

A young man with short brown hair and a light beard is looking down at an open red book he is holding. He is wearing a grey and blue striped sweater. The background is a library with many colorful books on shelves, some of which are blurred. The lighting is warm and focused on the man and his book.

Library & Information Spend Predictions for 2023

August 2023

Research Study undertaken by Ipsos

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1 Executive Summary

1.1 What was done

- A global telephone survey was carried out at 677 institutions across North America, South America, Europe, Asia Pacific and Middle East & Africa.
- Senior librarians and information officers with control over and knowledge of library and information services budgets for 2023 were contacted in order to understand current industry trends and predict future purchasing behaviour.
- Institutions included academic institutions, hospitals/trusts, medical schools, government functions and corporations. Academic institutions were categorised by their size and high-level information needs.
- Telephone surveys were carried out by independent research agency Ipsos who have specialist knowledge of conducting international research studies.
- Quotas for this study were set to reflect the global contribution to library and information spend by region and type of institute. Small scale imbalances in the final profile achieved were adjusted by weighting at the analysis stage.
- It should be noted that some participants could only give broad indications as to what they expected to occur in regard to next year's budget.

2 Summary of Results

Budget trends in 2023 by type of Institution

Budget	Academic Institutes			Corp.	Gov't	Hosp/ Medical	Total
	Top	Middle	Lower				
Overall	↗ 0.3	↑ 1.0	↑ 3.0	↑ 4.0	↑ 1.4	↑ 1.5	↑ 1.8
Materials	↑ 0.7	↑ 0.9	↑ 2.9	↑ 3.9	↑ 0.7	↑ 1.3	↑ 1.7
- Serials	↑ 1.1	↑ 0.6	↑ 2.9	↑ 0.9	↑ 0.6	↑ 1.0	↑ 1.2
- Database & Info Tools*	↑ 0.6	↑ 3.4	↑ 3.1	↑ 4.9	↑ 2.9		↑ 2.9
- Medical Info tools	↑ 1.9	↑ 2.7	↑ 0.8			↑ 2.2	↑ 2.1
- Books	↓ -0.7	↓ -1.9	↑ 2.3	↑ 1.9	↓ -0.5	↗ 0.1	↗ 0.2
<i>n</i>	80	88	92	89	45	283	677

*Including Abstracting and Indexing services

NB: Arrows green or red indicate change greater than 0.5%

Following the upheaval of the pandemic most institutions saw a resetting of budgets in 2022, broadly in line with pre-pandemic levels, after largely flat or negative budgets in the previous year. This general pattern appears to have continued in 2023, albeit with some downward pressure on budgets. When reviewing the results of this survey, please note that all forecasts for future budget changes are based on predictions from librarians and information officers.

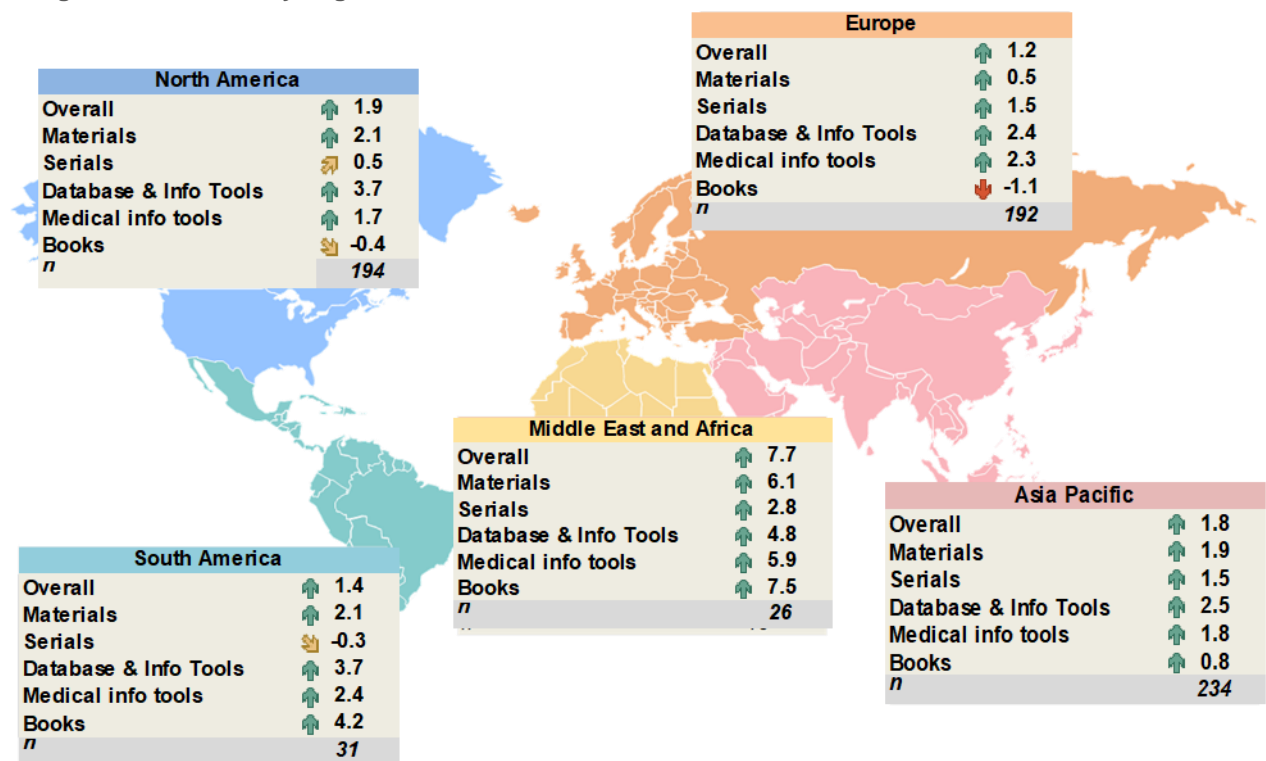
- **Overall Spend** (which includes operational expenditure, salary costs as well as materials) are set to **increase by 1.8% in 2023** (in 2022 a 2.2% increase was forecast).
 - All regions forecast some form of budget increase, however, the scale of these varied.
 - In the three main regions, overall library budgets are predicted to increase by circa 1-2% - North America (1.9%), Europe (1.2%), and Asia Pacific (1.8%).
 - This was also the case for South America (1.4%), whilst projected increases were higher in the Middle East & Africa (7.7%).
 - However, it is important to note that data for the Middle East & Africa and South America are based on small samples, and therefore should be treated with caution throughout the report when interpreting the findings.
 - At an institutional level more significant increases were noted amongst Corporates (4.0%), compared to Medical (1.5%), Government (1.4%), and Academic institutes (1.4%). However, variations were noted by type of Academic institute – Top-Tier (0.3%), Mid-Tier (1.0%) and Lower-Tier (3.0%).
 - Looking at qualitative predictions, 35% of institutes expect their budget to increase in 2023 (down from 38% in 2022), 47% to remain static, while 14% expect these to decrease (up from 11% in 2022).*
- **Materials and Information Spend** (all information content provision) is predicted to **increase by 1.7% in 2023**, broadly consistent with the overall budget forecasts (2.1% increase was predicted in 2022 to Materials and Information budgets).
 - Increases are forecast in each of the three main regions, albeit with some variations: North America (2.1%), Asia Pacific (1.9%) and Europe (0.5%).
 - Whilst more marked increases are projected in the Middle East & Africa (6.1%), South America (2.1%) was comparable to North America.

* The sum of responses does not add to 100% as there were 4% of participants who said that they didn't know or were unable to say whether budgets would be changing. This also applies to other qualitative budget forecasts for different areas in the report where the sum of responses may not add to 100%.

- Across academic segments, institutions are forecasting a 1.5% budget increase, ranging from 2.9% amongst Lower-Tier institutions to 0.7% amongst Top-Tier. This is consistent with patterns previously observed.
- Higher increases are expected for Corporates (3.9%) compared to Government (0.7%) and Medical institutes (1.3%).
- Qualitatively, 37% of institutes predict that their materials budget will rise in 2023, 47% believe it will remain static, whilst 14% anticipate a decrease. This compares to 38%, 50% and 10% respectively in 2022.
- The breakdown of the materials budget reported is as follows: 34% Journals and Serials, 37% Databases and Tools, 22% Books (including e-books) and 7% Other information sources. This is very similar to the distribution observed in the previous year (34%, 39%, 21% and 5% respectively across the four categories above). Some variations were noted across the three main regions, with North America and Asia Pacific being more likely to allocate budget to Databases and Tools compared to European institutes who were more likely to prioritise Journals and Serials.
- By segment, it was noted that Medical institutes had similar expenditure on Journals and Serials and Databases and Tools (37% and 37% respectively), whereas Corporate institutions allocated the highest proportion of their budget to Databases & Tools (51% compared to 22% for Journals and Serials).
- Serials budgets are forecast to **increase by 1.2%** (a 1.3% increase was predicted in 2022).
 - Budgets in this area are projected to be broadly comparable across the three main regions: North America (0.5%), Europe (1.5%) and Asia Pacific (1.5%).
 - 35% of institutions expect an increase in serials budgets in 2023 (29% in 2022). 47% (54% in 2022) believe it will remain static whilst 13% (10% in 2022) predict a decrease.
 - Approaching 1 in 2 (44%) would consider cancelling serial subscriptions if 50% or more of articles were freely available. The proportion is higher in North America, where it rises to 56%. The threshold was broadly comparable across different institutions.
- 'Open Access' fees are being paid from the materials budget by 32% of institutes (30% in 2022). This is more prevalent in Top and Mid-Tier Academic institutions. It was least likely to occur in Government institutions.
- Database and Information tools (including A&I services) are provided by 93% of institutes, similar to 2022 (92%). Budgets here are expected to rise by 2.9% (compared to 2.8% in 2022). Higher budget increases were noted in North America (3.7%), compared to Asia Pacific (2.5%) and Europe (2.4%). Some 2 in 5 (40%) predict an increase in budgets in 2023, whilst 49% anticipated no change to budgets and 8% a decrease. Most institutes tend to use multiple services.
- Research Data Management – 49% (47% in 2022) of institutes provide Institutional Repositories, rising to 77% amongst Academic institutes. RDM, CRIS and Research Performance Analytics tools were less likely to be provided (by 27%, 23% and 22% of institutes respectively), with little or no year-on-year increases noted for such services. The exception to this was Research Performance Analytics tools which were less widely used in 2023 compared to the previous year.
- Medical Information Tools – Clinical Reference systems were the most widely used of the tools, with 4 in 5 (81%) of Hospitals using these.
 - Diagnostic or Advanced Clinical Decision Support tools and Patient Engagement tools were less likely to be provided, with 31% and 25% respectively using such tools.
 - 2023 budgets were expected to increase by an average of 2.1% in this area (unchanged from 2022), with little variation noted across the three main regions.
- Book expenditure is forecast to **increase by 0.2%** (an increase of 1.3% was predicted in 2022).
 - Of the three main regions, Asia Pacific was the only one to report an increase to 2023 Book budgets.

- This contrasted with Europe and North America, where budgets have been cut (-1.1% and -0.4% respectively), continuing a general longer-term downward trend observed.
- The highest Book budget increases were seen in South America (4.2%) and Middle East and Africa (7.5%).
- Some variations were noted by sector, with biggest budget cuts reported by Medium-Tier Academic institutions (-1.9%).
- The majority (54%) of institutes believe their budgets will remain static, 24% predict that budget expenditure for 2023 will increase and 18% expect these to decrease. This compares to 60%, 24% and 12% respectively for the previous year.
- Some 27% of 2022 Book budgets was spent on e-books, similar to the previous year. E-book expenditure is predicted to increase by 1.8% across all institutions in 2023; this rises to 4.6% amongst Lower-Tier Academic institutions.

Budget trends in 2023 by Region*



*Including Abstracting and Indexing services

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

3 Overall Library & Info spend broken down

3.1 Academic Institutes Library Expenditure

The overall library budget includes the ongoing costs of maintaining a library, salary, materials and operating expenditure.

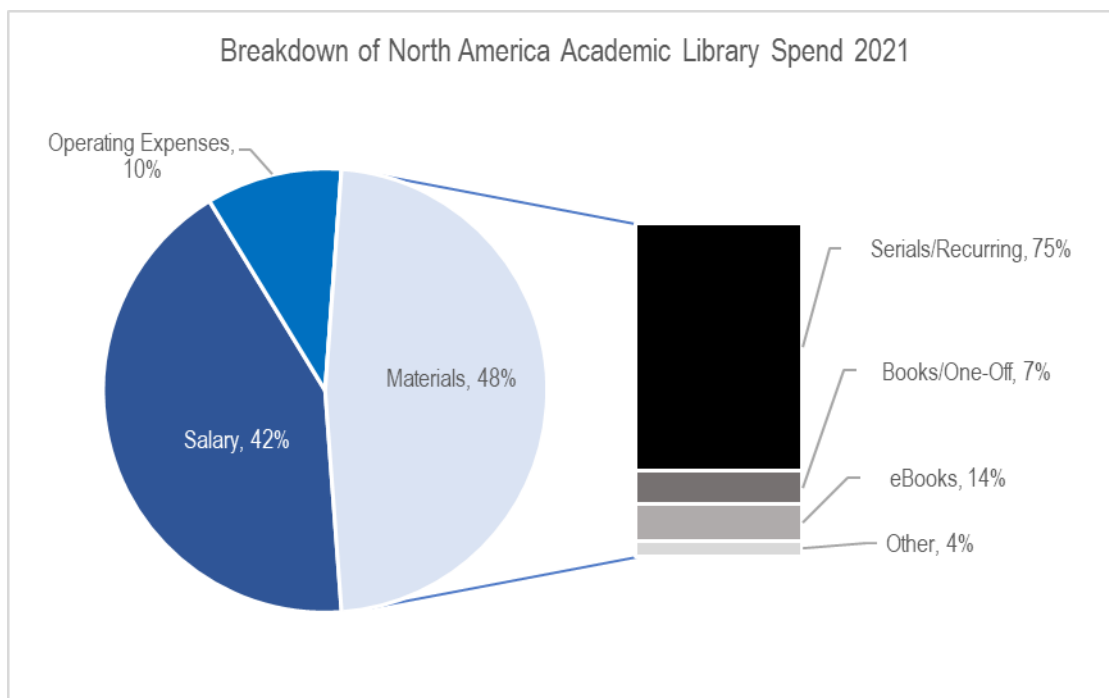
A review of the Association of Research Libraries (ARL) statistics provides an idea of how library budgets break down in the Academic institutes for North America.

The ARL statistics include details of collections, expenditures, staffing, and service activities for its member libraries and the majority of the libraries are large North American academic institutes.

The latest data is for 2021¹. 117 university libraries reported a combined expenditure of \$3.5 billion. This expenditure broke down into: Materials (48%), Salaries (42%) and other operating expenditures (10%) - see chart below.

Spend on information content, tools and solutions is normally (but not always) part of the Materials budget. The Materials budget further broke down into ongoing resource expenditure (75%) and one-time resource expenditure (7%), with the rest being allocated to collection support. It is worth noting that the ARL no longer classifies expenditure in terms of serials or books, they changed their approach in 2012. However, when looking at their definitions and the amount of expenditure this classification represents when compared to previous periods, it is quite clear most of the expenditure associated with ongoing resources will be traditional journal subscriptions plus database subscriptions.

The latest library budget data shows that ongoing resource expenditure has increased at the expense of operating expenses which has reduced, meanwhile salary costs have remained the same.



4 Methodology

A total of 677 interviews were conducted between October 2022 and January 2023.

Individuals with responsibility for the administration of budgets for libraries or information services were recruited from 6 main categories of institution:

1. Academic* Low-Tier: 500 to 9,999 full time students.
2. Academic* Mid-Tier: 10,000 to 24,999 full time students.
3. Academic* Top-Tier: 25,000+ full time students.
4. Medical: Both public and private hospitals and medical trusts, including those providing primary care and/or secondary care. The size of the hospital was determined by bed capacity; less than 100, 100-249 beds and 250+ beds.
5. Government: Government departments, public sector bodies/agencies.
6. Corporate: Commercial companies having 200+ employees, with a R&D function (e.g. Pharma, Engineering, Oil/Gas, Technology, etc.).

* Academic Institutions include universities and other higher academic institutions, including medical schools attached to the university. Classification of Tier was based on the number of full-time students, provided by participants.

Interviews were conducted in 35 countries, across 6 regions – North America, Europe, Asia Pacific, South America and Middle East & Africa.

The full list of countries included was as follows: Canada, USA, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Poland, Romania, Spain, Sweden, Switzerland, UK, Australia, China, India, Japan, South Korea, Malaysia, New Zealand, Taiwan, Argentina, Brazil, Chile, Colombia, Mexico, Israel, South Africa, and Turkey.

A standardised 20-minute questionnaire was used in all markets and translated into 14 different languages.

Quotas were adopted on type of institution and region, and a full breakdown of the final sample has been included on following page. The reported data has been weighted back to the original quota targets to adjust for small scale imbalances in the final distribution of interviews.

Within the following report, we have included a combined measure of all Academic institutions, combining the responses from Top, Mid and Lower-Tier institutions.

Where appropriate, we have also included a subset of markets called 'Emerging countries'. This includes the following markets: India, China, Czech Republic, Poland, Romania, Argentina, Brazil, Chile, Colombia, Mexico, Turkey, and South Africa.

The overall margin of error is approximately $\pm 3.8\%$, based on the total sample size of 677 (e.g. if 50% of the overall sample claim to use a particular information tool, the actual proportion is likely to lie between 46.2% to 53.8%).

4.1 Sample collected

The final sample breakdown was as follows:

Region	Country	Academic Tier 1	Academic Tier 2	Academic Tier 3	Hospitals	Govt.	Corporate	Total	%
North America	USA	23	21	19	77	13	19	172	25%
	Canada	2	3	5	7	0	5	22	3%
	Total	25	24	24	84	13	24	194	29%
Europe	Austria	4	0	0	1	0	0	5	1%
	Belgium	1	1	0	5	0	0	7	1%
	Czech Republic	2	1	1	3	0	1	8	1%
	Denmark	0	0	0	1	0	3	4	1%
	Finland	1	0	0	2	0	0	3	0%
	France	3	0	2	12	2	2	21	3%
	Germany	8	6	7	11	2	3	37	5%
	Ireland	0	0	0	3	0	1	4	1%
	Italy	3	5	3	8	1	2	22	3%
	Netherlands	0	1	1	5	0	2	9	1%
	Poland	2	2	1	2	0	1	8	1%
	Portugal	0	0	0	0	0	2	2	0%
	Romania	1	0	0	0	0	0	1	0%
	Russia	0	0	0	0	0	0	0	0%
	Spain	1	2	2	5	2	2	14	2%
	Sweden	1	1	3	5	0	0	10	1%
	Switzerland	0	0	0	5	0	1	6	1%
	United Kingdom	4	4	3	12	2	5	30	4%
	Total		31	23	23	80	9	25	191
Asia Pacific	Australia	1	3	3	8	2	1	18	3%
	China	5	15	16	44	9	17	106	16%
	Hong Kong	0	0	0	0	0	0	0	0%
	India	3	3	3	10	1	4	24	4%
	Japan	9	5	0	17	5	5	41	6%
	Malaysia	2	2	1	2	0	0	7	1%
	New Zealand	0	0	0	3	0	0	3	0%
	South Korea	4	2	2	9	2	4	23	3%
	Taiwan	2	2	0	8	1	0	13	2%
Total		26	32	25	101	20	31	235	35%
South America	Argentina	2	1	1	2	0	0	6	1%
	Brazil	2	2	2	3	1	4	14	2%
	Chile	0	0	0	1	0	0	1	0%
	Colombia	0	1	0	2	0	0	3	0%
	Mexico	2	1	1	1	0	2	7	1%
Total		6	5	4	9	1	6	31	5%
Middle East and Africa	Israel	1	2	0	1	1	1	6	1%
	Saudi Arabia	0	0	0	0	0	0	0	0%
	South Africa	0	2	2	4	0	2	10	1%
	Turkey	3	0	2	4	1	0	10	1%
Total		4	4	4	9	2	3	26	4%
Total	N	92	88	80	283	45	89	677	100%
	%	13%	13%	12%	41%	6%	13%	98%	

* Sample sizes for South America and Middle East & Africa are small and results should be interpreted with caution.

5 Overall Spend

5.1 Overall Spending Predications for 2023

All librarians and information officers were asked if they expect their overall spend for 2023 to increase, remain the same or decrease when compared to their 2022 budget. This refers to the overall budget spent and includes salaries, operating or maintenance costs and materials costs (e.g. books, book series, journals and information tools, etc.).

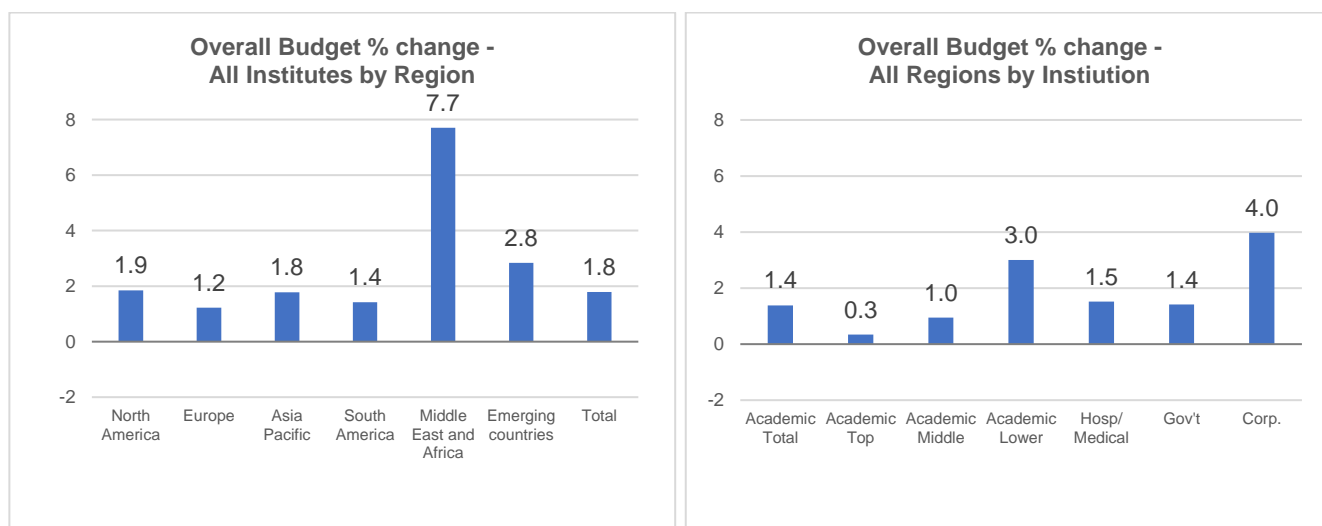
Overall spend is predicted to increase by 1.8% in 2023. This represents a modest year-on-year fall from levels reported in 2022 (2.2%) and is partly driven by lower projected budget increases in Europe in 2023 (1.2% in 2023 compared to 2.3% in 2022). Only small year-on-year variations were noted for the other two main regions of Asia Pacific and North America.

All regions are predicting increases in 2023. However, as previously noted, only modest increases are predicted in the three main regions (c. 1-2%), whilst higher budget increases are projected in the Middle East & Africa (7.7%)*.

- Academic institutions, at a total level, are expecting an increase of 1.4%, led by Lower-Tier Academic institutions (3.0%), with flatter budgets amongst Top and Mid-Tier academic institutions (0.3% and 1.0% respectively). This is consistent with the pattern observed in 2022.
- Overall budgets have also increased for other types of institutions, led by Corporate (4.0%), although year-on-year budgets appear to have been squeezed in 2023 for both Government (1.4% vs. 4.4% in 2022) and Medical institutions (1.5% versus 2.7% in 2022).

Qualitative forecasts indicate that 47% of all institutional budgets will remain static (compared to 48% in 2022). Circa one in three (35%) of institutes predict budget growth in 2023, which represents a fall from 38% in 2022. The Middle East and Africa was the only region with a majority (70% reporting) that budgets will increase in 2023.

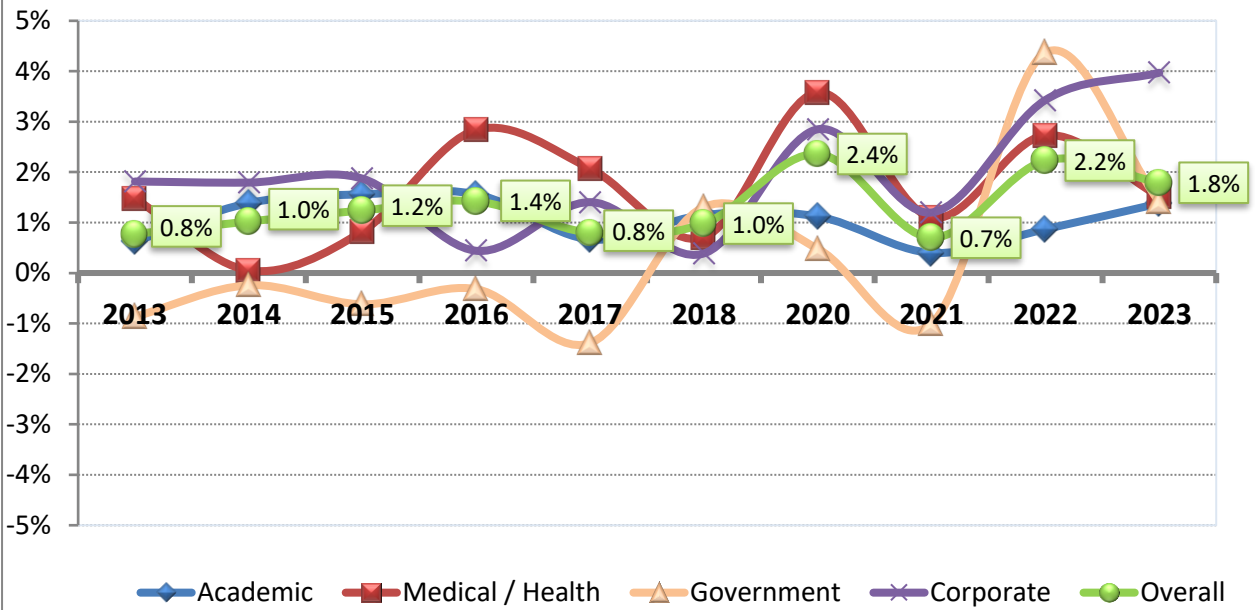
14% of institutes are expecting a decrease in overall budgets (vs. 11% in 2022). These figures are broadly comparable across the three main regions.



Base: 677 participants

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

Overall Library Budget Forecasts for 2013 to 2023



Budget change for 2023 - Overall Spend						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	25%	50%	25%	-0.5
	Academic Middle	24	38%	46%	17%	1.3
	Academic Lower	25	44%	56%	0%	2.0
	<i>All Academic</i>	73	36%	51%	14%	0.9
	Medical/Health	83	30%	51%	14%	1.4
	Government	13	54%	38%	8%	2.0
	Corporate	25	76%	12%	12%	6.1
	Overall	194	40%	45%	13%	1.9
Europe	Academic Top	23	17%	65%	17%	-0.7
	Academic Middle	23	26%	57%	13%	1.3
	Academic Lower	31	39%	39%	16%	1.7
	<i>All Academic</i>	77	27%	53%	16%	0.7
	Medical/Health	81	31%	54%	11%	2.0
	Government	9	11%	44%	33%	-2.5
	Corporate	25	44%	44%	12%	2.0
	Overall	192	30%	52%	14%	1.2
Asia Pacific	Academic Top	25	24%	52%	20%	0.3
	Academic Middle	32	25%	41%	25%	-0.5
	Academic Lower	26	42%	27%	12%	4.3
	<i>All Academic</i>	83	30%	40%	19%	1.3
	Medical/Health	101	26%	56%	13%	1.2
	Government	20	25%	55%	15%	2.4
	Corporate	30	57%	30%	13%	4.6
	Overall	234	31%	47%	15%	1.8
South America	Academic Top	4	50%	50%	0%	5.5
	Academic Middle	5	60%	40%	0%	10.0
	Academic Lower	6	67%	33%	0%	6.0
	<i>All Academic</i>	15	59%	41%	0%	7.0
	Medical/Health	9	11%	56%	33%	-1.9
	Government	1	0%	100%	0%	0.0
	Corporate	6	50%	33%	17%	-3.0
	Overall	31	33%	51%	16%	1.4
Middle East and Africa	Academic Top	4	100%	0%	0%	13.3
	Academic Middle	4	25%	50%	25%	-2.5
	Academic Lower	4	75%	25%	0%	7.7
	<i>All Academic</i>	12	67%	25%	8%	5.3
	Medical/Health	9	78%	11%	11%	8.1
	Government	2	50%	50%	0%	20.0
	Corporate	3	67%	33%	0%	5.3
	Overall	26	70%	22%	8%	7.7
Emerging Countries	Academic Top	29	30%	55%	15%	1.5
	Academic Middle	28	44%	45%	11%	2.7
	Academic Lower	22	59%	25%	0%	8.7
	<i>All Academic</i>	79	42%	44%	10%	3.4
	Medical/Health	76	30%	49%	21%	1.7
	Government	12	28%	57%	15%	4.4
	Corporate	30	61%	26%	13%	4.0
	Overall	197	39%	44%	15%	2.8
Overall	Academic Top	80	26%	53%	19%	0.3
	Academic Middle	88	31%	47%	18%	1.0
	Academic Lower	92	44%	39%	9%	3.0
	<i>All Academic</i>	260	34%	46%	15%	1.4
	Medical/Health	283	29%	53%	14%	1.5
	Government	45	29%	49%	17%	1.4
	Corporate	89	59%	29%	12%	4.0
	Overall	677	35%	47%	14%	1.8

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

6 Materials and Information Spend

6.1 Breakdown of Materials and Information Spend

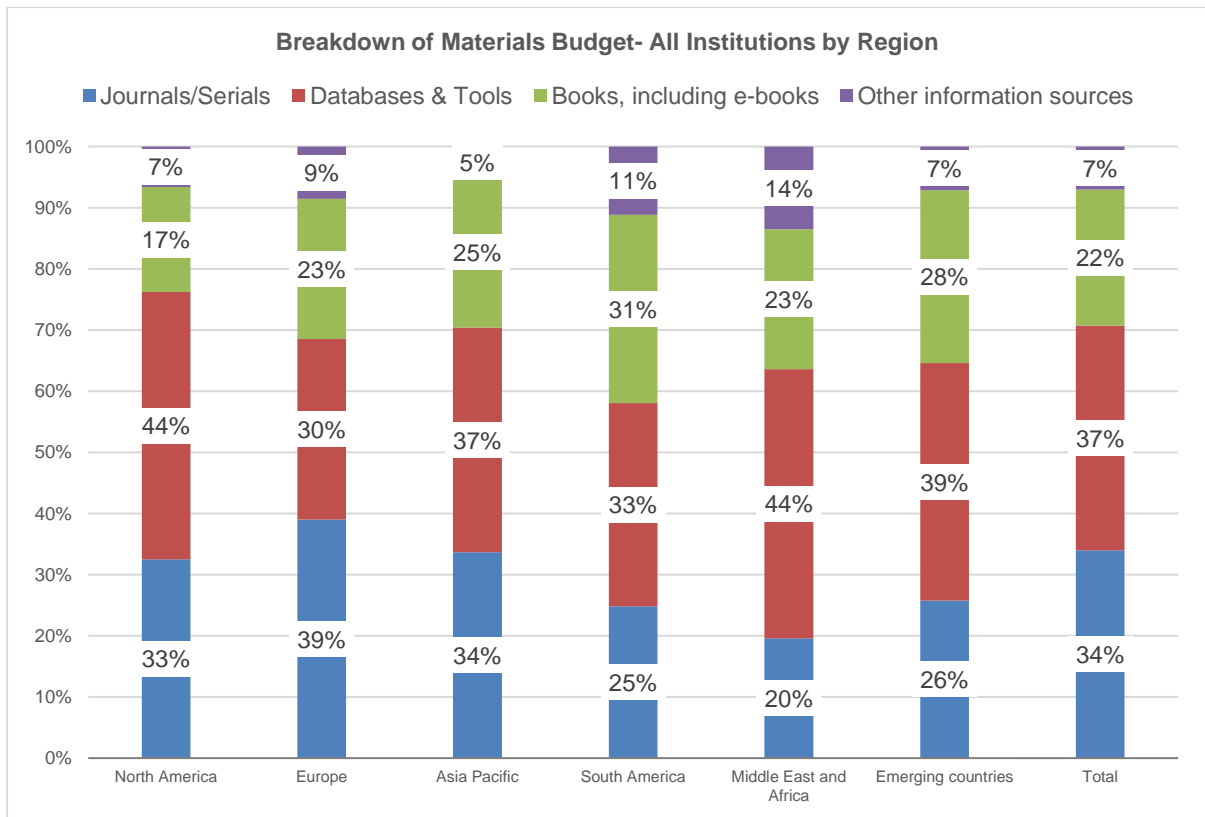
All librarians and information officers were asked about their current Materials and Information Spend, and expectations for 2023. This budget category includes the acquisition of information resources such as:

- Journals/Serials (i.e. repeating publications on a subject or area; typically monthly or quarterly and subscription based; category includes journal databases or platforms).
- Databases and Information Tools: enabling users to find and access information.
 - For research organisations this included A&I databases (i.e. bibliographic, abstracting or indexing databases used to search for scholarly content across academic books, conference, journals)..Tools could also include specialist search databases covering chemistry, engineering, drug interactions, etc.
 - For medical institutions this included medical tools that provide access to content for physicians and patients to improve patient care.
- Books, including e-books (normally written for scholars/researchers/professionals to share research findings or provide foundational knowledge in particular fields. Books can sometimes be part of a series).
- Other information sources (i.e. any other information resources that are purchased and managed by the institution or organisation).

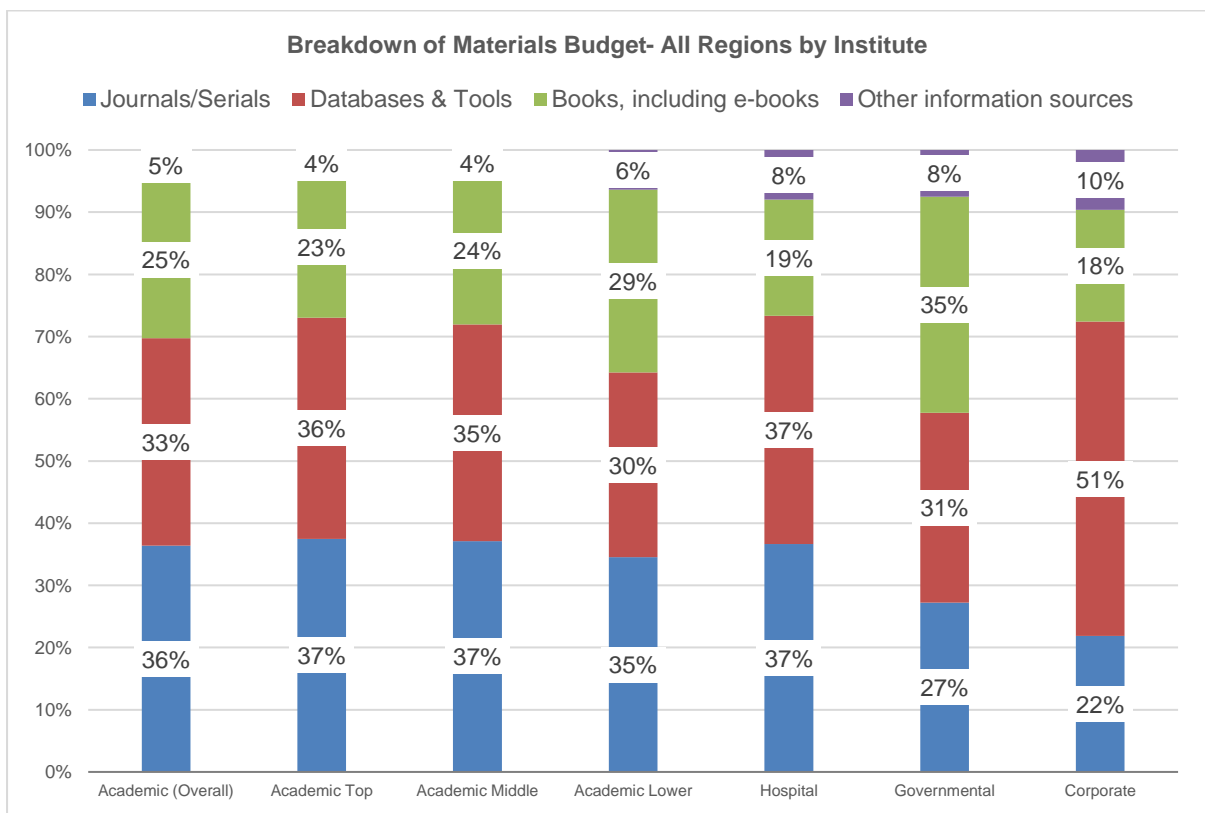
Full definitions for each of these elements can be found within the Appendix.

Participants were asked to provide a breakdown of their current Materials budget, and the results were broadly consistent between the different regions and types of institutions. At a total level, it is estimated that 34% is spent on Journals and Serials, 37% on Databases and Tools, 22% on Books (including e-books) and 7% on Other information sources such as multi-media, industry reports, etc.

- Institutions in Europe spent 39% of their materials budget on Journals and Serials, the highest of any of the main regions, whereas in North America and Asia Pacific budget spend was weighted more to Databases and Tools (44% and 37% respectively). South America invested a higher share of their budget in books and e-books (31%) compared to other regions.
- Hospitals and Medical Trusts had similar expenditure on Journals and Serials and Databases and Tools (37% and 37% respectively), whereas Corporate institutions allocated more of their budget to Databases & Tools (51% compared to 22% for Journals and Serials).
- Allocation of budget to Books was broadly comparable across all types of institutions, with the exception of Government institutions where 35% of their budget was allocated to such resources.



Base: North America 194; Europe 192; Asia Pacific 234; South America 31; ME&A 26; Emerging Countries 197, Total 677



Base: Academic Overall 260; Academic Top 80; Academic Middle 88; Academic Lower 92; Hospital 283; Government. 45; Corporate 89, Total 677

Breakdown of Materials Budget - All Institutions by Region						
	Base	Journals/ Serials	Databases & Tools	Books, including e-books	Other information sources	Total
North America	194	33%	44%	17%	7%	100%
Europe	192	39%	30%	23%	9%	100%
Asia Pacific	234	34%	37%	25%	5%	100%
South America	31	25%	33%	31%	11%	100%
Middle East and Africa	26	20%	44%	23%	14%	100%
Emerging countries	197	26%	39%	28%	7%	100%
<i>Total</i>	<i>677</i>	<i>34%</i>	<i>37%</i>	<i>22%</i>	<i>7%</i>	<i>100%</i>

Breakdown of Materials Budget - All Regions by Institution						
	Base	Journals/ Serials	Databases & Tools	Books, including e-books	Other informatio n sources	Total
Academic (Overall)	260	36%	33%	25%	5%	100%
Academic Top	80	37%	36%	23%	4%	100%
Academic Middle	88	37%	35%	24%	4%	100%
Academic Lower	92	35%	30%	29%	6%	100%
Hospital	283	37%	37%	19%	8%	100%
Governmental	45	27%	31%	35%	8%	100%
Corporate	89	22%	51%	18%	10%	100%
<i>Total</i>	<i>677</i>	<i>34%</i>	<i>37%</i>	<i>22%</i>	<i>7%</i>	<i>100%</i>

Breakdown of Materials/Information Spend - All Regions by Institution							
Region	Organisation	Base*	Journals/Serials	Databases & Tools	Books, including e-books	Other information sources	Total
North America	Academic Top	24	42%	30%	23%	6%	100%
	Academic Middle	24	47%	35%	14%	4%	100%
	Academic Lower	25	39%	37%	19%	5%	100%
	<i>All Academic</i>	73	43%	34%	18%	5%	100%
	Medical/Health	83	34%	47%	13%	6%	100%
	Government	13	10%	35%	46%	9%	100%
	Corporate	25	11%	64%	12%	12%	100%
	Overall	194	33%	44%	17%	7%	100%
Europe	Academic Top	23	48%	30%	19%	3%	100%
	Academic Middle	23	45%	26%	24%	5%	100%
	Academic Lower	31	29%	25%	36%	10%	100%
	<i>All Academic</i>	77	40%	27%	27%	6%	100%
	Medical/Health	81	43%	27%	20%	10%	100%
	Government	9	34%	21%	37%	7%	100%
	Corporate	25	25%	49%	15%	11%	100%
	Overall	192	39%	30%	23%	9%	100%
Asia Pacific	Academic Top	25	31%	41%	25%	3%	100%
	Academic Middle	32	28%	40%	28%	4%	100%
	Academic Lower	26	41%	26%	28%	5%	100%
	<i>All Academic</i>	83	33%	36%	27%	4%	100%
	Medical/Health	101	34%	37%	23%	6%	100%
	Government	20	40%	29%	26%	5%	100%
	Corporate	30	29%	43%	21%	6%	100%
	Overall	234	34%	37%	25%	5%	100%
South America	Academic Top	4	14%	46%	35%	5%	100%
	Academic Middle	5	7%	38%	53%	2%	100%
	Academic Lower	6	8%	18%	70%	4%	100%
	<i>All Academic</i>	15	10%	34%	53%	4%	100%
	Medical/Health	9	43%	27%	14%	16%	100%
	Government	1	0%	50%	25%	25%	100%
	Corporate	6	23%	42%	27%	8%	100%
	Overall	31	25%	33%	31%	11%	100%
Middle East and Africa	Academic Top	4	15%	60%	16%	9%	100%
	Academic Middle	4	34%	47%	17%	3%	100%
	Academic Lower	4	9%	68%	17%	7%	100%
	<i>All Academic</i>	12	19%	58%	17%	6%	100%
	Medical/Health	9	22%	34%	22%	22%	100%
	Government	2	25%	50%	20%	6%	100%
	Corporate	3	9%	33%	47%	11%	100%
	Overall	26	20%	44%	23%	14%	100%
Emerging Countries	Academic Top	29	22%	49%	26%	4%	100%
	Academic Middle	28	16%	44%	35%	4%	100%
	Academic Lower	22	24%	31%	40%	4%	100%
	<i>All Academic</i>	79	21%	43%	32%	4%	100%
	Medical/Health	76	31%	34%	26%	9%	100%
	Government	12	23%	43%	25%	9%	100%
	Corporate	30	24%	41%	26%	10%	100%
	Overall	197	26%	39%	28%	7%	100%
Overall	Academic Top	80	37%	36%	23%	4%	100%
	Academic Middle	88	37%	35%	24%	4%	100%
	Academic Lower	92	35%	30%	29%	6%	100%
	<i>All Academic</i>	260	36%	33%	25%	5%	100%
	Medical/Health	283	37%	37%	19%	8%	100%
	Government	45	27%	31%	35%	8%	100%
	Corporate	89	22%	51%	18%	10%	100%
	Overall	677	34%	37%	22%	7%	100%

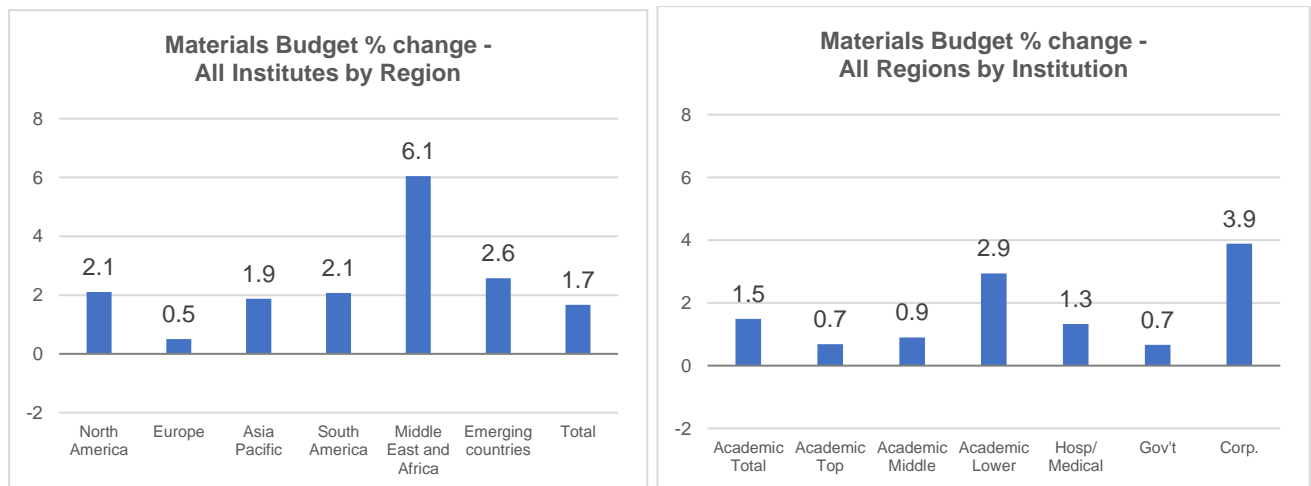
* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

6.2 Materials and Information Spend Predications for 2023

Overall Materials spend is set to increase by 1.7% in 2023. This is broadly comparable to 2022, when Materials budgets increased by an average of 2.1%.

- Materials budgets have increased in all the three main regions in 2023, with increases lower in Europe (0.5%) compared to North America and Asia Pacific (2.1% and 1.9% respectively). The highest increases to budgets were reported for in the Middle East & Africa region*.
- There has been little year-on-year change to overall Academic Materials budgets (1.5% in 2023 versus 1.0% in 2022), although there is some variation by size of institution, with Lower Tier Academics reporting higher budget increases compared to Top and Mid-Tier institutions.
- Year-on-year budget increase have been pared back for Hospitals (1.3% vs. 2.5% in 2022) and Government institutions (0.7% vs. 4.2% in 2022), whereas the reverse was noted for Corporates (3.9% vs. 2.6%).

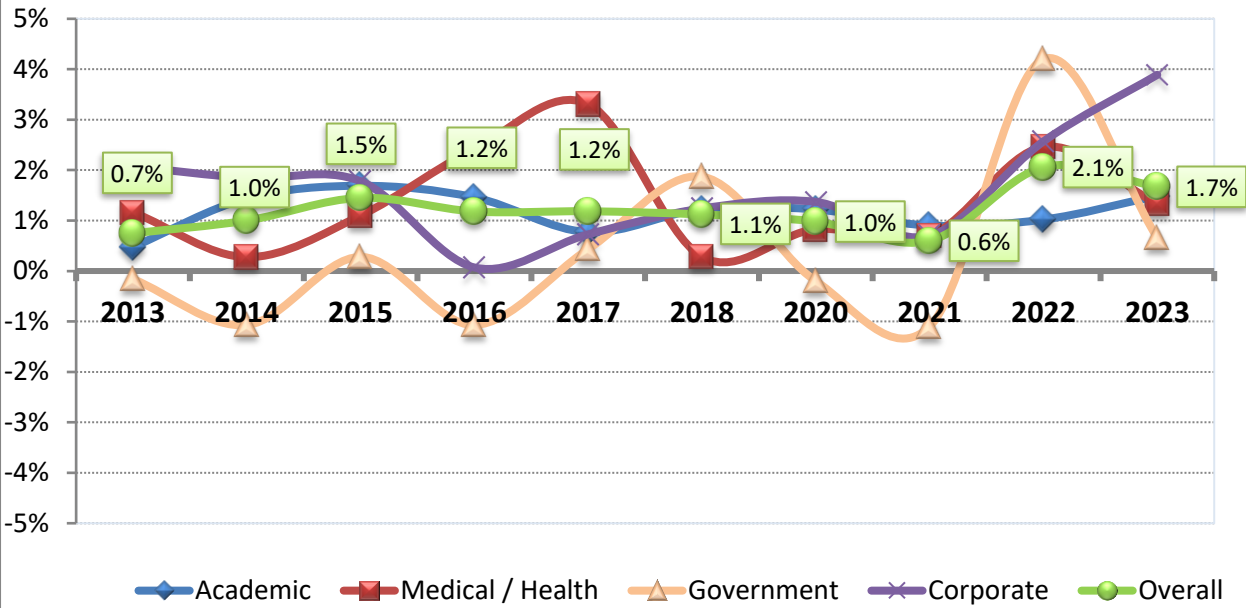
Qualitative forecasts suggest that 47% of Materials budgets will remain static (compared to 50% in 2022), with 37% of institutes predicting increases in this area for 2023 (compared to 38% in 2022). Circa 14% of institutes are expecting a decrease in their Materials budget, compared to 10% in 2022. Approximately two in five institutions (37%) in Emerging countries are predicting an increase to their Materials budget in 2023, compared to 45% in 2022.



Base: 677 participants

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

Materials Budget Forecasts for 2013 to 2023



Materials and Information Spend change for 2023						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	42%	50%	8%	0.8
	Academic Middle	24	46%	42%	8%	2.3
	Academic Lower	25	36%	56%	8%	2.4
	<i>All Academic</i>	73	41%	49%	8%	1.8
	Medical/Health	83	36%	51%	12%	1.1
	Government	13	46%	46%	8%	2.7
	Corporate	25	80%	12%	8%	5.9
	Overall	194	44%	45%	10%	2.1
Europe	Academic Top	23	22%	57%	22%	-0.2
	Academic Middle	23	22%	52%	17%	-0.1
	Academic Lower	31	39%	39%	19%	0.6
	<i>All Academic</i>	77	27%	49%	20%	0.1
	Medical/Health	81	32%	54%	11%	1.6
	Government	9	0%	56%	44%	-6.1
	Corporate	25	40%	40%	12%	2.0
	Overall	192	29%	51%	17%	0.5
Asia Pacific	Academic Top	25	24%	56%	16%	0.2
	Academic Middle	32	28%	47%	22%	-0.3
	Academic Lower	26	50%	31%	12%	4.5
	<i>All Academic</i>	83	34%	45%	16%	1.4
	Medical/Health	101	30%	53%	14%	1.1
	Government	20	30%	55%	15%	3.4
	Corporate	30	60%	27%	13%	4.6
	Overall	234	35%	47%	15%	1.9
South America	Academic Top	4	50%	50%	0%	5.5
	Academic Middle	5	80%	20%	0%	11.0
	Academic Lower	6	67%	33%	0%	6.0
	<i>All Academic</i>	15	66%	34%	0%	7.3
	Medical/Health	9	11%	67%	22%	-0.6
	Government	1	0%	100%	0%	0.0
	Corporate	6	33%	33%	33%	-3.0
	Overall	31	33%	53%	14%	2.1
Middle East and Africa	Academic Top	4	100%	0%	0%	6.7
	Academic Middle	4	25%	50%	25%	-3.3
	Academic Lower	4	75%	25%	0%	7.7
	<i>All Academic</i>	12	67%	25%	8%	3.0
	Medical/Health	9	78%	11%	11%	7.7
	Government	2	100%	0%	0%	15.0
	Corporate	3	33%	33%	0%	3.0
	Overall	26	70%	18%	8%	6.1
Emerging Countries	Academic Top	29	26%	59%	11%	1.0
	Academic Middle	28	39%	53%	8%	1.8
	Academic Lower	22	59%	35%	0%	7.5
	<i>All Academic</i>	79	39%	51%	7%	2.8
	Medical/Health	76	33%	49%	19%	2.0
	Government	12	28%	57%	15%	3.0
	Corporate	30	52%	26%	16%	3.7
	Overall	197	37%	47%	14%	2.6
Overall	Academic Top	80	32%	52%	14%	0.7
	Academic Middle	88	34%	46%	16%	0.9
	Academic Lower	92	44%	40%	12%	2.9
	<i>All Academic</i>	260	37%	46%	14%	1.5
	Medical/Health	283	33%	52%	13%	1.3
	Government	45	27%	53%	20%	0.7
	Corporate	89	58%	27%	12%	3.9
	Overall	677	37%	47%	14%	1.7

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution

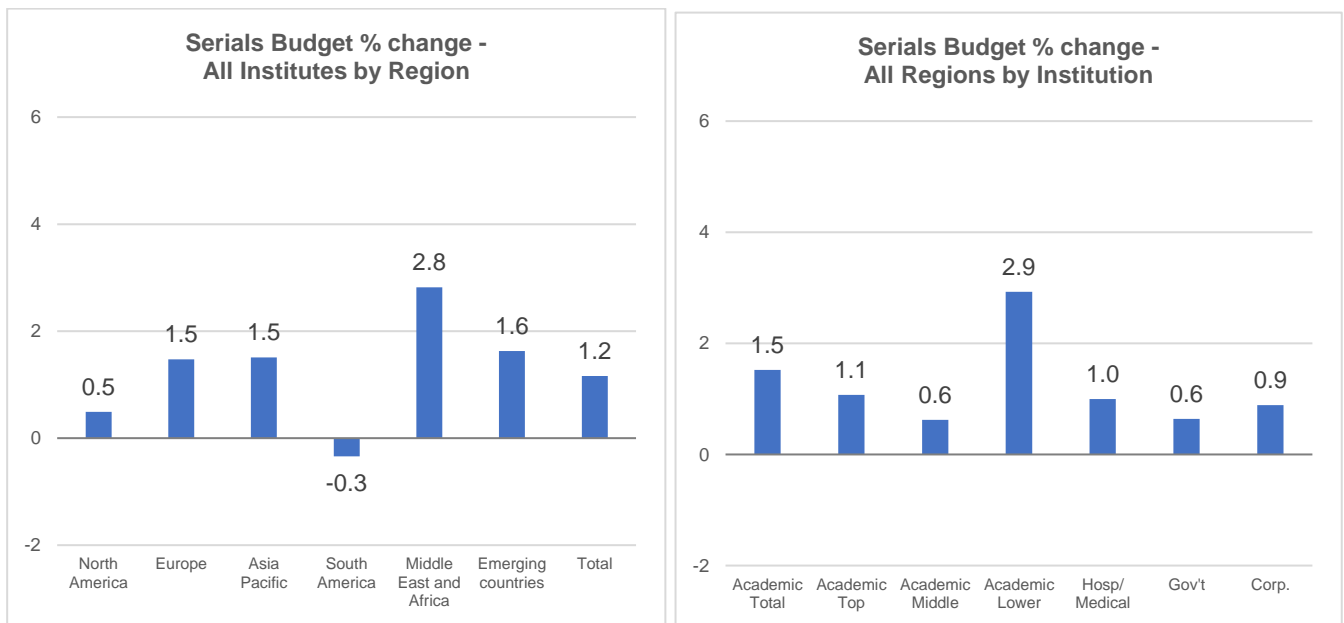
7 Serials and Journals

All librarians and information officers were asked about anticipated 2023 expenditure on Serials, Journals or ongoing subscriptions covering scientific content. By Serials and Journals, we are referring to repeating publications on a subject or area, typically monthly or quarterly and subscription based. This category also includes journal databases or platforms.

Serials/Journals budgets are projected to increase by an average of 1.2% across all institutions surveyed (compared to an average increase of 1.3% in 2022), with limited variations by region and type of institution.

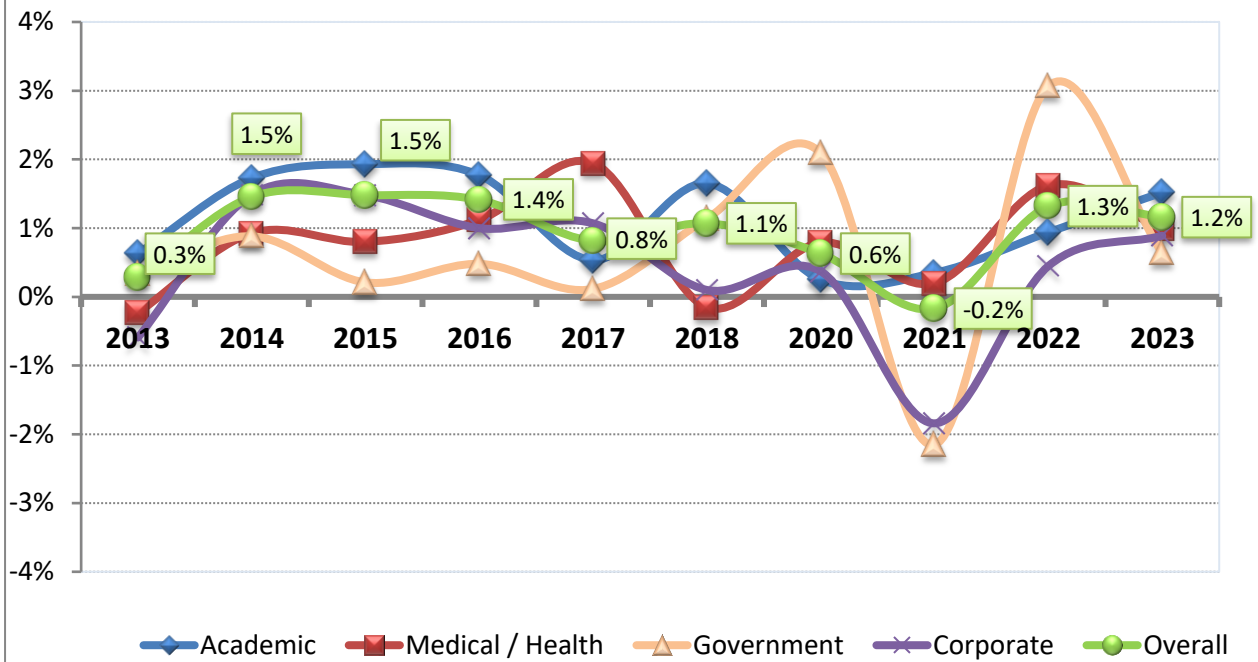
- Budgets are projected to be broadly comparable across most regions.
- There was limited variation by type of institution, with the exception of Lower Tier Academic institutions which projected highest increases to Serials budgets in 2023 (2.9% compared to 0.5% in 2022).
- Across most institutions, 2023 budgets were comparable to those set in 2022, although a year-on-year fall was noted amongst Government institutions (0.6% increase compared to 3.1% in 2022)

Qualitative forecasts indicate that circa 1 in 2 (47%) of institutions believe budgets will remain static (compared to 54% in 2022), 35% predict that their budgets will increase and 13% expect budgets to decrease. This is similar to the position observed in 2022.



Base: 677 participants

Serials/Journals Budget Forecasts for 2013 to 2023

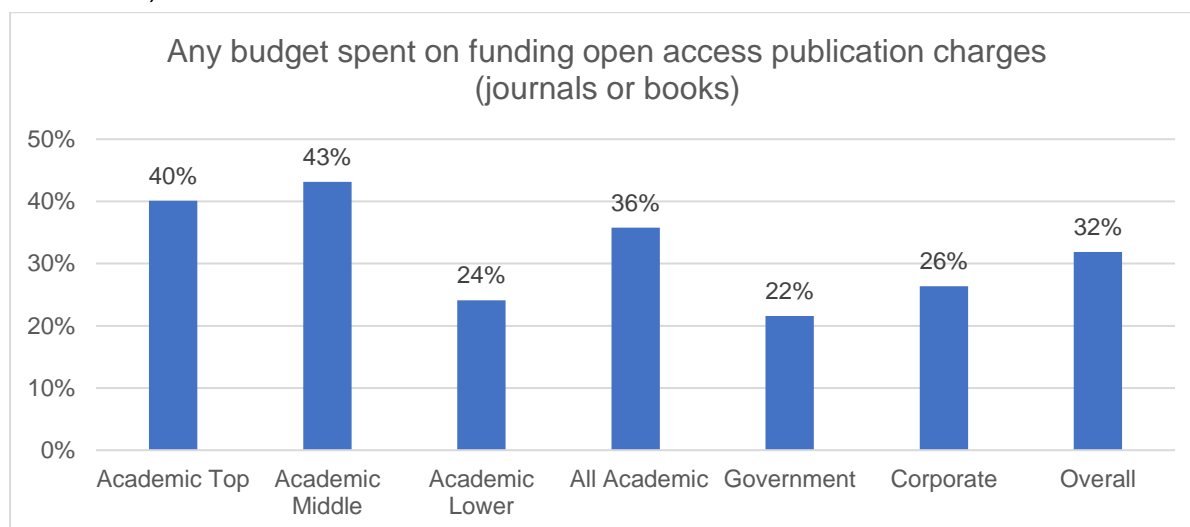


Serials/Journals Budget Change for 2023						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	46%	38%	17%	1.3
	Academic Middle	24	46%	46%	0%	2.7
	Academic Lower	25	44%	48%	8%	2.0
	<i>All Academic</i>	73	45%	44%	8%	1.9
	Medical/Health	83	40%	42%	16%	-0.5
	Government	13	8%	69%	23%	-0.9
	Corporate	25	24%	60%	8%	0.2
	Overall	194	37%	47%	12%	0.5
Europe	Academic Top	23	52%	35%	13%	1.7
	Academic Middle	23	35%	52%	13%	0.7
	Academic Lower	31	39%	35%	19%	2.3
	<i>All Academic</i>	77	42%	41%	15%	1.6
	Medical/Health	81	38%	48%	7%	2.2
	Government	9	11%	56%	22%	-0.3
	Corporate	25	28%	48%	16%	-0.1
	Overall	192	36%	46%	12%	1.5
Asia Pacific	Academic Top	25	32%	48%	20%	0.1
	Academic Middle	32	28%	53%	16%	-1.1
	Academic Lower	26	50%	27%	15%	4.6
	<i>All Academic</i>	83	37%	43%	17%	1.2
	Medical/Health	101	34%	51%	13%	1.4
	Government	20	25%	45%	30%	0.8
	Corporate	30	33%	50%	17%	3.2
	Overall	234	34%	47%	16%	1.5
South America	Academic Top	4	25%	50%	0%	2.5
	Academic Middle	5	40%	20%	20%	5.3
	Academic Lower	6	0%	83%	0%	0.0
	<i>All Academic</i>	15	22%	51%	7%	2.5
	Medical/Health	9	22%	44%	11%	-1.4
	Government	1	0%	0%	0%	0.0
	Corporate	6	0%	50%	17%	-6.0
	Overall	31	18%	44%	9%	-0.3
Middle East and Africa	Academic Top	4	50%	50%	0%	2.0
	Academic Middle	4	25%	50%	25%	-5.8
	Academic Lower	4	25%	50%	0%	3.3
	<i>All Academic</i>	12	33%	50%	8%	-0.7
	Medical/Health	9	33%	56%	0%	2.9
	Government	2	100%	0%	0%	22.5
	Corporate	3	0%	67%	0%	0.0
	Overall	26	34%	51%	3%	2.8
Emerging Countries	Academic Top	29	26%	52%	18%	-0.3
	Academic Middle	28	14%	60%	19%	-2.2
	Academic Lower	22	41%	36%	4%	6.8
	<i>All Academic</i>	79	26%	51%	15%	0.6
	Medical/Health	76	32%	47%	13%	2.0
	Government	12	28%	29%	22%	3.3
	Corporate	30	28%	47%	17%	2.5
	Overall	197	29%	47%	15%	1.6
Overall	Academic Top	80	42%	41%	15%	1.1
	Academic Middle	88	36%	49%	11%	0.6
	Academic Lower	92	42%	39%	13%	2.9
	<i>All Academic</i>	260	40%	43%	13%	1.5
	Medical/Health	283	36%	47%	12%	1.0
	Government	45	17%	51%	23%	0.6
	Corporate	89	26%	53%	13%	0.9
	Overall	677	35%	47%	13%	1.2

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

8 Open Access

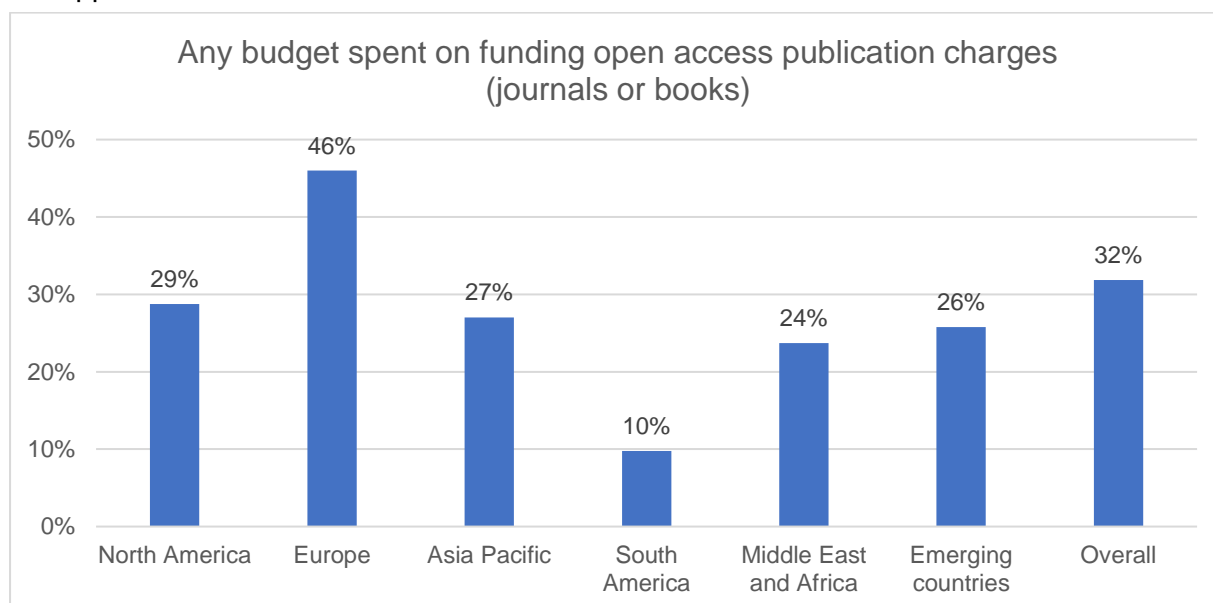
All librarians and information officers in Academic, Government and Corporate institutions were asked about **Open Access** (i.e. typically when research or books are made free to access, with costs covered by a fee charged to the author which may be reimbursed by some funding bodies or institutions).



Base: Academic Top 80; Academic Middle 88; Academic Lower 92; Academic Overall 260; Government 45; Corporate 89; Total 394

Circa 1 in 3 institutions (32%) reported that a part of their library and information services budget was spent on funding such open access publication charges, in either journals or books. However, no attempt was made to quantify the proportion of budget that was allocated to this activity.

This practice was more common amongst Top and Mid-Tier Academic institutions. It was least likely to happen in Government institutions.



Base: North America 111; Europe 111; Asia Pacific 133; South America 22; Middle East & Africa 17; Emerging Countries 121; Total 394

Such activity was more likely to be reported by European institutions, compared to those based in North America and Asia Pacific (46%, 29% and 27% respectively).

Actions as a result of more content being made available through Open Access					
	Base	Saved money which has been allocated back to your institution	Used any savings to cover Open Access Article Process Charges managed by the author	Other impact	No impact
Academic Top	33	40%	38%	31%	12%
Academic Middle	37	33%	13%	40%	27%
Academic Lower	23	46%	32%	20%	21%
<i>All Academic</i>	93	39%	27%	32%	20%
Medical/Health	0	0%	0%	0%	0%
Government	11	24%	0%	0%	76%
Corporate	23	44%	26%	17%	26%
Overall	127	38%	24%	27%	26%

Librarians and information officers in institutions that cover some open access publication charges were asked about the potential impact of this. Nearly 2 in 5 (38%) said this had saved money which had been allocated back to their institution, with 1 in 4 (24%) saying that their institution had used savings achieved to cover author charges.

Actions as a result of more content being made available through Open Access					
	Base	Saved money which has been allocated back to your institution	Used any savings to cover Open Access Article Process Charges managed by the author	Other impact	No impact
North America	32	50%	25%	22%	28%
Europe	52	20%	19%	41%	28%
Asia Pacific	37	51%	26%	11%	25%
<i>South America</i>	2	56%	100%	0%	0%
Middle East and Africa	4	55%	45%	55%	0%
Emerging countries	31	47%	36%	0%	27%
Overall	127	38%	24%	27%	26%

European institutions were less likely to allocate savings back to their institution (20%) compared to those in Asia Pacific and North America (51% and 50% respectively).

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

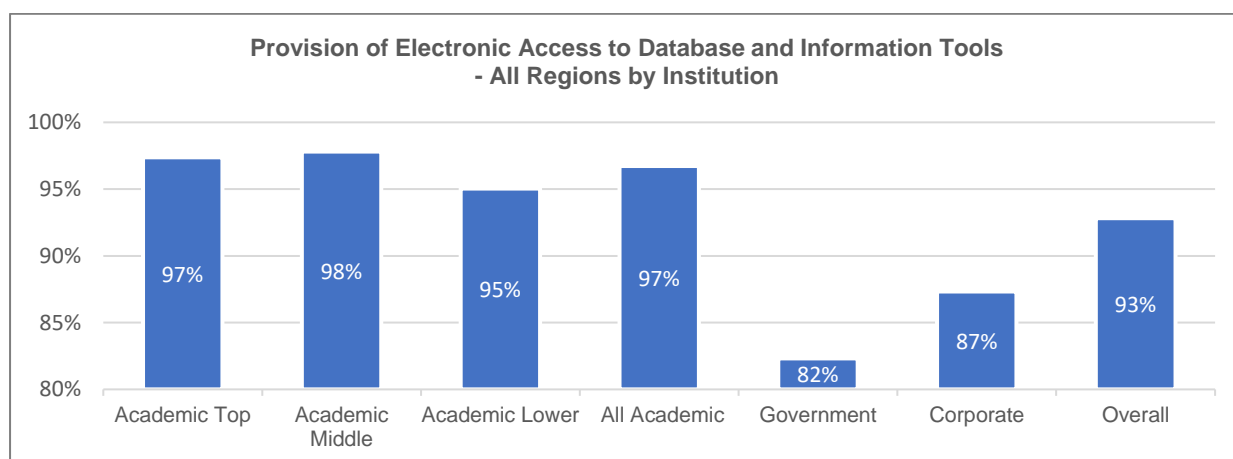
9 Databases and Information Tools (including Abstracting and Indexing Services)

9.1 Provision of Electronic access

All librarians and information officers in Academic, Government and Corporate institutions were asked about their use of databases and information tools (including bibliographic databases and abstracting or indexing services), and, if applicable, their anticipated expenditure in this area in 2022.

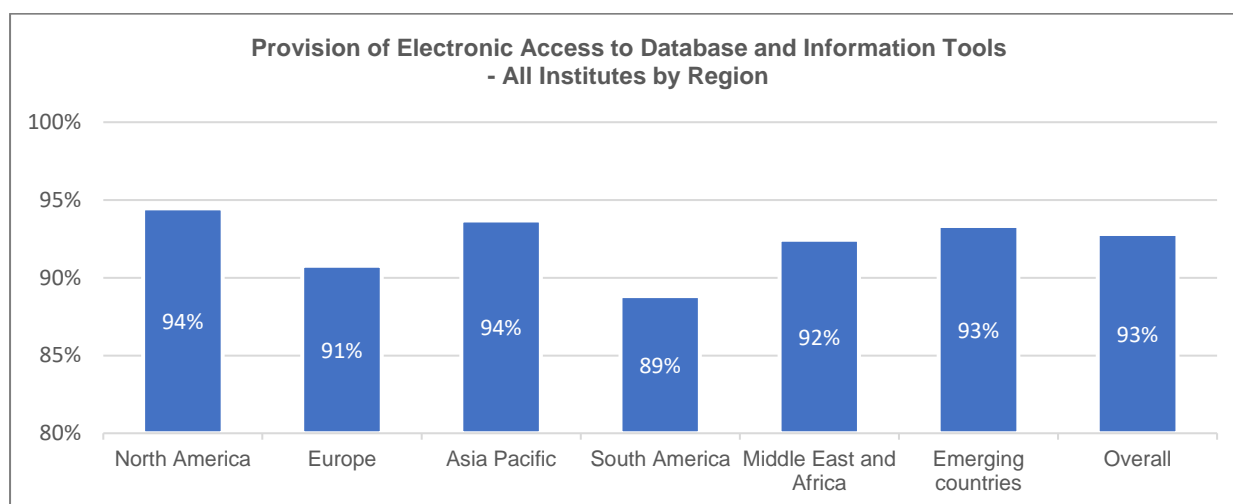
For this category, we are referring to databases and information tools (including bibliographic databases and abstracting or indexing databases) used to search for scholarly content across academic books, conference, journals. Tools could include specialist search databases covering chemistry, engineering, drug interactions, etc.

A majority of institutions (93%) currently provide electronic access to such services, similar to the 2022 study (92%) and this was more widespread amongst Academic institutions (97%), with Government institutions being the least likely to offer this (82%).



Base: Academic Top 80; Academic Middle 88; Academic Lower 92; Academic Overall 260; Government 45; Corporate 89; Total 394.

The provision of such services was broadly comparable across the three main regions (North America, Europe and Asia Pacific).



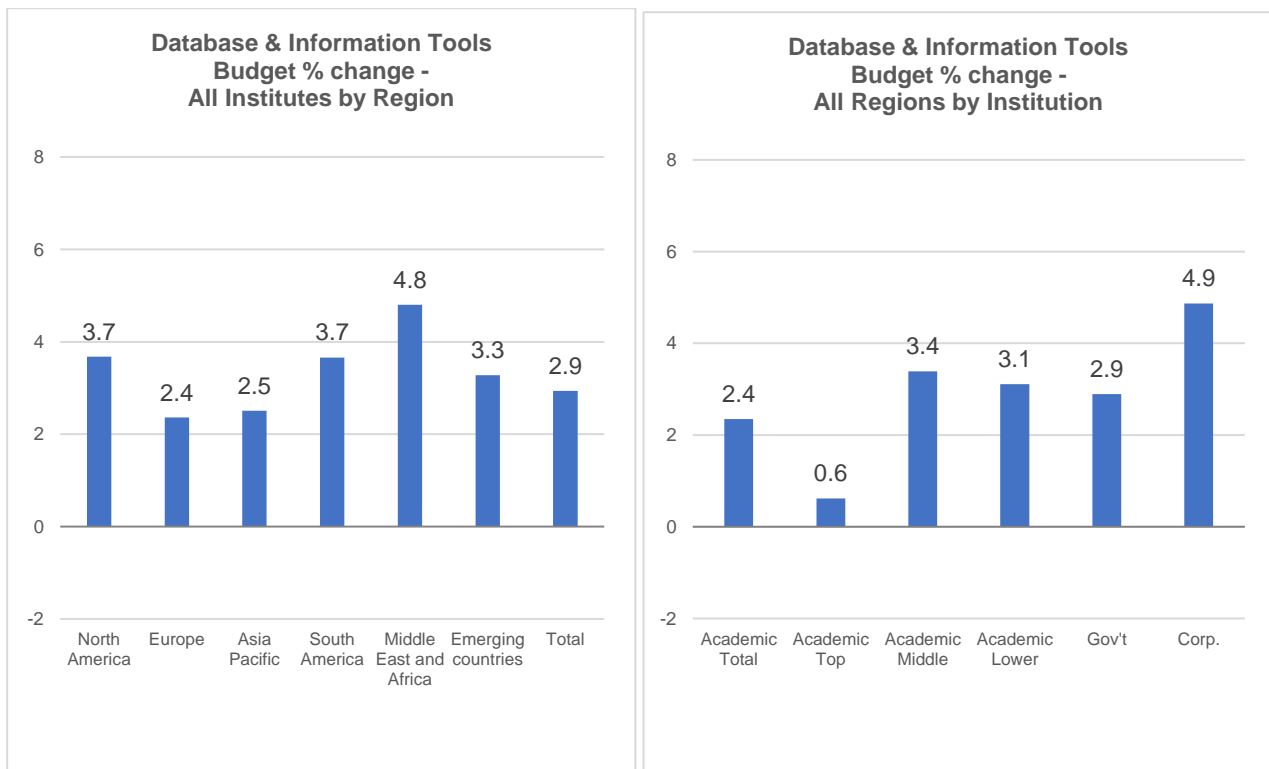
Base: North America 111; Europe 111; Asia Pacific 133; South America 22; Middle East & Africa 17; Emerging Countries 121; Total 394

9.2 Databases and Information Tools (including A&I) – 2023 Budget Predictions

Amongst institutions using such services, spending on databases and information tools in 2023 is projected to increase by an average of 2.9% compared to 2.8% in 2022.

- In North America projected budget increases in this area are higher overall (3.7%), with lower increases anticipated in Asia Pacific (2.5%) and Europe (2.4%).
- 2023 budgets varied little by type of institution, with Corporate institutions reporting higher increases in this area.

Qualitative forecasts indicate that 1 in 2 (49%) of institutes believe that their budgets will remain static compared to 52% in 2022, 40% predict that their budgets will increase and 8% expect budgets to decrease.



Base: 365 participants

Database & Information Tools Budget Change for 2023						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	46%	46%	8%	2.0
	Academic Middle	24	50%	50%	0%	3.7
	Academic Lower	25	44%	56%	0%	2.7
	<i>All Academic</i>	73	47%	51%	3%	2.8
	Medical/Health	0	0%	0%	0%	0.0
	Government	11	27%	64%	9%	4.0
	Corporate	21	86%	14%	0%	6.6
	Overall	105	52%	45%	3%	3.7
Europe	Academic Top	22	23%	64%	14%	0.0
	Academic Middle	23	39%	57%	4%	4.8
	Academic Lower	27	41%	48%	7%	3.5
	<i>All Academic</i>	72	34%	56%	8%	2.8
	Medical/Health	0	0%	0%	0%	0.0
	Government	7	14%	71%	0%	0.5
	Corporate	22	45%	45%	5%	2.0
	Overall	101	34%	56%	7%	2.4
Asia Pacific	Academic Top	24	13%	67%	17%	-1.1
	Academic Middle	30	33%	37%	23%	1.4
	Academic Lower	25	36%	56%	4%	3.1
	<i>All Academic</i>	79	27%	53%	15%	1.1
	Medical/Health	0	0%	0%	0%	0.0
	Government	16	44%	50%	6%	3.9
	Corporate	29	55%	31%	10%	5.9
	Overall	124	35%	48%	13%	2.5
South America	Academic Top	4	50%	50%	0%	3.8
	Academic Middle	5	80%	0%	20%	10.3
	Academic Lower	6	0%	83%	0%	0.0
	<i>All Academic</i>	15	43%	44%	7%	4.5
	Medical/Health	0	0%	0%	0%	0.0
	Government	1	0%	100%	0%	0.0
	Corporate	3	33%	67%	0%	3.3
	Overall	19	36%	55%	5%	3.7
Middle East and Africa	Academic Top	4	50%	50%	0%	7.0
	Academic Middle	4	25%	50%	25%	-2.0
	Academic Lower	4	50%	50%	0%	11.3
	<i>All Academic</i>	12	42%	50%	8%	4.7
	Medical/Health	0	0%	0%	0%	0.0
	Government	2	50%	50%	0%	5.0
	Corporate	2	50%	50%	0%	5.0
	Overall	16	44%	50%	6%	4.8
Emerging Countries	Academic Top	28	15%	66%	15%	-0.7
	Academic Middle	28	47%	38%	11%	6.5
	Academic Lower	21	35%	55%	0%	5.2
	<i>All Academic</i>	77	31%	54%	10%	3.1
	Medical/Health	0	0%	0%	0%	0.0
	Government	9	19%	72%	9%	2.5
	Corporate	26	43%	45%	12%	4.1
	Overall	112	33%	53%	10%	3.3
Overall	Academic Top	78	28%	58%	12%	0.6
	Academic Middle	86	42%	45%	11%	3.4
	Academic Lower	87	38%	55%	3%	3.1
	<i>All Academic</i>	251	36%	53%	9%	2.4
	Medical/Health	0	0%	0%	0%	0.0
	Government	37	29%	63%	5%	2.9
	Corporate	77	60%	32%	5%	4.9
	Overall	365	40%	49%	8%	2.9

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

9.3 Research Data Management: current provision and future plans

All librarians and information officers were asked about **Research Data Management (RDM)** tools or services (i.e. software solutions that allow researchers to store, share, publish and find research data), to establish if their institution currently provides this or plans to do so in the future.

Provision of RDM: by Institution			
Organisation	Provision		
	Currently provide	Plan to provide	Not provided
Academic Top	45%	18%	38%
Academic Middle	36%	13%	51%
Academic Lower	19%	11%	70%
<i>All Academic</i>	33%	14%	53%
Medical/Health	24%	10%	65%
Government	20%	12%	68%
Corporate	25%	16%	59%
Overall	27%	12%	60%

Provision of RDM: by Region			
Region	Provision		
	Currently provide	Plan to provide	Not provided
North America	29%	8%	62%
Europe	25%	15%	60%
Asia Pacific	27%	14%	59%
South America	29%	10%	61%
Middle East & Africa	34%	12%	54%
Emerging Countries	34%	18%	47%
Overall	27%	12%	60%

Base: 677 participants

27% of institutions currently provide RDM tools or services, almost unchanged from the previous year (26%), with 12% planning to do so in the future. Higher levels of adoption were noted amongst Top-Tier Academic institutions.

Little variation was noted in adoption levels across the three main regions, although it was interesting to note that those in Emerging countries were more like to provide RDM tools.

9.4 Institutional Repositories: current provision and future plans

All librarians and information officers were asked about **Institutional Repository** tools or services (i.e. archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution or organisation, particularly a university or research institution), to establish if their institution currently provides this or plans to do so in the future.

Provision of Institutional Repositories: by Institution			
Organisation	Provision		
	Currently provide	Plan to provide	Not provided
Academic Top	86%	7%	7%
Academic Middle	83%	8%	9%
Academic Lower	62%	13%	25%
<i>All Academic</i>	<i>77%</i>	<i>9%</i>	<i>14%</i>
Medical/Health	34%	11%	55%
Government	31%	14%	55%
Corporate	28%	10%	62%
Overall	49%	11%	41%

Provision of Institutional Repositories: by Region			
Region	Provision		
	Currently provide	Plan to provide	Not provided
North America	42%	10%	48%
Europe	45%	9%	47%
Asia Pacific	54%	13%	33%
South America	77%	7%	16%
Middle East & Africa	51%	14%	35%
Emerging Countries	64%	16%	21%
Overall	49%	11%	41%

Base: 677 participants

Institutional Repositories were one of the most widely used tools or services, with 49% of institutions currently providing, and a further 11% planning to do so in the future. Higher levels of current and planned usage were noted amongst Academic institutions (77%), with Corporate institutions being the least likely to provide this (28%).

There was some variation in usage across the three main regions, with institutions based in Asia Pacific being more likely to provide access to such tools.

9.5 Current Research Information Systems (CRIS): current provision and future plans

All librarians and information officers were asked about **Current Research Information Systems (CRIS)** (i.e. information system to store, manage and exchange contextual metadata for research activities undertaken within an institution or organisation), to establish if their institution currently provides such systems or plans to do so in the future.

Provision of Current Research Information Systems: by Institution			
Organisation	Provision		
	Currently provide	Plan to provide	Not provided
Academic Top	32%	20%	48%
Academic Middle	27%	15%	58%
Academic Lower	20%	8%	72%
<i>All Academic</i>	<i>26%</i>	<i>15%</i>	<i>59%</i>
Medical/Health	20%	11%	70%
Government	17%	9%	74%
Corporate	25%	10%	64%
Overall	23%	12%	65%

Provision of Current Research Information Systems: by Region			
Region	Provision		
	Currently provide	Plan to provide	Not provided
North America	16%	5%	79%
Europe	20%	16%	64%
Asia Pacific	27%	13%	59%
South America	30%	24%	46%
Middle East & Africa	41%	14%	45%
Emerging Countries	33%	20%	48%
Overall	23%	12%	65%

Base: 677 participants

CRIS are currently provided by 1 in 4 institutions (23%), unchanged from 2022. Approximately, 1 in 10 (12%) have plans to provide this in the future. Current and future adoption was higher among Top and Mid-Tier Academic institutions. Of the three main regions, Asia Pacific institutions were the most likely to have such systems in place or have plans to introduce these.

9.6 Research Performance Analytics: current provision and future plans

All librarians and information officers were asked about **Research Performance Analytics** tools or services (i.e. dedicated tools used to undertake sophisticated research performance analyses typically to track research productivity and return on research value), to establish if their institution currently provides this or plans to do so in the future.

Provision of Research Performance Analytics: by Institution			
Organisation	Provision		
	Currently provide	Plan to provide	Not provided
Academic Top	44%	13%	43%
Academic Middle	36%	16%	48%
Academic Lower	21%	11%	69%
<i>All Academic</i>	<i>34%</i>	<i>13%</i>	<i>53%</i>
Medical/Health	16%	11%	74%
Government	7%	11%	83%
Corporate	22%	8%	70%
Overall	22%	11%	66%

Provision of Research Performance Analytics: by Region			
Region	Provision		
	Currently provide	Plan to provide	Not provided
North America	24%	6%	71%
Europe	15%	11%	75%
Asia Pacific	26%	17%	56%
South America	29%	2%	69%
Middle East & Africa	30%	12%	58%
Emerging Countries	27%	23%	51%
Overall	22%	11%	66%

Base: 677 participants

Circa 1 in 5 (22%) of institutions currently provide such tools or services, with a further 11% planning to do so in the future. Higher levels of current and planned adoption were noted amongst Top and Mid-Tier Academic institutions.

There was some variation across the three main regions, with those in Asia Pacific being more likely to provide this or have plans to introduce this.

10 Medical Information Tools

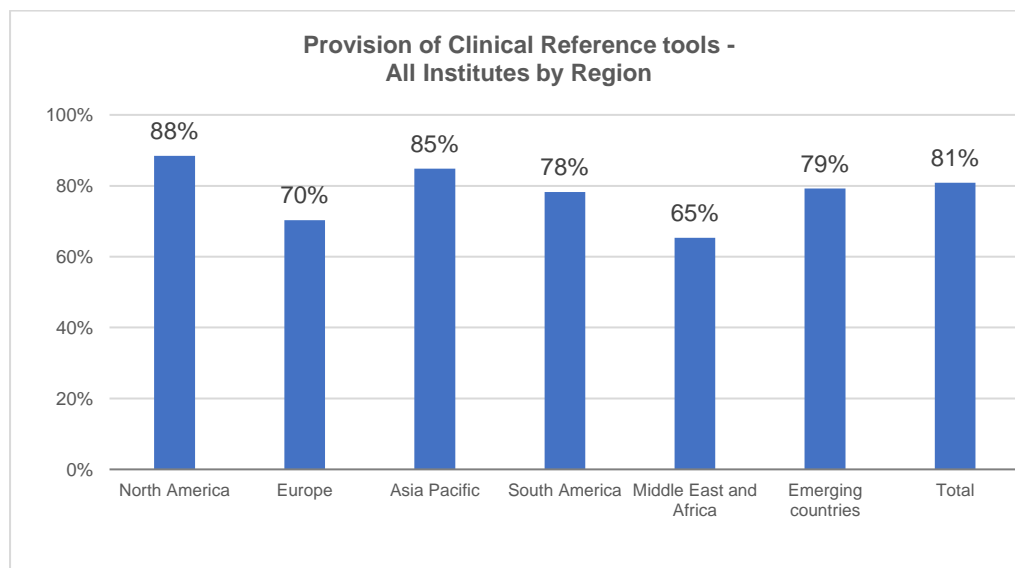
10.1 Current Medical Information Tools used

Librarians and information officers in Hospitals or Medical Trusts were asked about different medical information tools - there were three categories of tools.

10.1.1 Clinical Reference Tools

The first of these, Clinical Reference Tools, are defined as: multi-speciality tools that allow physicians to access clinically relevant information, across journals, books and guidelines. It also includes drug information databases, order sets (pre-packaged groups of orders that apply to a specified diagnosis) and care plans ('templates' that define the essentials of care – nutrition, mobility etc.).

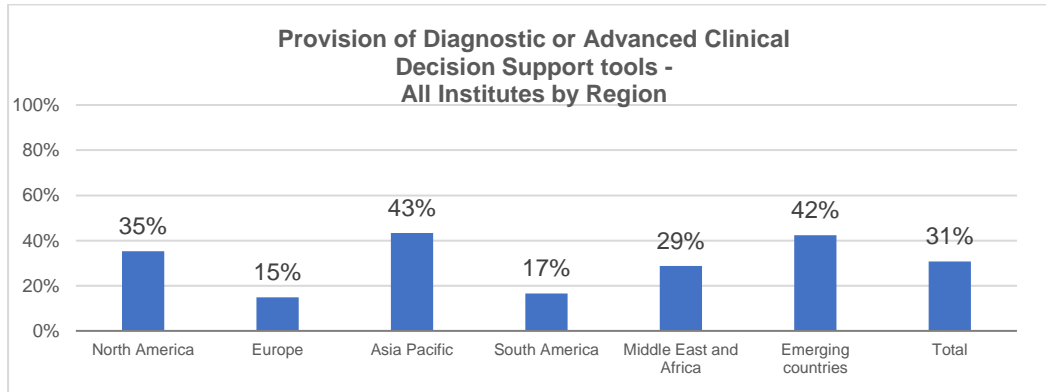
Approximately 4 out of 5 hospitals reported using Clinical Reference Tools. Use of such tools varied across the three main region: North America (88%), Europe (70%) and Asia Pacific (85%).



Base: North America 145; Europe 134; Asia Pacific 143; South America 22; ME&A 20; Emerging Countries 116, Total 464.

10.1.2 Diagnostic or Advanced Clinical Decision Support tools

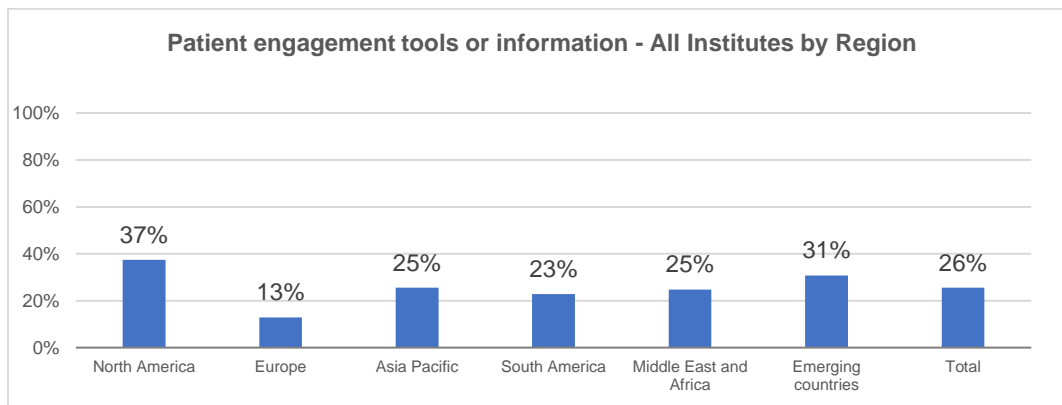
The second category of tools are Diagnostic or Advanced Clinical Decision Tools (that a clinician can utilise at point-of-care to enable decision making) were less frequently used, with circa 1 in 3 (31%) claiming to use them. Use of such tools varied by region: North America (35%), Europe (15%) and Asia Pacific (43%).



Base: North America 145; Europe 134; Asia Pacific 143; South America 22; ME&A 20; Emerging Countries 116, Total 464.

10.1.3 Patient Engagement Tools or Information

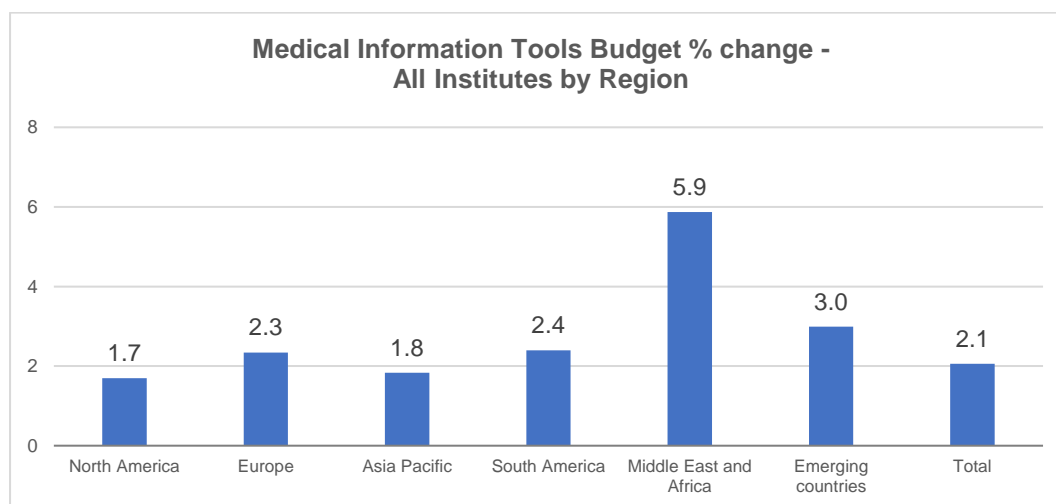
Patient engagement tools or information (enabling patients to be engaged in the healthcare decision-making process and administration of their healthcare) were used by a similar proportion, with circa 1 in 4 (25%) claiming to use them. Use of such tools varied by region: North America (37%), Europe (13%) and Asia Pacific (25%).



Base: North America 145; Europe 134; Asia Pacific 143; South America 22; ME&A 20; Emerging Countries 116, Total 464.

10.1.4 Medical Information Tools – Budget Predictions 2023

Hospitals and Medical Trusts anticipated that expenditure on Medical Information Tools would increase by an average of 2.1% in 2023, unchanged from 2022. The 2023 budget projections were similar across the three main regions of North American, Europe and Asia Pacific.



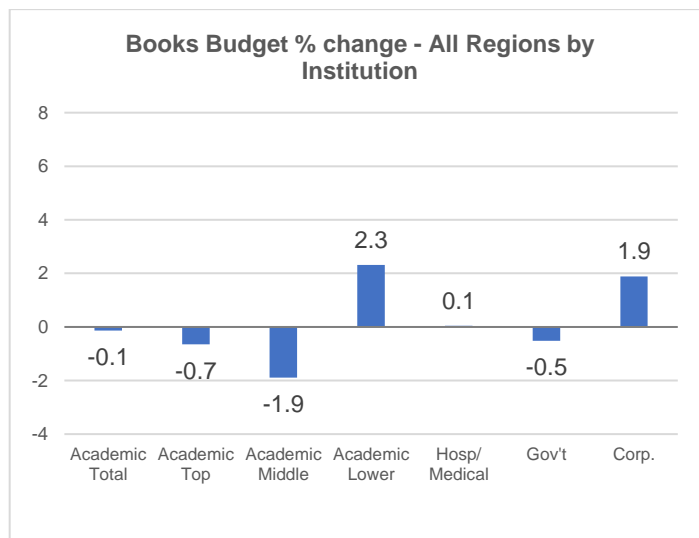
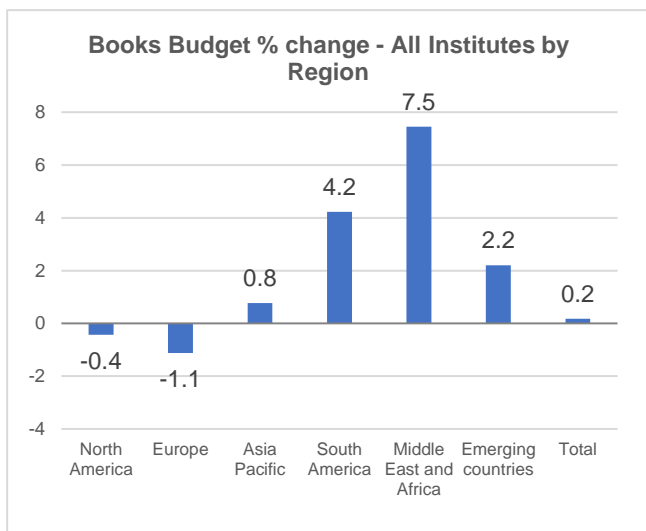
Base: North America 145; Europe 134; Asia Pacific 143; South America 22; ME&A 20; Emerging Countries 116, Total 464.

Qualitative forecasts indicate that the majority (56%) of institutes believe that their budgets will remain static in this area (compared to 60% in 2022), 28% predict that their budgets will increase and 4% expect budgets to decrease.

Medical Information Tools: Budget change for 2023						
		Base	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
Region	North America	145	35%	56%	3%	1.7
	Europe	134	23%	58%	2%	2.3
	Asia Pacific	143	25%	58%	6%	1.8
	South America	22	20%	55%	3%	2.4
	Middle East and Africa	20	45%	37%	0%	5.9
	Emerging countries	116	28%	50%	6%	3.0
Total		464	28%	56%	4%	2.1

11 Books

All librarians and information officers were asked about anticipated 2022 expenditure on books (including printed books, e-books, monographs and book series).

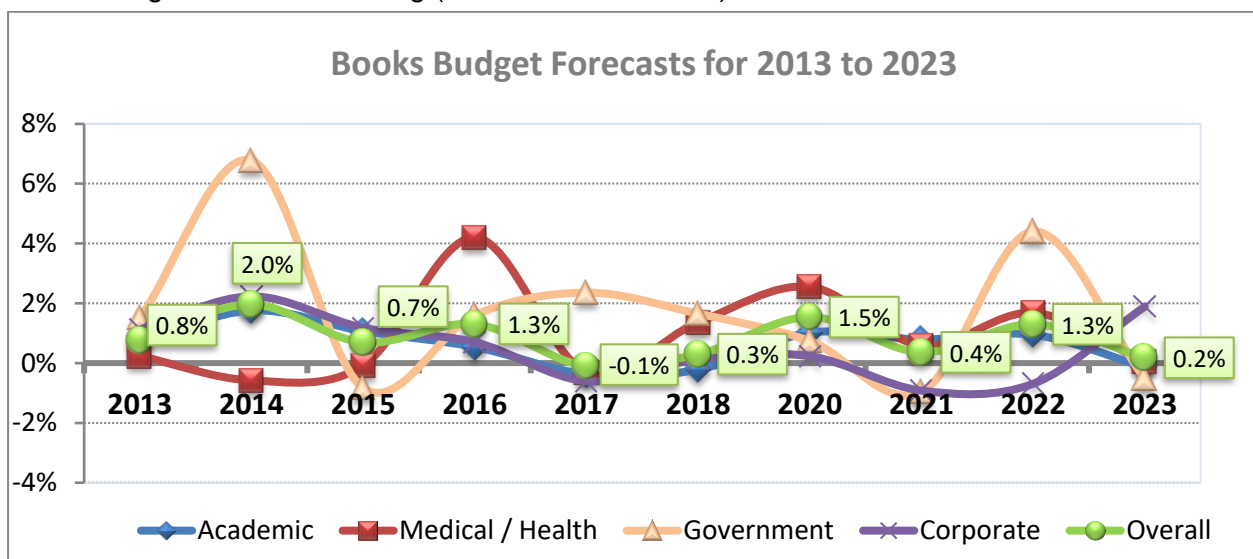


Base: 677 participants.

Book budgets are projected to increase by an average of 0.2% across all institutions surveyed (compared to 1.3% in 2022). However, this varied by region and type of institution.

- Institutions in North America and Europe are projecting decreases of -0.4% and -1.1% respectively in their books budget, whereas in Asia Pacific an increase of 0.8% is projected. Other regions estimated increases of 4% or above*.
- There was variation by type of institution, with Lower-Tier Academic and Corporate institutions projecting the largest increases to their book budgets in 2023. Budgets are set to contract amongst Government, Mid and Top-Tier Academic institutions.

Qualitative forecasts indicate that the majority (54%) of institutes believe that their budgets will remain static, 24% predict that their budgets will increase and 18% expect budgets to decrease. This is similar to the general patterns observed for 2022 budgets, albeit with an increase in those reporting that Books budgets were decreasing (18% vs. 12% in 2022).



* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

Books Budget Change for 2023						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	25%	54%	21%	-1.1
	Academic Middle	24	21%	46%	33%	-0.4
	Academic Lower	25	28%	48%	24%	1.3
	<i>All Academic</i>	73	25%	49%	26%	-0.1
	Medical/Health	83	22%	58%	20%	-1.3
	Government	13	54%	38%	8%	1.8
	Corporate	25	28%	48%	24%	0.0
	Overall	194	26%	52%	22%	-0.4
Europe	Academic Top	23	17%	52%	30%	-2.7
	Academic Middle	23	17%	43%	39%	-2.5
	Academic Lower	31	32%	39%	23%	-0.6
	<i>All Academic</i>	77	22%	45%	31%	-2.0
	Medical/Health	81	17%	65%	11%	0.3
	Government	9	0%	56%	44%	-8.3
	Corporate	25	20%	72%	8%	1.2
	Overall	192	18%	58%	20%	-1.1
Asia Pacific	Academic Top	25	20%	60%	16%	0.3
	Academic Middle	32	13%	53%	31%	-4.0
	Academic Lower	26	27%	54%	8%	3.7
	<i>All Academic</i>	83	20%	56%	18%	-0.1
	Medical/Health	101	25%	57%	14%	0.7
	Government	20	25%	55%	20%	2.2
	Corporate	30	30%	60%	7%	2.6
	Overall	234	24%	57%	15%	0.8
South America	Academic Top	4	50%	50%	0%	6.3
	Academic Middle	5	60%	0%	20%	6.5
	Academic Lower	6	83%	17%	0%	8.0
	<i>All Academic</i>	15	64%	22%	7%	6.9
	Medical/Health	9	11%	67%	11%	1.4
	Government	1	0%	0%	0%	0.0
	Corporate	6	33%	33%	17%	5.0
	Overall	31	33%	41%	9%	4.2
Middle East and Africa	Academic Top	4	50%	50%	0%	2.0
	Academic Middle	4	25%	75%	0%	1.8
	Academic Lower	4	50%	50%	0%	16.7
	<i>All Academic</i>	12	42%	58%	0%	6.3
	Medical/Health	9	56%	22%	11%	2.0
	Government	2	50%	50%	0%	20.0
	Corporate	3	67%	33%	0%	15.0
	Overall	26	51%	39%	5%	7.5
Emerging Countries	Academic Top	29	26%	59%	11%	1.5
	Academic Middle	28	17%	61%	15%	-2.2
	Academic Lower	22	47%	37%	4%	9.1
	<i>All Academic</i>	79	28%	54%	10%	2.0
	Medical/Health	76	29%	52%	13%	1.5
	Government	12	28%	22%	29%	4.0
	Corporate	30	40%	47%	6%	4.0
	Overall	197	30%	51%	12%	2.2
Overall	Academic Top	80	23%	55%	20%	-0.7
	Academic Middle	88	19%	46%	33%	-1.9
	Academic Lower	92	32%	46%	16%	2.3
	<i>All Academic</i>	260	25%	49%	23%	-0.1
	Medical/Health	283	22%	59%	15%	0.1
	Government	45	26%	47%	22%	-0.5
	Corporate	89	28%	58%	12%	1.9
	Overall	677	24%	54%	18%	0.2

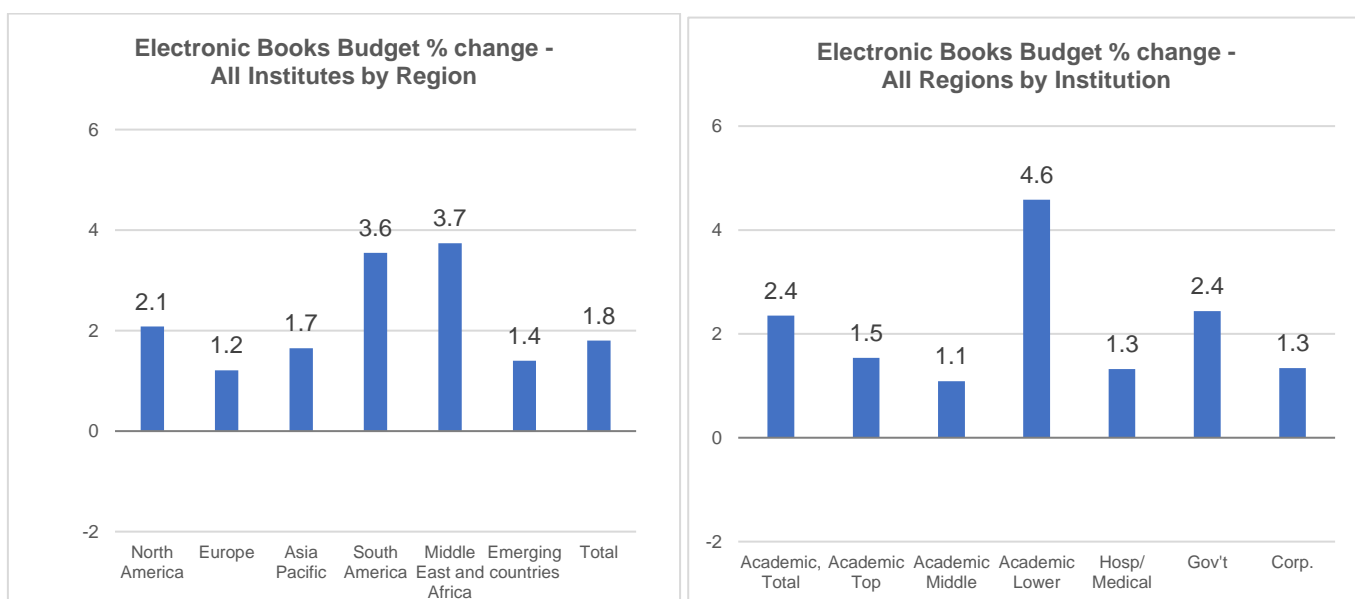
*Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

11.1 Electronic books

All librarians and information officers were asked about the proportion of their current books spend which is allocated to electronic books. Across all institutions, circa 27% of the current spend is on electronic resources compared to 26% in 2021 budgets.

Library Book Budget – current % spent on electronic books												
Region	Organisation	2011	2012	2013	2014	2015	2016	2017	2019	2020	2021	2022
Overall	Academic Top	22.4	18.3	19.9	27.8	30.9	27.9	30.7	30.6	21.6	29.8	40.1
	Academic Middle	14.8	17.7	16.8	22.1	25.7	26.7	27.0	26.0	32.2	33.1	34.5
	Academic Lower	15.7	15.4	19.9	25.3	24.7	23.1	29.7	24.6	31.8	32.1	29.0
	All Academic	17.6	17.1	18.9	25.0	27.0	25.9	29.1	27.1	28.5	31.7	34.5
	Medical/Health	15.0	17.5	21.0	33.9	36.4	32.0	29.5	24.0	19.7	23.5	25.0
	Government	10.9	7.7	11.8	24.2	28.7	24.5	18.3	22.3	24.2	22.3	12.6
	Corporate	16.8	11.5	20.9	26.6	34.1	26.1	25.6	21.7	14.2	20.6	16.5
	Overall	16.3	15.5	18.8	26.7	29.7	26.7	27.5	24.7	22.6	26.1	26.5

All librarians and information officers were asked about anticipated 2023 expenditure on electronic books.



Base: 677 participants

Electronic book budgets are projected to increase by an average of 1.8% across all institutions surveyed.

- This was broadly consistent across all regions*.
- There was some variation by type of institution, with Lower Tier Academic and Government institutions projecting higher increases to their electronic books budget in 2023.
- A fall in overall 2023 electronic books budgets was noted compared to 2022 (1.8% and 3.0% respectively).

Qualitative forecasts indicate that the majority (55%) of institutes believe that their electronic books budgets will remain static (compared to 59% in 2022), 29% predict that their budgets will increase and 8% expect budgets to decrease (compared to 4% in 2022).

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

Electronic Books Budget Change for 2023						
		Base *	Qualitative Predictions			Quantitative Predictions
			% respondents predicting			
Region	Organisation	n	Increase	Static	Decrease	% Budget Change
North America	Academic Top	24	29%	67%	4%	2.9
	Academic Middle	24	46%	46%	8%	1.7
	Academic Lower	25	44%	48%	8%	4.4
	<i>All Academic</i>	73	40%	54%	7%	3.0
	Medical/Health	83	25%	65%	6%	0.8
	Government	13	54%	46%	0%	4.6
	Corporate	25	24%	68%	4%	2.2
	Overall	194	33%	60%	6%	2.1
Europe	Academic Top	23	26%	61%	13%	1.5
	Academic Middle	23	39%	43%	17%	2.4
	Academic Lower	31	45%	42%	3%	4.8
	<i>All Academic</i>	77	37%	49%	11%	2.8
	Medical/Health	81	22%	63%	1%	2.0
	Government	9	0%	67%	22%	-3.1
	Corporate	25	16%	64%	8%	-3.7
	Overall	192	25%	58%	7%	1.2
Asia Pacific	Academic Top	25	32%	40%	20%	-0.4
	Academic Middle	32	28%	44%	25%	-1.1
	Academic Lower	26	31%	46%	4%	3.9
	<i>All Academic</i>	83	30%	43%	16%	0.7
	Medical/Health	101	24%	59%	11%	1.1
	Government	20	40%	45%	15%	4.6
	Corporate	30	40%	53%	3%	4.2
	Overall	234	29%	52%	12%	1.7
South America	Academic Top	4	50%	50%	0%	6.3
	Academic Middle	5	80%	0%	20%	4.5
	Academic Lower	6	50%	33%	0%	5.0
	<i>All Academic</i>	15	60%	28%	7%	5.3
	Medical/Health	9	11%	67%	11%	1.4
	Government	1	0%	0%	0%	0.0
	Corporate	6	33%	33%	17%	5.0
	Overall	31	31%	43%	9%	3.6
Middle East and Africa	Academic Top	4	50%	50%	0%	2.0
	Academic Middle	4	25%	75%	0%	1.8
	Academic Lower	4	75%	25%	0%	13.3
	<i>All Academic</i>	12	50%	50%	0%	5.3
	Medical/Health	9	33%	56%	0%	3.0
	Government	2	50%	50%	0%	5.0
	Corporate	3	0%	67%	0%	0.0
	Overall	26	36%	55%	0%	3.7
Emerging Countries	Academic Top	29	30%	48%	15%	0.4
	Academic Middle	28	36%	46%	15%	0.2
	Academic Lower	22	37%	31%	6%	3.5
	<i>All Academic</i>	79	34%	43%	13%	1.0
	Medical/Health	76	19%	60%	12%	0.2
	Government	12	35%	29%	15%	2.8
	Corporate	30	48%	40%	6%	5.3
	Overall	197	30%	49%	11%	1.4
Overall	Academic Top	80	31%	54%	12%	1.5
	Academic Middle	88	39%	43%	17%	1.1
	Academic Lower	92	41%	44%	5%	4.6
	<i>All Academic</i>	260	37%	47%	11%	2.4
	Medical/Health	283	23%	62%	6%	1.3
	Government	45	31%	49%	11%	2.4
	Corporate	89	27%	60%	5%	1.3
	Overall	677	29%	55%	8%	1.8

* Sample sizes for South America and Middle East & Africa are small and should be interpreted with caution.

12 Appendix

12.1 Definition Index: Materials and Information Spend

Journals/Serials: are repeating publications that deal with a particular subject or professional activity. Typically, issues are published on regular intervals, monthly or quarterly. Journals are typically scholarly and publish research articles that record predominantly scientific developments. Journals or serials are often subscription-based, the library pay an annual fee to subscribe to all the issues published in a year. Organizations may buy all the journals from one publisher, sometimes these are called journal databases or journal platforms.

Databases and Information Tools: Enable users to find and access information, including:

- **Abstracting and Indexing Databases:** bibliographic databases that allow users to search across quality assured publications (journals) to find scholarly content. This does not include full content journal databases.
- **Discipline Specific Tools:** databases that focus on areas such as engineering or chemistry; they also support searches for drug interactions or by chemical formulae.
- **Discovery Services Tools:** online library searching tools that provide an all-in-one interface for finding both local library items and online subscription and open access resources.
- **Medical Tools:** provide access to content for physicians and patients to improve patient care. Examples include, Diagnostic or Advanced Clinical Decision Support tools, and Patient Engagement tools. Three categories of tools were included:
 - **Clinical Reference Tools:** These are often multi-specialty tools that allow physicians to access clinically-relevant information, across journals, books and guidelines, they also include drug information databases, order sets (prepackaged groups of orders that apply to a specified diagnosis) and care plans ('templates' that define the essentials of care – nutrition, mobility etc.).
 - **Diagnostic or Advanced Clinical Decision Support Tools:** These are tools that a clinician can utilize often at the point-of-care to enable decision making. They are often easy to use and contain filtered information.
 - **Patient Engagement Tools or Information:** These are resources that enable patients to be engaged in their healthcare decision-making process. Tools that use a variety of channels (smartphone app, social media etc.) to enable providers to e-connect with patients sending appointment reminders, educating, enabling medication adherence via reminders and collecting data.

Books, including e-books: normally written for scholars/researchers/professionals to share research findings or provide foundational knowledge in particular fields or textbooks for faculty and students to use in courses. Books can sometimes be part of a series.

12.2 Definition Index: Research Data Management

Research Data Management: Software solutions that allow researchers to store, share, publish and find research data.

Institutional Repository: is an archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a university or research institution.

CRIS (Current Research Information System): is an information system to store, manage and exchange contextual metadata for the research activity funded by a research funder or conducted at a research-performing organisation such as a university.

Research Performance Analytics: Dedicated tools used to undertake sophisticated research performance analyses based on publication, citation and collaboration data. They are typically used to tracking research productivity and demonstrate a return on research value.

13 References

¹ ARL Statistics 2021