidentity	23	19
Infotrieve	14	15
EZproxy	191	237
HAN	13	14
LibLynx	14	16
VPN	118	187
Remote desktop	148	147
Portal	127	92

On-site ■ Off-network ■
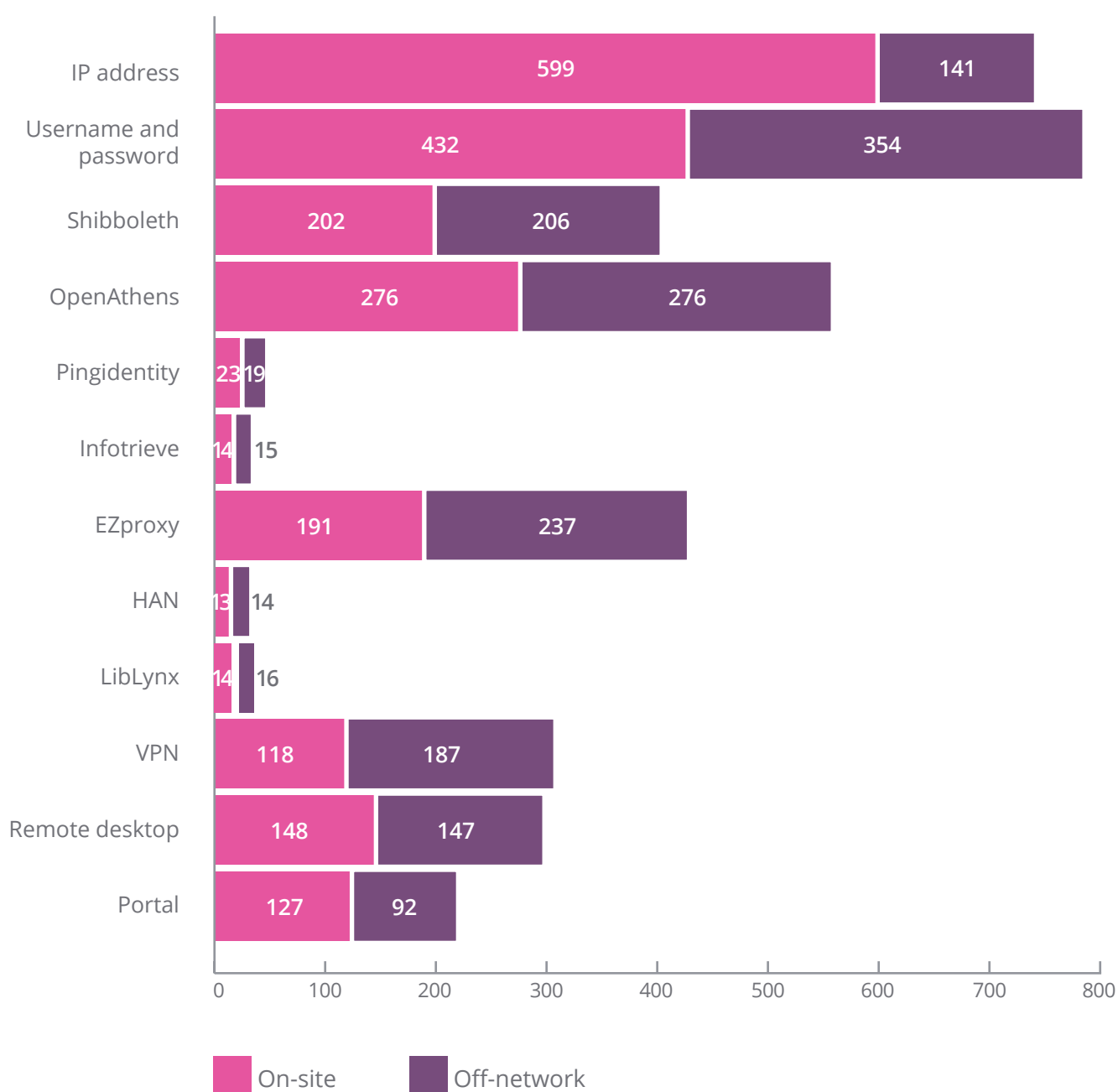
Do you use an integrated library system (ILS) / library management system (LMS)?

System	Percentage
Alma (Ex Libris)	~15%
Alto (Capita)	~6%
Axiell	0%
Evergreen	<1%
Horizon (SirsiDynix)	<1%
Koha	~8%
Liberty (Softlink)	~2%
Polaris (Innovative Interfaces)	<1%
Sierra (Innovative Interfaces)	~14%
Symphony (SirsiDynix)	~12%
Voyager (Ex Libris)	~3%
WorldShare Management Services (OCLC)	~5%
None	~10%
Other	~24%
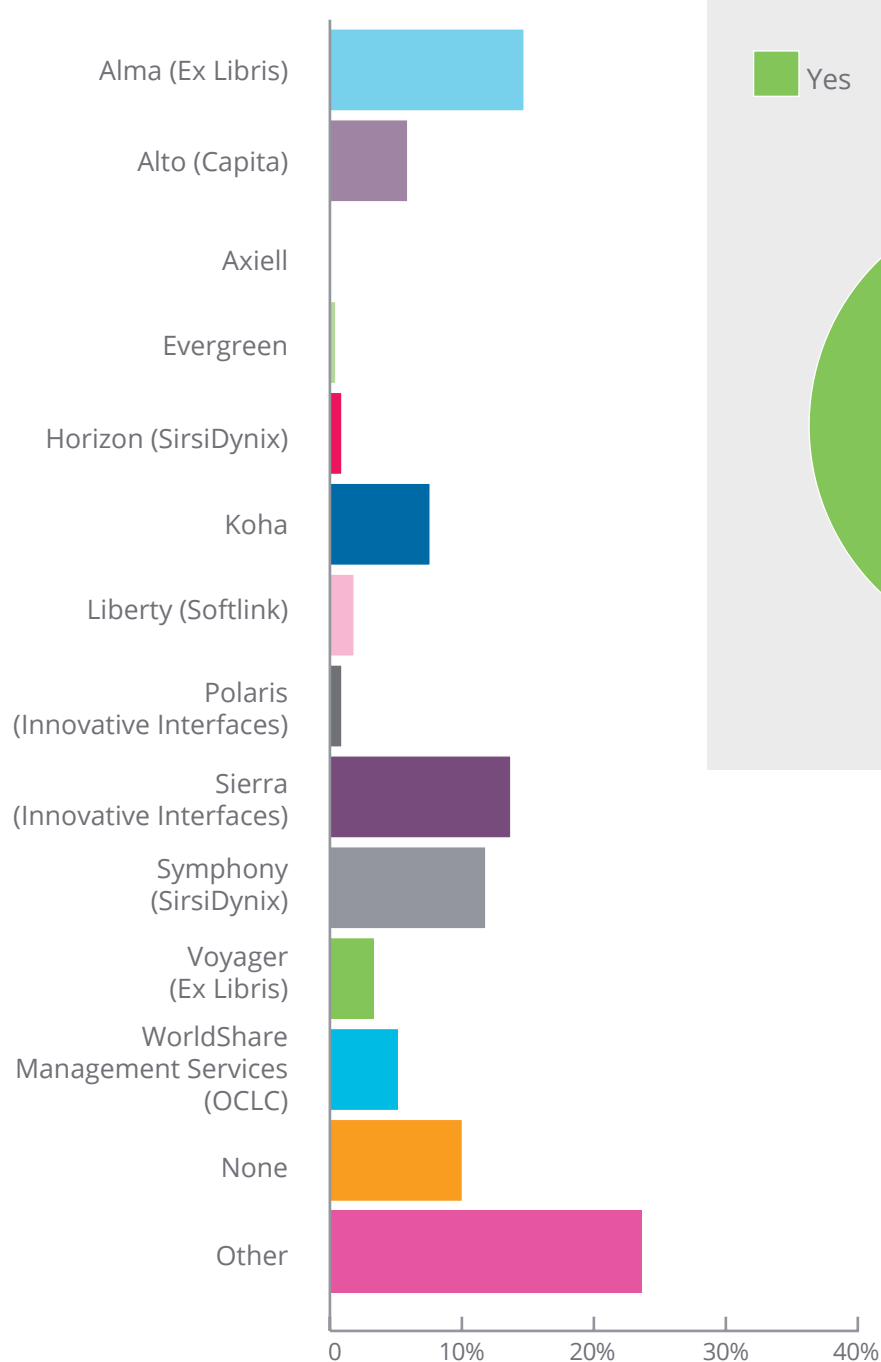
Is your ILS / LMS the source of your user directory data?

Yes ■ No ■

47.76% (298) Yes

52.24% (326) No
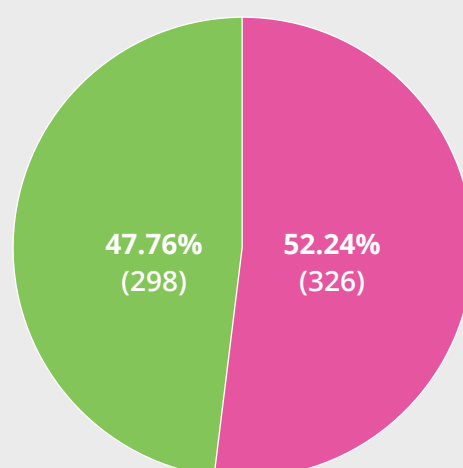
Access management is critical

A massive 99.2% of librarians, across all sectors and locations, agree that managing access to their resources is 'critical' to meeting their users' needs, maximizing investment in library resources and improving outcomes for the library. This was a slight increase on the 98.3% who agreed with this when asked in 2015.

One of the few librarians who added a comment to their response summed up why: "If users didn't access our resources, what's the point of our services? We would be paying for resources not being utilized."
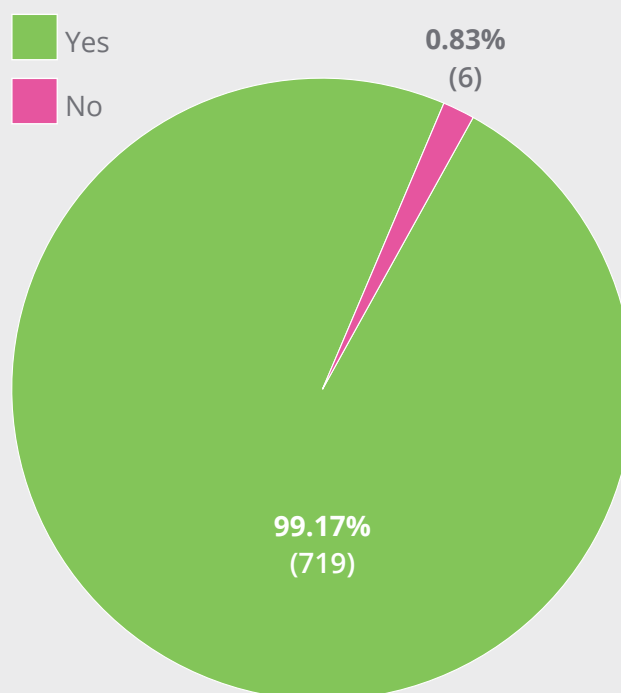
Do you agree?

■ Yes
■ No

0.83% (6)

99.17% (719)

Key points and comments:

- Only 30.9% of librarians feel decisions about access management are given the necessary level priority by other stakeholders within their organizations.

- Just a third (33.4%) of librarians agree there is adequate investment in access management software.

- Set against a fast-changing industry backdrop, access management is fraught with complications with nearly two thirds (63.5%) warning the technical implications of strategic licensing decisions are not always sufficiently understood.

- More than half (54%) said the skills implications of the changing access management landscape are not always recognized by those in charge of hiring and training new staff.

- A sizeable 39.4% of librarians feel they are 'behind the curve' in terms of the access management they offer users, but this is an improvement on 2015 when 42.5% agreed with this statement.

To what extent would you agree with the following statements about how access management is perceived or managed in your organization?

Legend:
- Strongly disagree (pink)
- Disagree (light blue)
- Neither agree nor disagree (purple)
- Agree (green)
- Strongly agree (dark blue)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Decisions about access management are given the necessary priority within my team	19	104	127	342	137
It's clear where ownership of access management sits across my organization / system	31	155	149	305	89
Those who need to understand the technologies and terminology associated with access management	27	187	169	282	62
Decisions about access management are given the necessary priority by other stakeholders in the organization / system	48	237	217	181	43
There is sufficient investment in access management software	51	194	241	210	34
Access management is requiring my team to take on IT responsibilities	15	117	145	360	85
We have sufficient IT support for access management	55	221	204	207	40
Our current access management solution is sufficiently granular / flexible to support our users' evolving needs	58	219	226	190	32
Our current access management solution gives us good insight into the usage of the resources we invest in	53	181	235	229	28
It is difficult to keep up with the maintenance of our access management solution	29	182	286	195	31
We are behind the curve in terms of what we offer our users	41	203	195	229	56
The technical implications of strategic licensing decisions are not always sufficiently understood	13	82	170	376	84
The skills implications of the changing access management landscape are not always recognized by those in charge of hiring and training new staff	11	106	216	315	76

Axis: 0   100   200   300   400   500   600   700

Rise of remote access

Effective access management has become more vital as end users increasingly consume content remotely, either at home, via mobile devices or in off-site labs. A massive 97.6% of librarians said off-site access was rising with a further 62.2% expecting it to continue rising over the next 12 months.

This increasingly flexible mobile approach to working has seen librarians forced to adapt to provide digital content that can be accessed and consumed from anywhere. This creates both challenges and opportunities for the sector which we will explore further.

Do you agree?

■ Yes   ■ No

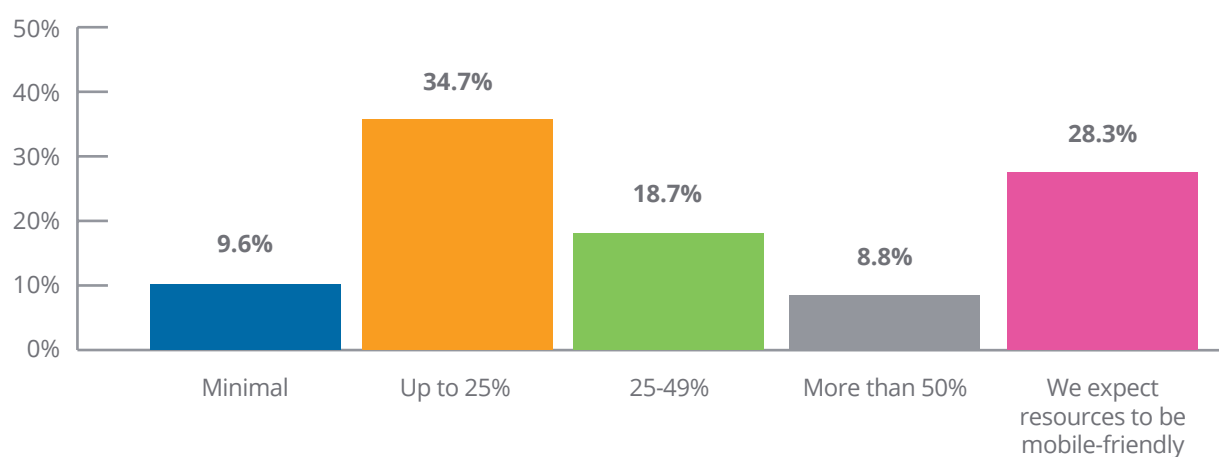**2.4%**
(13)

97.6%
(534)
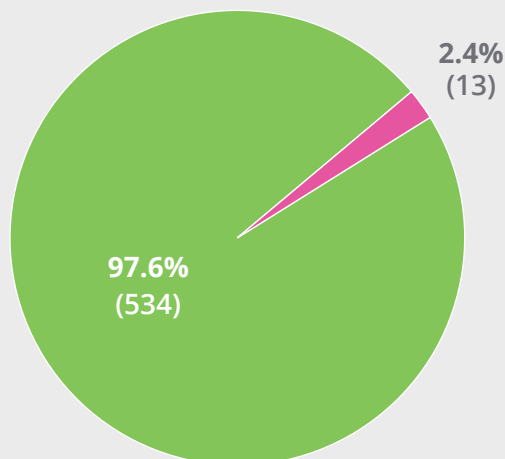
Key points and comments:

- 78.7% put the rise in off-site access down to more people working from home, while 77.8% said it was driven by people accessing content from mobile devices. A further 51.6% pointed to more people working in off-site labs and clinics rather than inside the library or institution itself. In 2015, research taking place on mobile devices was rated the most likely cause by 84.3% of respondents.

- Librarians cited a number of reasons for this shift including the technology-driven rise in 'flexible' working, the rise in distance learning and other new learning models and time pressures forcing people to limit their research to evenings and weekends when they are at home.

- Higher education (HE) and healthcare both ranked research increasingly taking place on mobile devices as the number one cause of off-site access, followed by research taking place at home and thirdly research increasingly taking place in off-site labs and clinics reflecting the nature of research in those fields.

In your view, why is this the case?

	Research increasingly taking place at home	Research increasingly taking place in off-site labs, clinics etc.	Research increasingly taking place on mobile devices	Other
	78.7%	51.5%	77.8%	18.5%
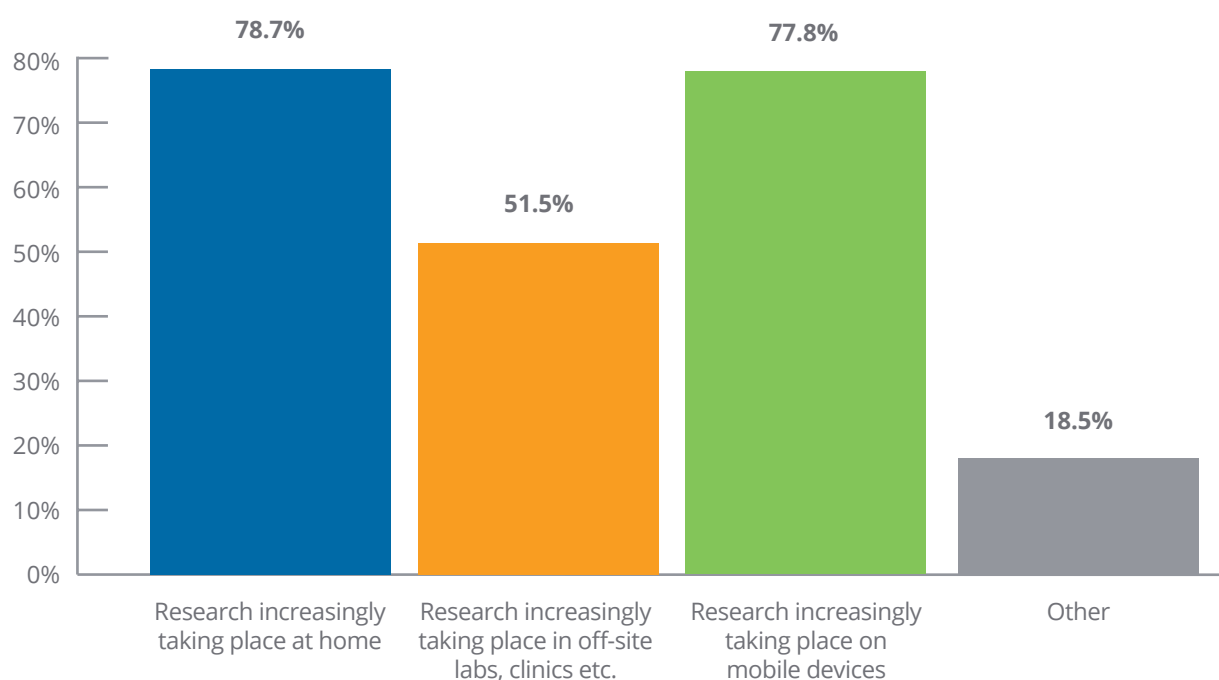
Do you see demand for access from mobile / smart devices growing and by what percentage over the next 12 months?

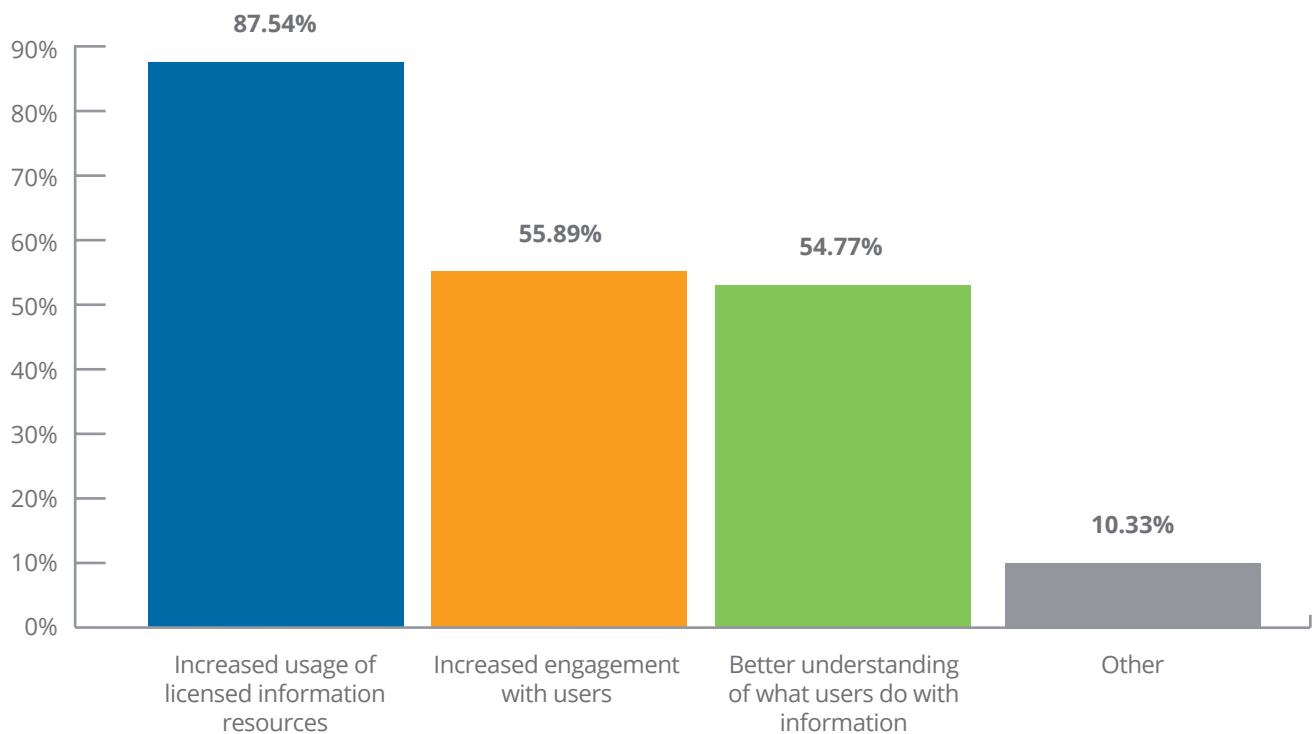| Minimal	Up to 25%	25-49%	More than 50%	We expect resources to be mobile-friendly
9.6%	34.7%	18.7%	8.8%	28.3%

Opportunities created by off-site access

The rise in remote working has created opportunities for librarians to increase access to and use of their content more than ever before and to gain a better understanding of user behavior.

There is a clear opportunity to increase use of licensed information resources according to 87.5% of respondents – this has risen slightly from 86% in 2015.

In your view, what opportunities does this create for libraries (or other information centers) and their users?

Category	Percentage
Increased usage of licensed information resources	87.54%
Increased engagement with users	55.89%
Better understanding of what users do with information	54.77%
Other	10.33%

Key points and comments:

- Demand for off-site or off-network access can facilitate increased engagement with users, 55.9% of respondents said, down from 57.1% in 2015, perhaps reflecting an increased drive towards self-service for users. This shift in responsibility for research is also reflected in the associated challenges.

- A further 54.8% said it could help them gain a better understanding of what users do with the information available, an increase from 52.2% in 2015 which may be due to increasingly sophisticated tools for tracking and analyzing user behavior online.

- This may also reflect a desire for better insight into the perceived value of resources and cross-department billing. It creates an "opportunity to demonstrate the value that libraries bring to patrons via their electronic collections."

- Off-site access creates opportunities for better training and education of users, some respondents said.

- It improves access to library resources by providing "a chance to engage with those users who cannot or do not visit the library in person" and because it "extends library services to 24/7 and removes location constraints on using them."

Challenges created by off-site access

The move towards remote working and the increasingly advanced technologies that support this create complex new challenges for librarians.

Library staff require greater technical skills and knowledge than ever before to support the rise in off-site access, according to 77.3% of respondents.

However, more than two thirds (70.9%) of librarians acknowledged that library users also require more technical skills than ever before to get the most out of their institution's resources.
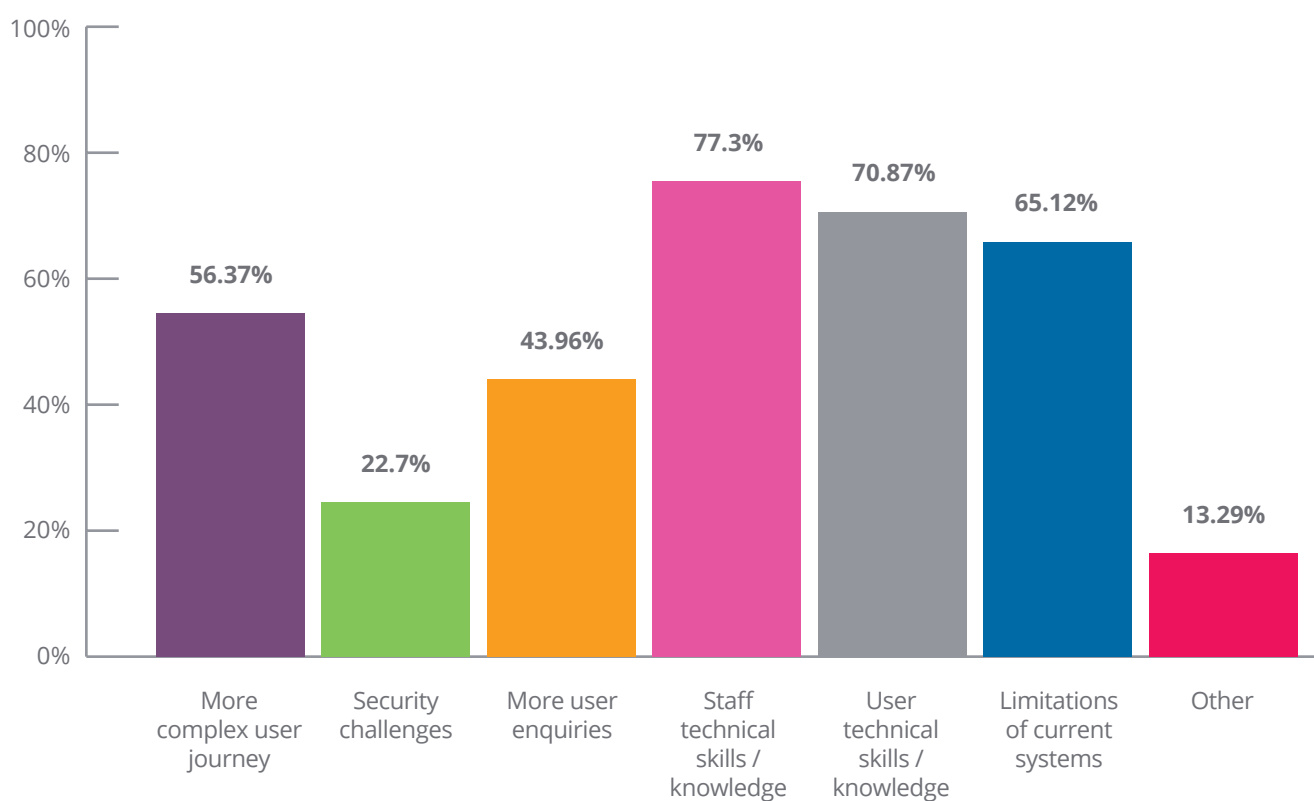
A further 65.1% said off-site working highlighted the limitations of their current access management options while 56.4% worried that it makes the 'user journey' longer and / or more complex.

Key points and comments:

- Librarians claimed staff are now expected to help users with technical, access and authentication problems from remote locations, often with limited information. As one librarian stated: "Not only must staff have more technical skills, but these skills must involve troubleshooting access problems from afar, sometimes without adequate information about the problems and often with the inability to reproduce the problem."

- The move to remote access means library staff often require an understanding of numerous complex systems and platforms through which their content is accessed and delivered, the survey revealed.

- It throws up complications around licensing and copyright which demand that some content is only accessible by certain individuals online.

- One librarian working in higher education said: "Systems can have complex layers that can have failures; supporting and managing these complex systems requires teams to understand each other's parts in these processes."

- The need to help users enhance their digital skills and literacy came through in the comments, together with libraries needing to devise more online support to reduce user frustrations.

- More than three quarters (76%) said it was important that users had access to an 'information center' providing training on research and how best to use resources.

- Off-site access reduces the visibility of the library. As one respondent said: "The seamless access to online resources off-network can make the library invisible: users do not realize that they are accessing those resources through the library."

- Increased cost of online resources was also raised as a challenge, along with increasing costs from publishers and (in the UK) that electronic resources incur VAT whereas printed resources do not.

**In your experience, what challenges
does this create for libraries (or other
information centers) and their users?**

Category	Percentage
More complex user journey	56.37%
Security challenges	22.7%
More user enquiries	43.96%
Staff technical skills / knowledge	77.3%
User technical skills / knowledge	70.87%
Limitations of current systems	65.12%
Other	13.29%

'Friction' points for librarians

Managing access to digital library content is a source of 'friction' for 60.7% librarians, a small reduction from 61.8% in 2015.

Variations in different publishers' access options create complications and confusion over who can access what, and how, online, more than two thirds (68.8%) of librarians claimed.

Nearly half (49%) blamed their current access management systems saying they failed to provide users with easy use of subscribed resources, although this is an improvement from three years before when two thirds of librarians said their access management systems were the source of the problems.

There is also tension between librarians' desire to provide easy access to content and their IT department's wish to secure their systems, 44.3% of respondents claimed.

A substantial proportion, 39.3%, disagreed that access management is a source of friction, slightly up from 38.2% in 2015.

Do you agree?

Yes ☐   No ☐

60.74% (413)

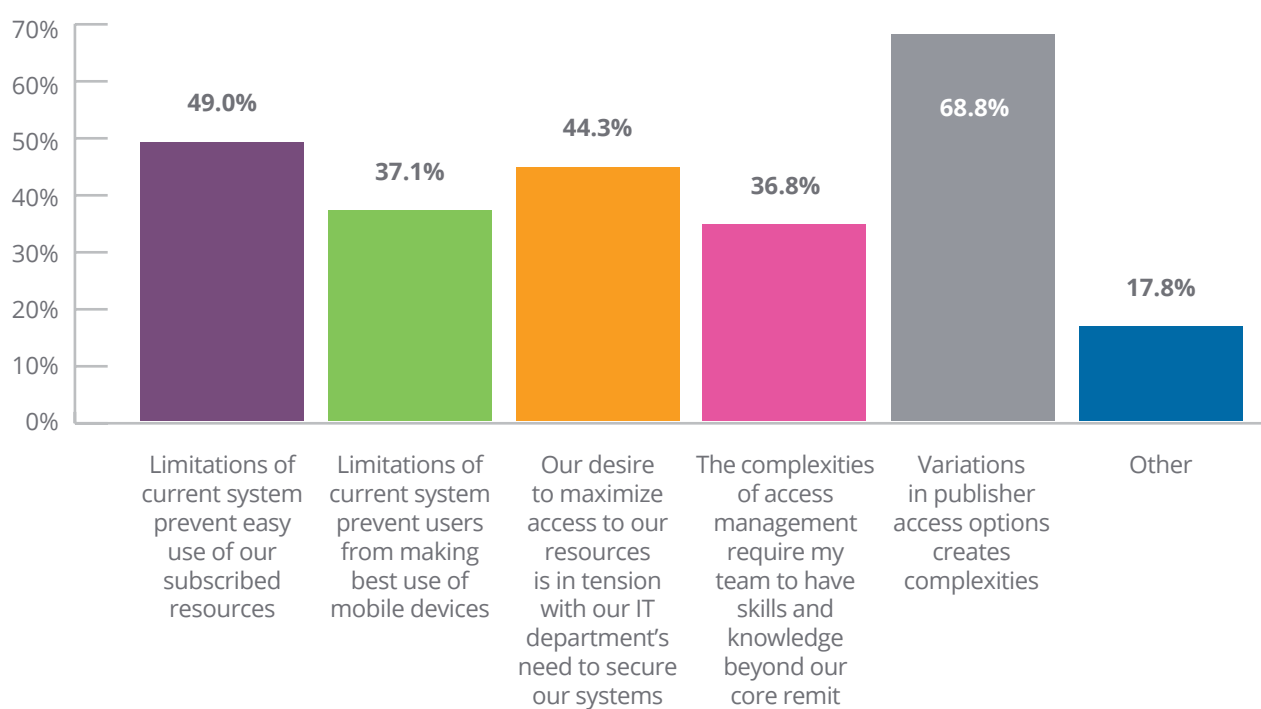39.26% (267)
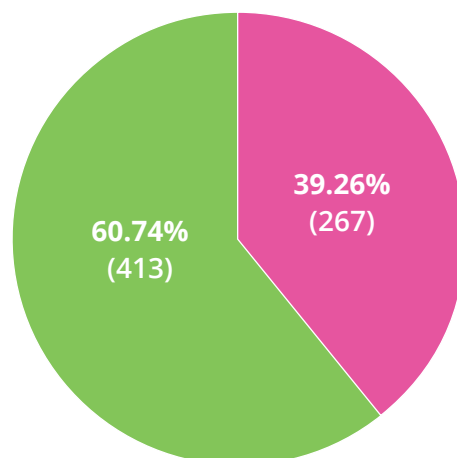
Key points and comments:

- Further sources of 'friction' included lack of support from IT departments, copyright and licensing issues, technical complexities, lack of understanding from IT or management and inability to meet unrealistic user expectations.

- There is little conformity in how best to address this friction with 56.5% preferring an access management solution that doesn't require IT knowledge, followed closely by 53.3% calling for additional support from publishers and 52.7% wanting more support from access management providers.

- It is clear that most librarians do not wish to resolve such frictions by increasing their users' skills, with only 21.1% selecting this option.

- More than half of librarians also agreed a dedicated single access management solution to provide people with simple and easy admission to content was the key to reducing friction.

- A considerable majority of 76.2% of librarians told us that they rated the importance of the information center in providing training as important or very important.

- Other solutions suggested included having dedicated internal resource for access management; standardization of access technology and terminology across publisher sites, and industry standards on remote access with comments including "less variation between publishers, more ability to fix access issues with a one-step solution"; more support from management and more open resources.
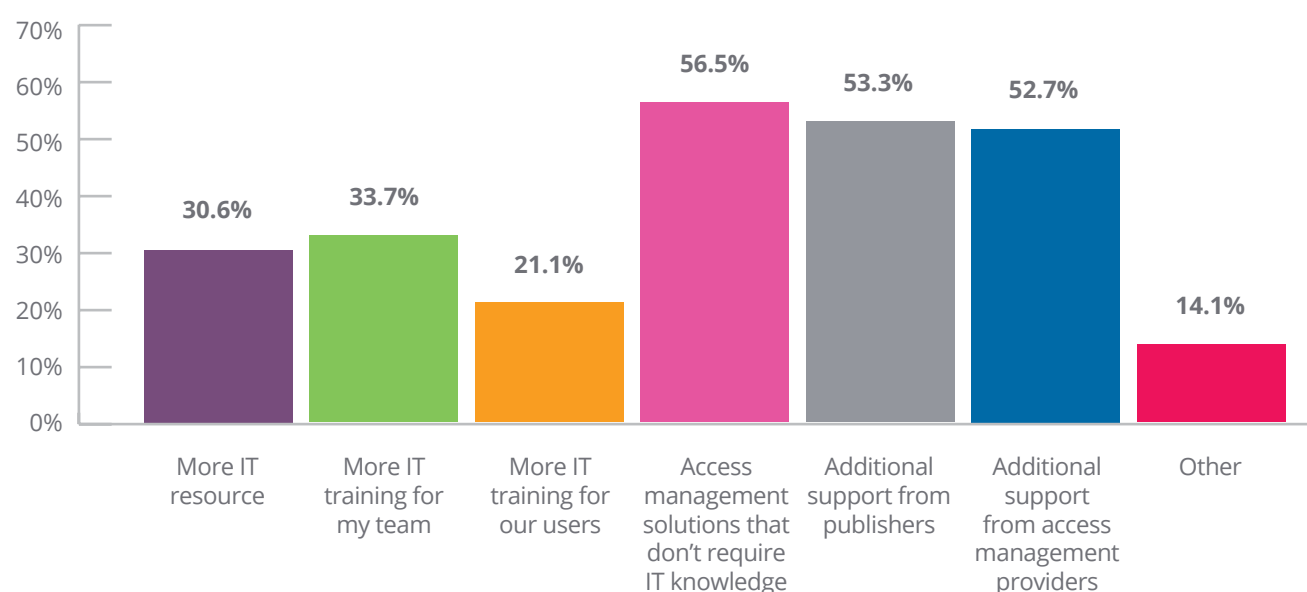
"Access to resources isn't based on magic.
Library director, UK Higher Education

Why is this the case?

Category	Percentage
Limitations of current system prevent easy use of our subscribed resources	49.0%
Limitations of current system prevent users from making best use of mobile devices	37.1%
Our desire to maximize access to our resources is in tension with our IT department's need to secure our systems	44.3%
The complexities of access management require my team to have skills and knowledge beyond our core remit	36.8%
Variations in publisher access options creates complexities	68.8%
Other	17.8%

What do you feel is the most desirable solution to these frictions?

Category	Percentage
More IT resource	30.6%
More IT training for my team	33.7%
More IT training for our users	21.1%
Access management solutions that don't require IT knowledge	56.5%
Additional support from publishers	53.3%
Additional support from access management providers	52.7%
Other	14.1%

How do you rate the importance of the information center providing training on research and using resource to end-users?

Legend:
- 1 (Not important at all)
- 2
- 3
- 4
- 5 (Very important)

| Rating	Percentage	Count
5 (Very important)	50.0%	(325)
4	26.2%	(170)
3	18.2%	(118)
2	4.3%	(28)
1 (Not important at all)	1.4%	(9)
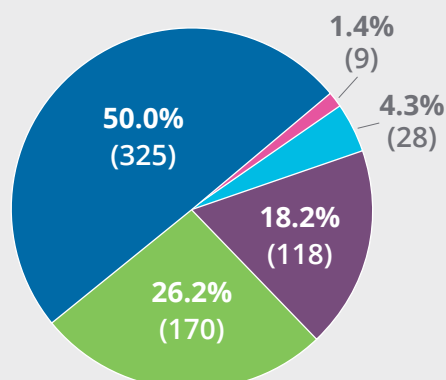
Privacy

More than half (59%) of librarians believe the provision of effective personalized online services is more important to users than protecting their anonymity.

Just a few months after the government introduced stringent personal data protection laws through GDPR, 59% of librarians maintained that a personalized experience on publishers' websites was a higher priority for users than remaining anonymous.

For publishing and library services to offer a more user-focused individually tailored approach to services, they require a certain level of information about the user's behavior and needs which could create tensions with the need protect anonymity.

Which do you think is more important for your end users?

User anonymity
41.4% (263)

A personalized experience on a publisher's website
58.6% (372)
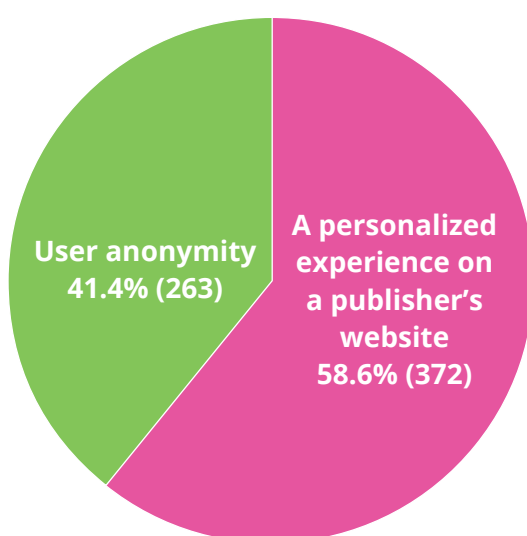
GDPR compliance

Concerns about GDPR compliance were highlighted and produced a wide range of responses and awareness with just 41.7% of respondents saying they felt confident that their information service was fully prepared for GDPR.

Reasons given for the lack of compliance suggested widespread confusion about the new rules:

- "There are too many people working on different things in IT and no communication on what's being worked on and who is doing the work. Silos."

- "I haven't heard of GDPR."

- "I don't think this is even on our radar. We've been too reactant."

- "That not all staff will be able to be as comprehensively trained and something could slip through the net."

- "We do not know enough to determine our responsibilities or its impact on us."

- "I don't know anything about it. I assume that IT will handle it."

- "Until the regulations have been tested in either a court of law or by a regulator no one can honestly say they are totally prepared for GDPR unless they hold absolutely no personal data."

- "We've had no institutional guidance, with a project team only established in the last few weeks, and we know we won't be compliant in time for May. We have no real understanding yet of what the volume of work we will need to do will be or how we'll resource it. We've had minimal communications from vendors on their actions toward it, and so feel we are 'waiting' on external factors. Whilst we have read what's required, we have no delegated staff in our team to manage it and are not really sure we understand how we will achieve compliance."

How confident are you that your information service is fully prepared for GDPR (General Data Protection Regulation)?

1 (Not at all confident)   2   3   4   5 (Completely confident)

10.4% (67)
13.3% (86)
34.6% (224)
33.7% (218)
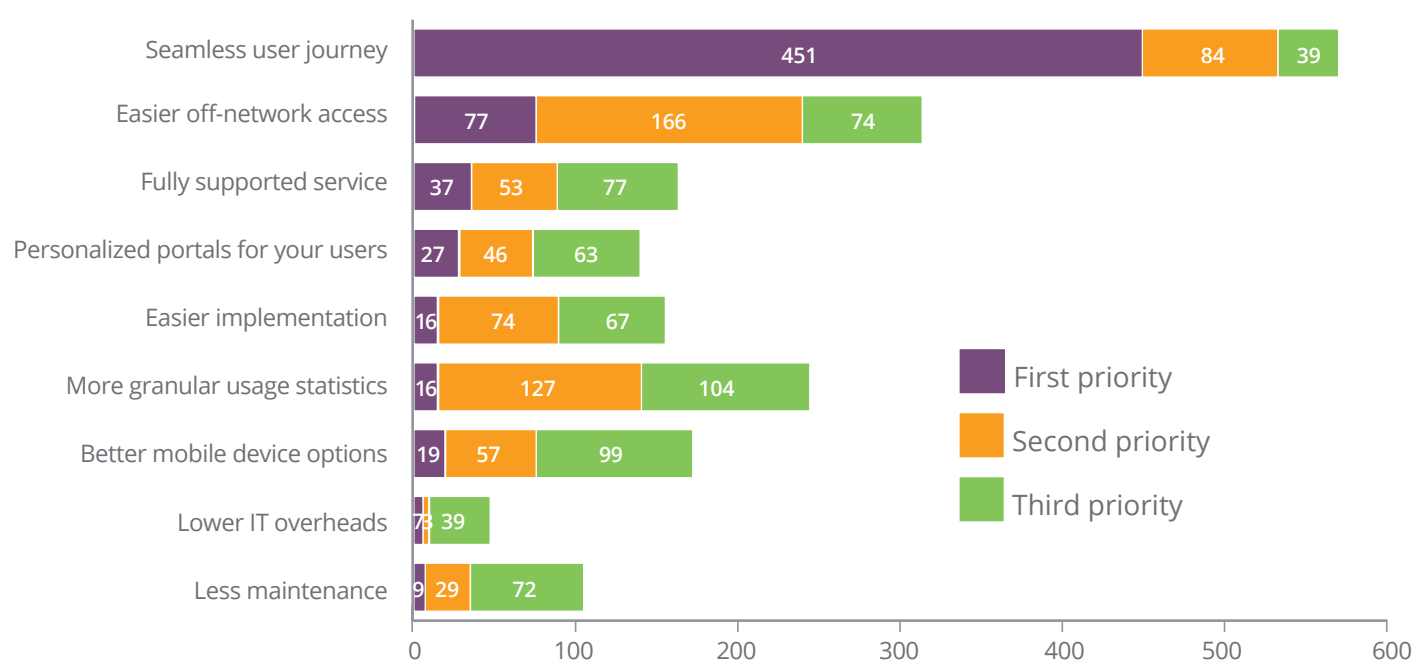8% (52)
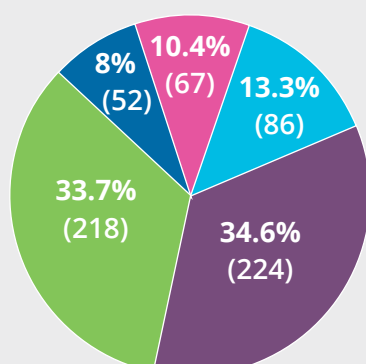
Future priorities

Creating a seamless user experience for those accessing library services is the top future priority for 78.6% of librarians, a 12% increase on 2015.

Ensuring users have simple easy access to content outstripped all other concerns by a huge margin with just 24.3% focusing on easier off-network access as their top priority. Creating a fully supported service was the third priority named by 22.2% of librarians.

This comes at a time when rapidly evolving technology, complex digital content systems and changing behavior are creating challenges for librarians trying to ensure their users can easily find and access what they need.

As previously stated, most librarians believe off-site access will continue to rise and 28.3% said they now expect all the resources they purchase to be mobile friendly.

What three things would you most like to achieve with your access management system in the future?

Category	First priority	Second priority	Third priority
Seamless user journey	451	84	39
Easier off-network access	77	166	74
Fully supported service	37	53	77
Personalized portals for your users	27	46	63
Easier implementation	16	74	67
More granular usage statistics	16	127	104
Better mobile device options	19	57	99
Lower IT overheads	7	3	39
Less maintenance	9	29	72

Legend:
- First priority
- Second priority
- Third priority

OpenAthens

About this survey

OpenAthens worked with the following organizations in preparing this report:

Catherine Dhanjal of TheAnswer Ltd

Purplefish PR Ltd

Survey participants were offered the chance to opt in to a draw to win a pair of Bose Wireless II headphones; the winner was Damien McCaffery, Electronic Resources Librarian, Paul J. Gutman Library, Jefferson (Philadelphia University + Thomas Jefferson University).

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