The Architect's Journey to Specification

Improving the built environment through stronger relationships between architects and building product manufacturers

In Collaboration with Deltek constructconnect

PUBLISHED NOVEMBER 2023 BY
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006
aia.org

© 2023 The American Institute of Architects All rights reserved.

ISBN: 978-1-57165-021-4

REPORT PREPARED BY:
Jessica Mentz, Manager, Market & Economic Research
Michele A. Russo, LEED AP, Vice President, Research & Practice
The American Institute of Architects

COLLABORATION:
AIA would like to thank Deltek, ConstructConnect, and Anguleris for their collaboration to support the research. This work would not have been possible without their support.

SURVEY ADMINISTRATION AND DATA TABULATION:
Werk Insight & Strategy

Table of contents

Letter from CEO

Architects play a fundamental role in specifying products and materials. This comprehensive study sheds light on shifting paradigms, particularly focusing on how architects learn about materials, interact with product manufacturers, and make informed material selections.

This research report is part of a series we began in 2016. The data in this study adds to the overall body of knowledge and enables us to track the evolution of various aspects of the product specification and selection process. The data shows that architects play a pivotal role in specification, with more than 80% being responsible for finding new products and materials used in a building project.

The report reveals significant shifts in firm culture since 2019. Factors such as the COVID-19 pandemic, subsequent economic contraction, supply chain issues, and the shift to remote work have had a profound impact on the profession. This has led to a decrease in risk taking, early product adoption, and collaboration. However, it has also sparked increased experimentation as supply chain issues have compelled firms to try products not previously specified.

The study underscores two initiatives that AIA continues to strengthen—our Conference on Architecture & Design and our education programs.

The findings of this study point to the value that design professionals place on opportunities to engage directly with building products and materials—and technical experts—at conferences and events. And it reveals the importance of lunch and learns, product libraries, and industry associations as mechanisms for early career professionals to monitor product trends.

One of the most intriguing findings from this study is the anticipated rise in the use of artificial intelligence (AI) for product research and specification. Around a fifth of respondents expect to use AI in this capacity.

Despite these changes, one thing remains constant. In their quest to create meaningful, functional, and beautiful spaces, architects value partnerships with manufacturers. The insights in this latest issue of our Journey to Specification report help guide us toward stronger partnerships as we create the built environment of tomorrow.

LAKISHA ANN WOODS, CAE
Executive Vice President and Chief Executive Officer
The American Institute of Architects

Chapter 1

Key findings

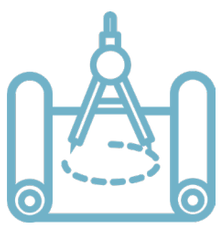
Key findings

This research report assesses changes to how architects learn about materials, interact with manufacturers and make informed product selections.

Influence

Firm position

Licensed architects remain the most influential firm position when it comes to learning about new products and materials, according to



86%

of architectural professionals

—with half noting them as the most influential player.

External

Manufacturers remain the largest external influencer for product learning—reported by 72% but half of small firms are also learning about new products from contractors.

Overall, architects, manufacturers, and consultants are the top key influencers when learning about products and materials.

Continuing Education

Continuing education remains a leading source of learning about new products

REPORTED BY

83%

and in-person lunch & learns/CE is the preferred interaction with manufacturers

REPORTED BY

77%

CE and webinars remain architectural professionals' most-used source for keeping on top of product and material trends.

Firm culture

Firm culture has shifted significantly since 2019—risk taking, product adoption, and collaboration have significantly declined since the pandemic.

This is likely an impact from the COVID-19 pandemic, supply chain issues, and remote work—all of which have contributed to a shift towards risk-aversity and a less collaborative culture.

Key findings

Next gen ideas

Younger architects are turning toward different sources of information from the ones prior generations have used.

They are significantly more likely to use lunch & learns, products from colleagues' projects, product libraries, and industry associations to monitor product trends.

A.I.

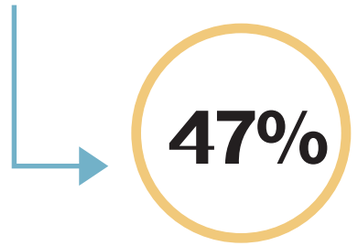
A fifth of the respondents expect to use artificial intelligence (A.I.) for product research and specification.

However, a quarter of principals and a third of project managers expect the same, suggesting it will grow notably.

Events

For those that attend in-person events and conferences, the largest share want to ask questions and engage with exhibitors.

However, the most important activity is to see and feel products—reported by



Manufacturers

The most important needs from a manufacturer remain the same as in 2016—responsive/ knowledgeable reps and websites that are easy to navigate.

Despite the high importance architects place on these needs, they remain the areas with some of the largest gaps in satisfaction vs importance, particularly the ease of navigating websites.

Chapter 2

Decision makers and influencers

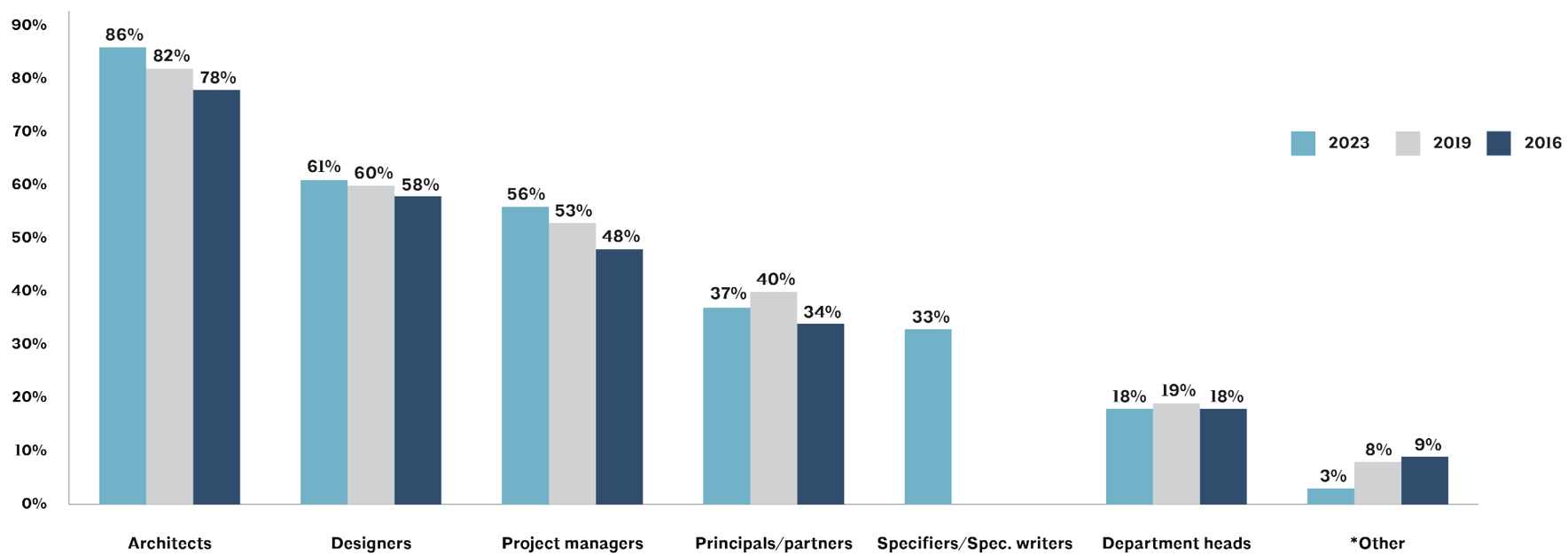
Researching new products and materials

Consistent with prior years, architects remain vital to specification with more than 80% of architects responsible for finding information about new products and materials.

Many designers and project managers are also likely to have a role in researching new products and materials at the majority of firms, 61% and 56% respectively. And while specifiers/spec writers are important, architects are significantly more likely to be involved in discovering and considering new materials.

Architects retain the primary responsibility for finding information about new products and materials within firms

Share of respondents indicating whose role it is to find out information about new products/materials



Note: The answer option "Specifiers/spec writers" was added to this question in 2023, thus tracking data is not available.

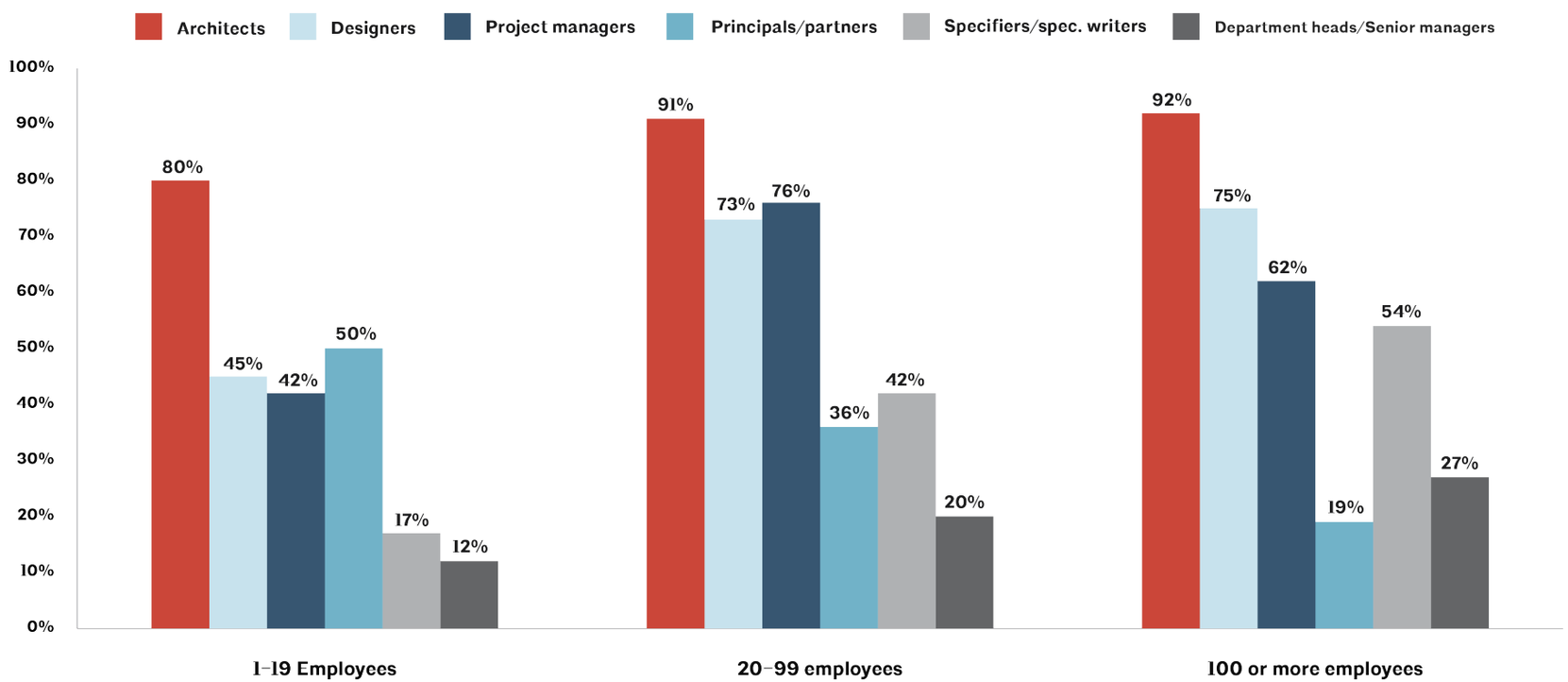
Researching new products and materials

There were some differences across respondents by firm size.

- While architects remain the most frequently involved in researching new products and materials across all firm types, firms with 20 or more employees are most likely to have architects fill this responsibility at their firm.
- Designers, project managers, and specification writers were also more involved at firms with 20 or more employees and firms that are multidisciplinary.
- Principals/partners, on the other hand, were more hands-on in smaller firms, which are also more likely to be single-disciplinary.

Spec writers, designers, and project managers are more influential in larger firms than in smaller ones, while principals play a more active role in smaller firms

Share of respondents indicating whose role it is to find out information about new products/materials, by firm size



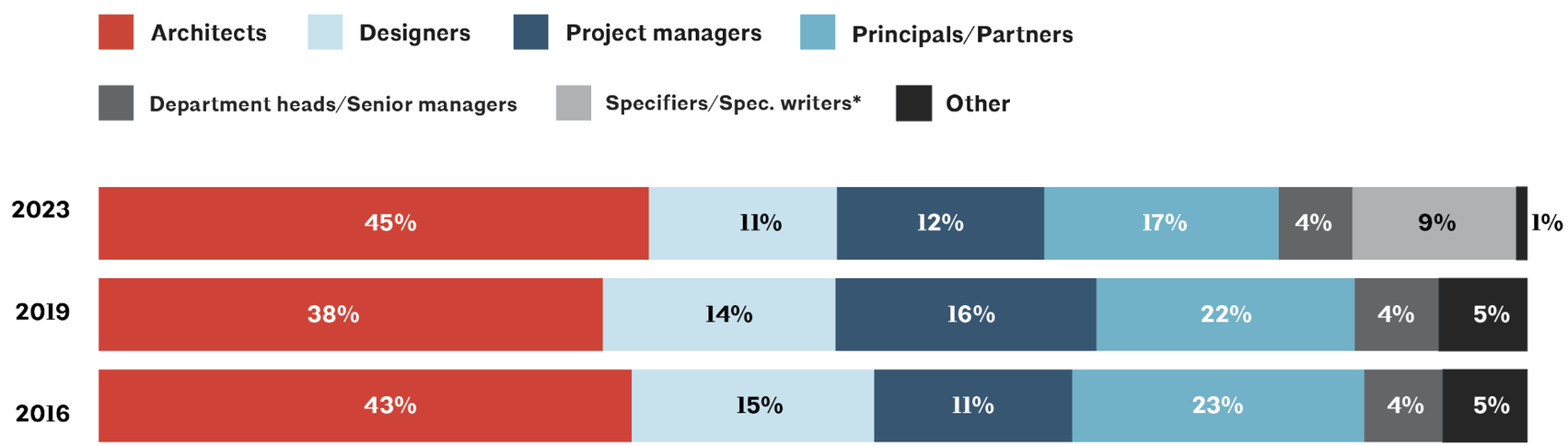
Influential in new products/material selection

Architects are not only the most likely to be involved in finding product information, they are also the role that is most influential in firms.

- In 2023, nearly half (45%) of respondents noted that architects are the most influential in finding information on new products and materials for their firms, an increase from 38% in 2019, though consistent with 43% that reported the same in 2016.
- Principals/partners were the second most commonly seen as influential (17%), lower than their reported influence in 2016 and 2019 (23% and 22%, respectively).
- At lower levels, some respondents reported that project managers (12%), designers (11%), and specifiers (9%) were influential.

Architects remain the most influential in finding information on new products and materials

Share of respondents indicating who is the most influential in finding information on new products and materials for their firm



*Note: *The answer option "Specifiers/Spec writers" was added to this question in 2023, thus tracking data is not available. Additionally, the answer option "Interns" was removed from this question in 2023.*

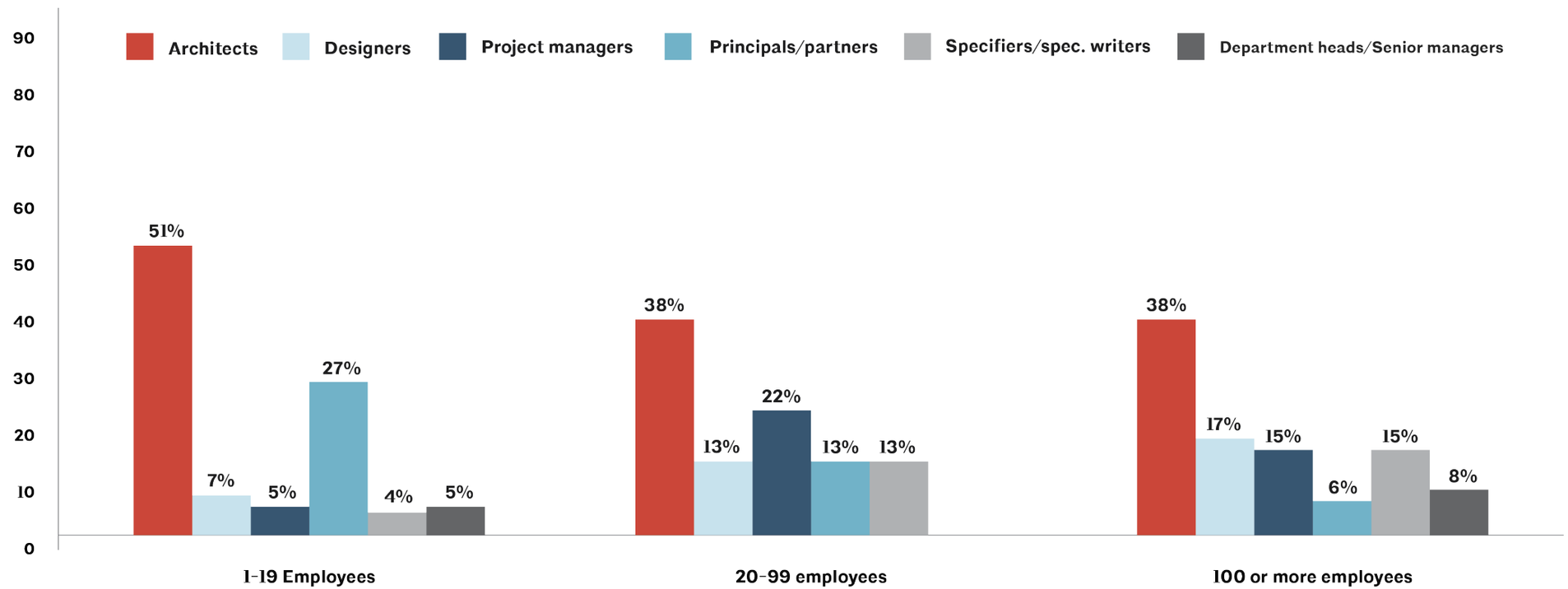
Influential in new products/material selection

There were some differences by firm size.

- Overall, architects are influential at all firm types, but they are significantly more likely to be the most influential voice when it comes to finding information on new products and materials at small firms—51% of respondents at small firms reported architects as the most influential compared to 38% at other sized firms.
- Principals/partners are also significantly more likely to be most influential in finding information on new products, especially at small firms, whereas they play very small roles at the largest firms (over 100 employees).
- At larger firms (more than 20 staff), principals/partners are able to distribute the specification work to other roles in the firm, in particular project managers and designers.

Architects and principals are most influential in finding information on new products and materials at small firms

Share of respondents indicating who is the most influential in finding information on new products and materials for their firm, by firm size



*Note: *Specifiers/Spec writers added in 2023*

Influencers as sources of information on new products and materials

When it comes to learning about products/materials, architects are primarily influenced by their colleagues, a consistent trend seen since 2016.

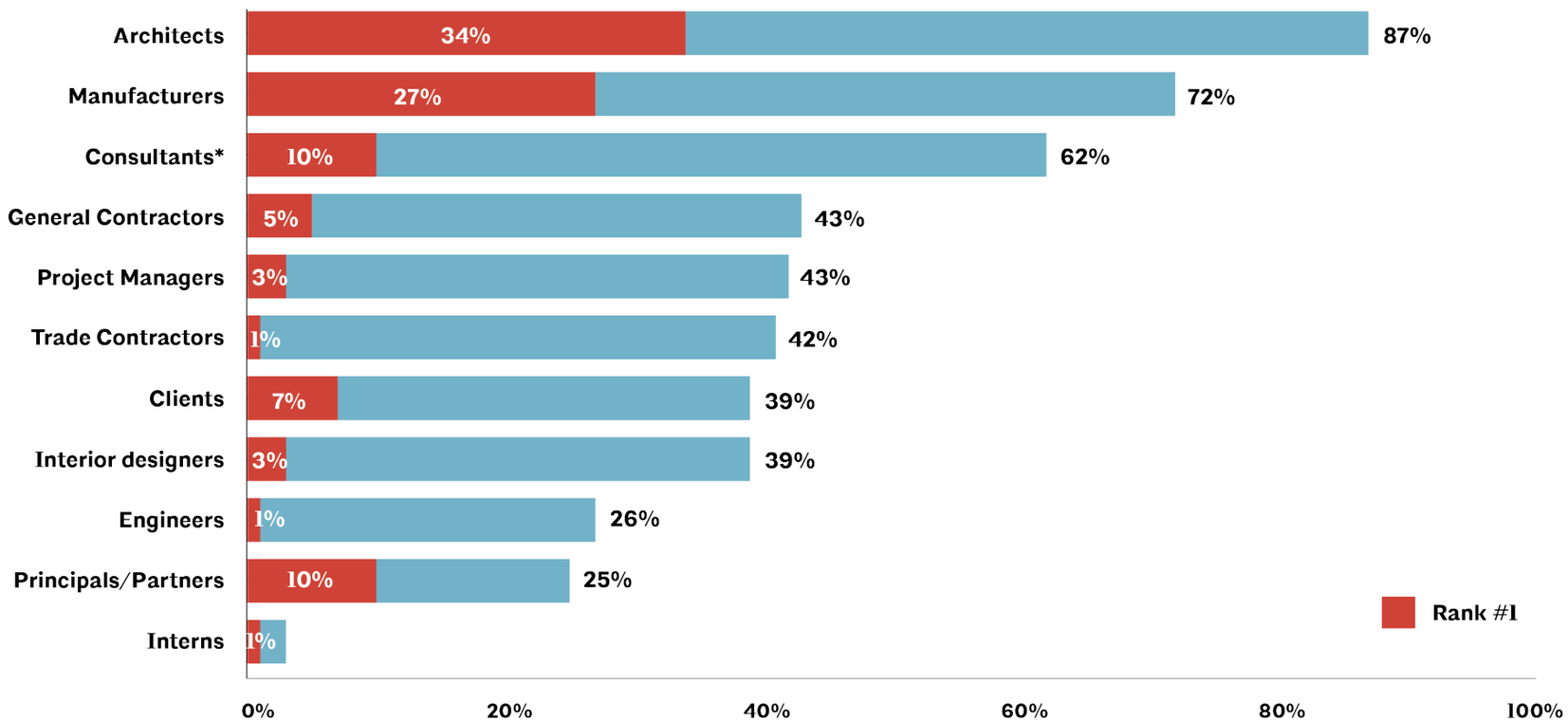
- In 2023, 87% of respondents ranked architects among their top five key influencers.
- Architects were also the most likely to be ranked as the most important influencer, at 34%.
- When clients or partners/principals were selected as a top five influencer, they were more likely to be placed as the most important.

Over time, there were two notable shifts. Architects, manufacturers, and trade contractors were significantly more likely to be considered key influencers in learning about products and materials in 2023 than in 2019, while principals/partners and interns were significantly less likely to be considered key influencers in learning about products:

- Architects: 87% reported architects as an influential source of information in 2023, compared with 81% in 2019 and 76% in 2016.
- Manufacturers: 72% reported manufacturers as influential, compared with 64% in 2019 and 66% in 2016.
- Trade contractors: 42% cited trade contractors as influential in 2023, compared with 33% in 2019.
- Principals/partners: 25% noted partners as influential in 2023, compared with 36% in 2019 and 32% in 2016.

Architects, manufacturers, and consultants are the top key influencers when learning about products and materials

Share of respondents reporting who are the top five key influencers when learning about products/materials on an importance scale, and those noted as most important



Note: *external consultants/thought leaders in 2016

Influencers as sources of information on new products and materials

For respondents over 58 or older, the most important influencers for learning about new products and materials were significantly different:

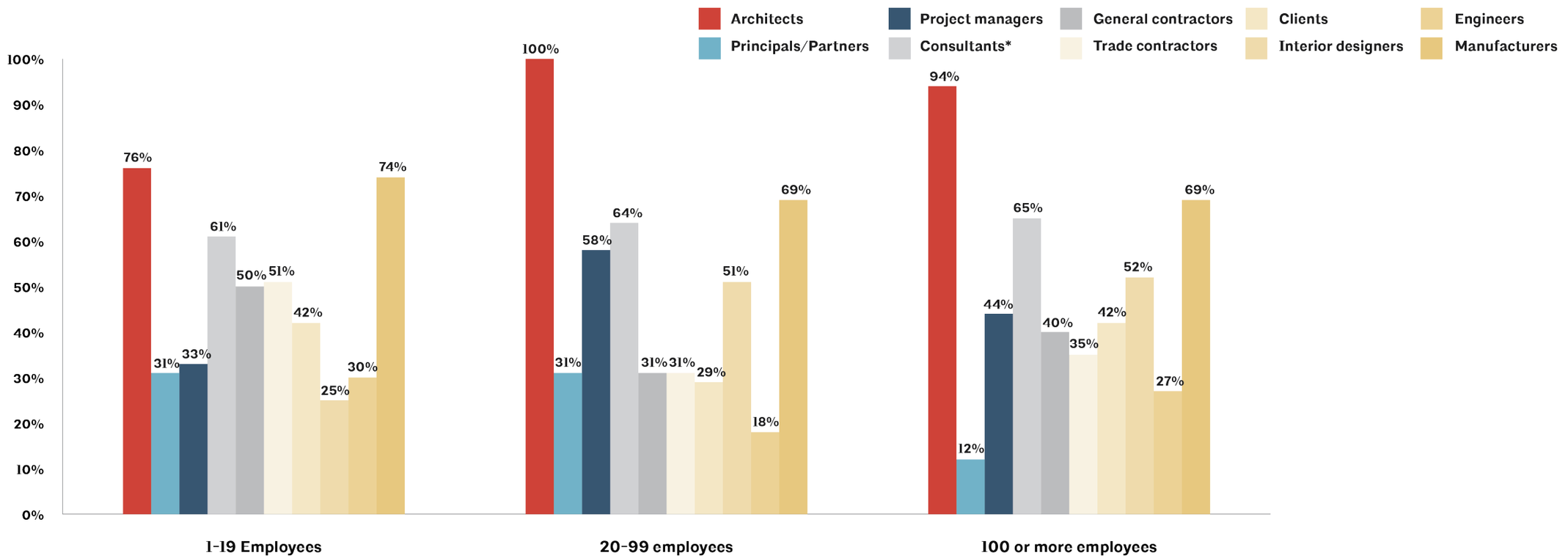
- Less likely to report architects as a top influencer: 76%, compared with 94% of those under 58
- More likely to report clients as a top influencer: 49%, compared with 31% of those under 43 and 34% of those aged 43–57
- More likely to report engineers as a top influencer: 37%, compared with 19% of those under 43 and 18% of those between 42 and 57.

There were also some differences when comparing influencers across firm size.

- Architects were particularly influential at larger firms, where nearly all respondents reported architects as one of their top five influencers, compared with three-quarters of respondents from smaller firms.
- Smaller firms are more reliant on contractors for learning about new products and materials.

Smaller firms are more reliant on contractors for learning about new products and materials

Share of respondents who ranked each source in their top five key influencers in terms of learning about products/materials, by firm size



Note: *external consultants/thought leaders in 2016

Chapter 3

Information sources

Sources for product trends

Architects rely on multiple sources to keep on top of trends relating to products and materials.

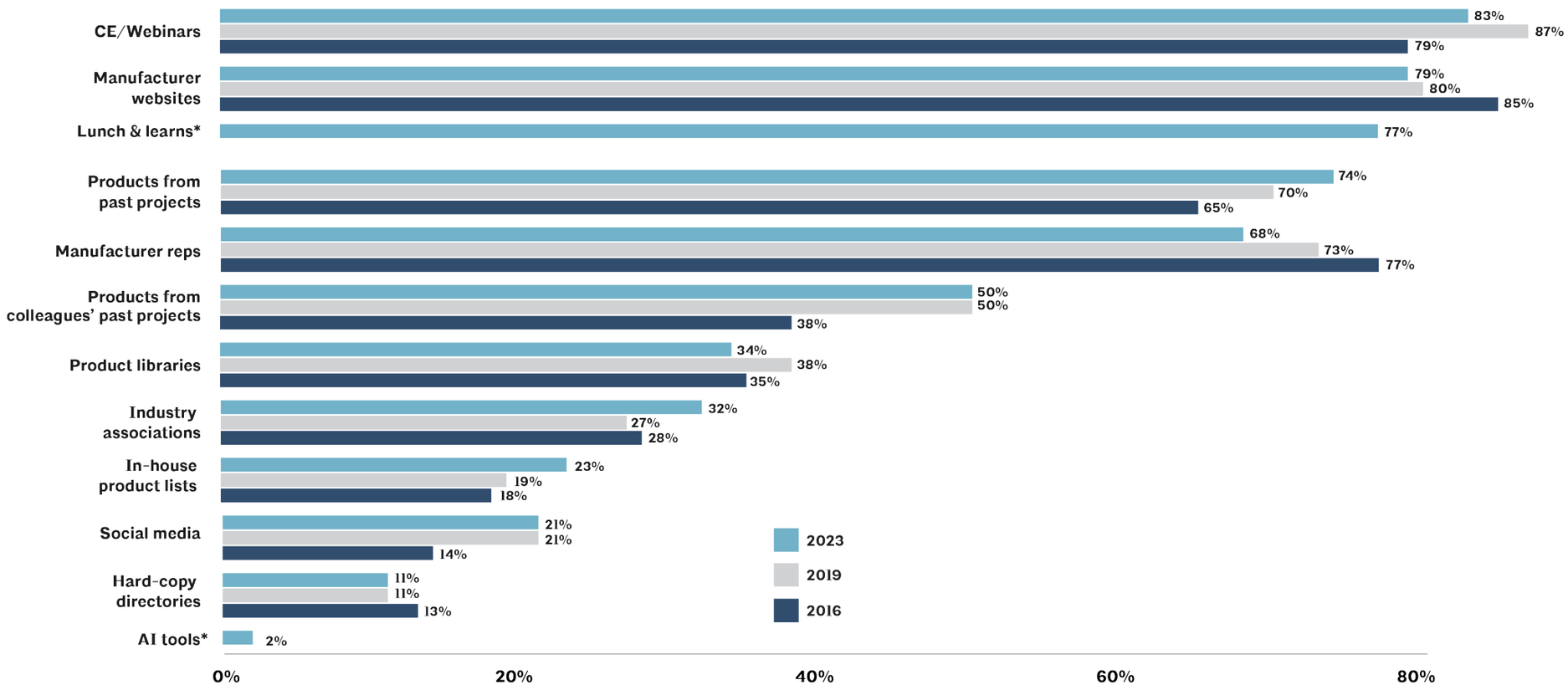
- Continuing education (CE) and webinars remain the most widely used—83% of respondents reported using them in 2023.
- Manufacturer websites are also commonly used by architects (79%) since they want quick, easy access to information.
- Lunch and learns (77%), where they have the opportunity to see and handle new products, were also widely used.

Continuing education/webinars remain architects' most used source for keeping on top of trends in products and materials

Share of respondents selecting which sources of information they use to keep on top of trends relating to products/materials

There were some changes over the last seven years.

- Products used on past projects have grown as a source of trends over time, suggesting increased risk aversion.
- Slightly more architects are looking at industry associations as a source of materials information in 2023.
- A.I. has not yet become a source of information for architects.



*AI tools were added as an answer option in 2023; lunch and learns were split from continuing education/webinars in 2023

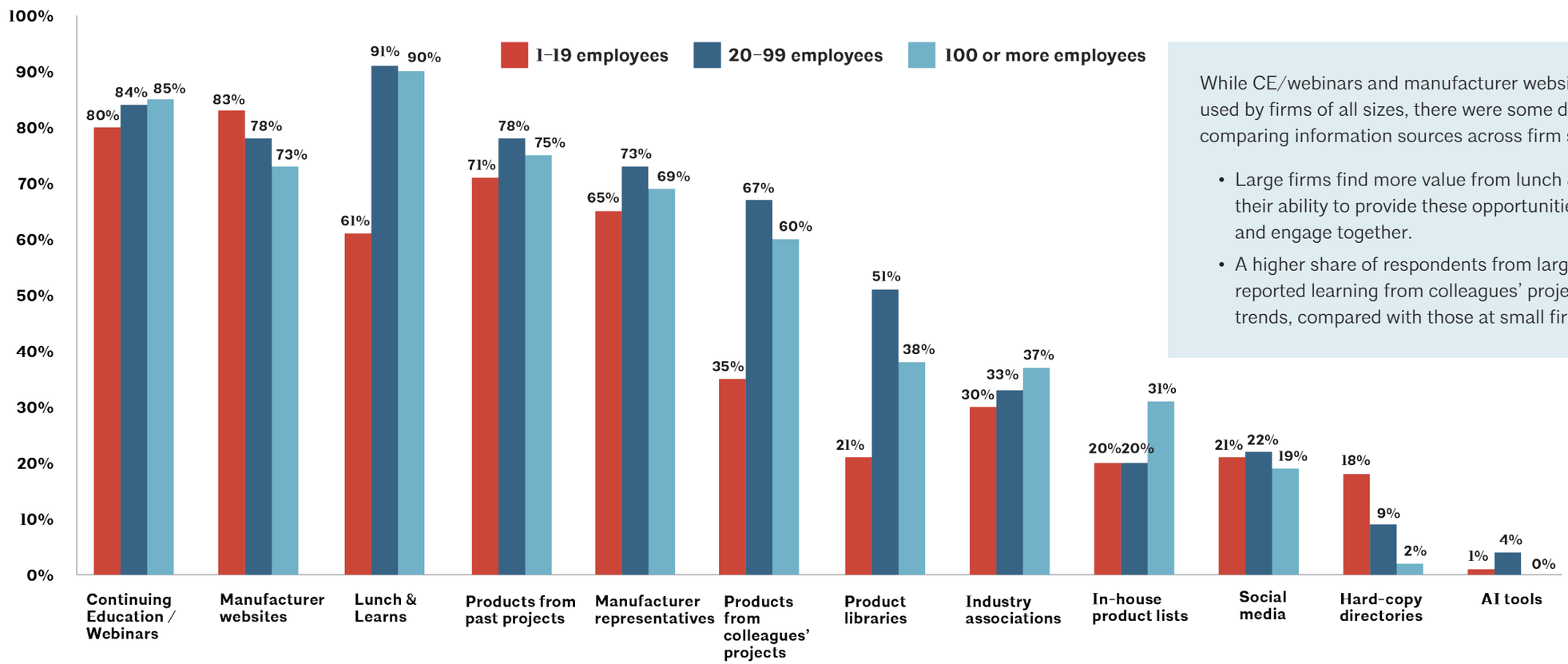
Sources for product trends

There were some significantly different sources for product trends by respondent age.

- Younger architects (42 and younger) are significantly more likely to use lunch & learns: 94%, versus 77% of those aged 43–57 and 68% of those over 57.
- Younger architects were also significantly more likely to learn from colleagues' projects: 83%, versus 46% of those aged 43–57 and 37% of those over 57.
- More than half of younger architects (42 and under) also looked to product libraries and industry associations to monitor product trends, with fewer than a third of older respondents reporting the same.
- Older architects (58 and older) are significantly more likely to use hard-copy directories as sources: 18% versus 6% of those under 43 and 7% of those between 42 and 47.

Larger firms get more value from lunch & learns and are learning from colleagues' projects

Share of respondents selecting which sources of information they use to keep on top of trends relating to products/materials, by firm size



While CE/webinars and manufacturer websites are commonly used by firms of all sizes, there were some differences when comparing information sources across firm size.

- Large firms find more value from lunch & learns, likely due to their ability to provide these opportunities for staff to interact and engage together.
- A higher share of respondents from larger firms also reported learning from colleagues' projects to stay on top of trends, compared with those at small firms.

Events and conferences

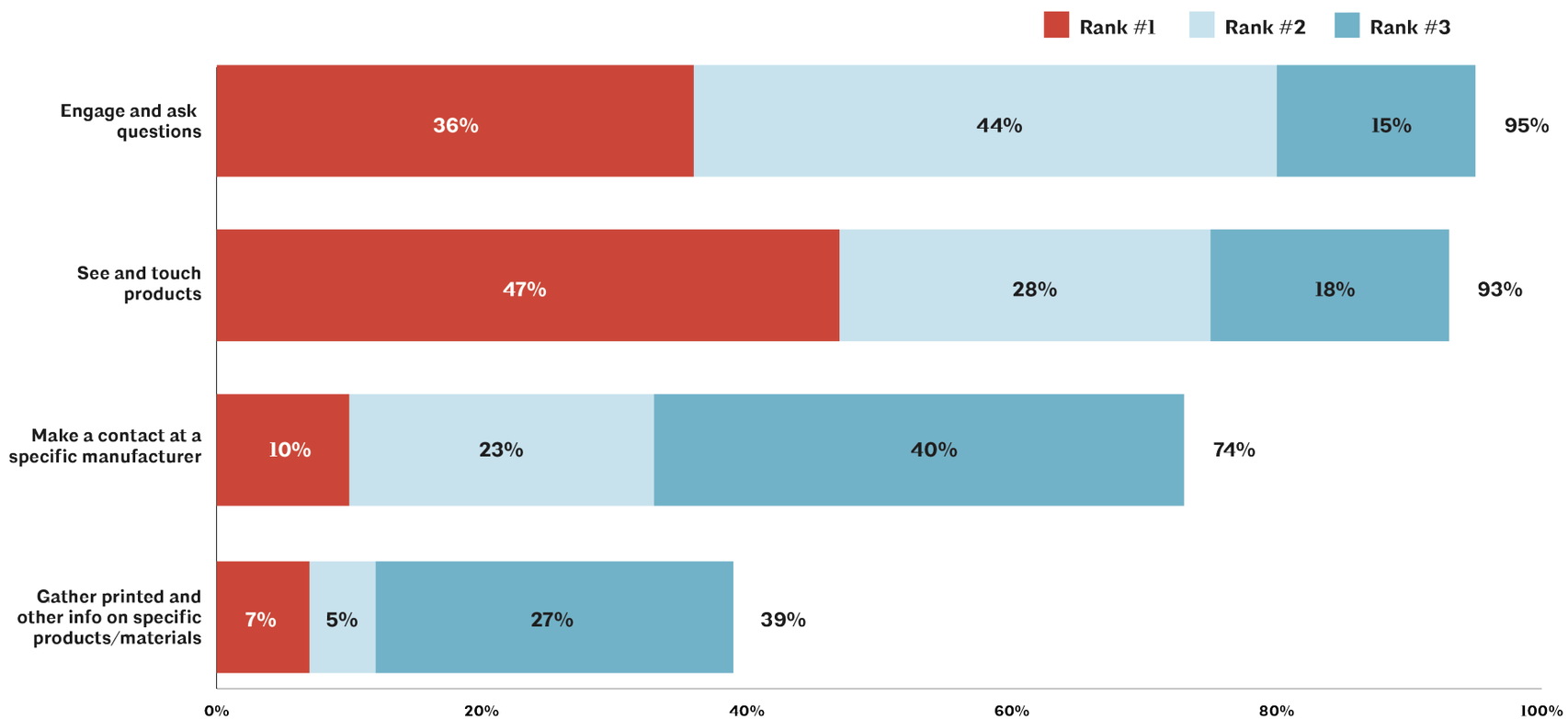
For architects and design professionals that attend events/conferences, nearly all placed the most value on in-person interaction with reps and products.

Many architects use events/conferences as sources of inspiration for new products—and to get direct answers to the questions they have from reps.

- Relationships matter. Making a contact with specific manufacturers was an important part of events, particularly for younger architects (80% of those under 43 and 78% of those aged 43 –57 rated it as important, as well as 66% of older respondents).
- Older architects still like printed information on specific products—52% rated it as a valuable reason to attend conferences.

In-person interaction with reps and products deemed a valuable part of events and conferences

Share of respondents that use events and conferences to monitor trends that ranked each attribute in their top 3 most valuable reasons they value events and conferences



Ways of discovering new products and materials from product manufacturers

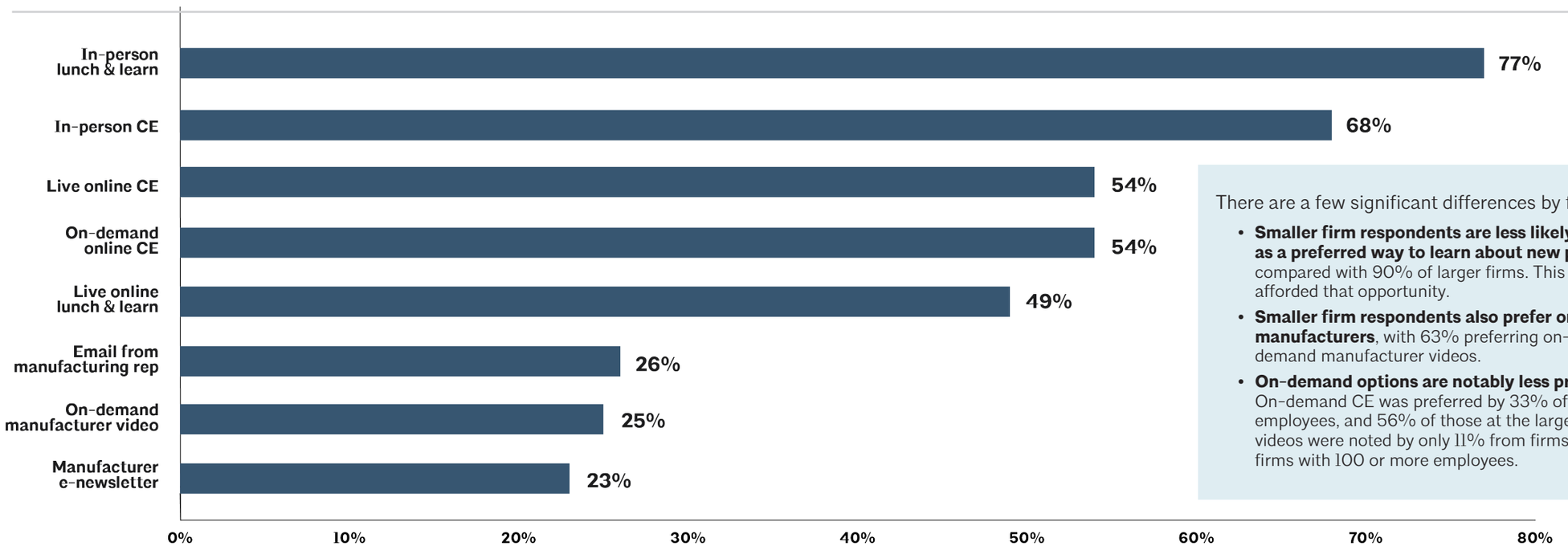
Architects not only use in-person lunch & learns to stay on top of product trends, but they also prefer them as the way to learn about new products and materials from product manufacturers.

This is especially true for architects under 43 (reported by 92%, versus 77% of those aged 43–57 and 70% of those over 57).

Overall, more than three-fourths (77%) of respondents like to learn through in-person lunch & learns, followed by in-person continuing education (68%). This is again likely due to the ability these formats offer for architects to engage directly with manufacturers, see products, and build relationships.

In-person lunch & learns are the preferred way for architects to learn about new products and materials

Share of respondents selecting which of the following ways they like to learn about new products and materials from manufacturers



There are a few significant differences by firm size:

- **Smaller firm respondents are less likely to note in-person lunch & learns as a preferred way to learn about new products from manufacturers:** 62%, compared with 90% of larger firms. This is likely because they are less often afforded that opportunity.
- **Smaller firm respondents also prefer on-demand opportunities from manufacturers**, with 63% preferring on-demand CE and 33% preferring on-demand manufacturer videos.
- **On-demand options are notably less preferred by those at large firms.** On-demand CE was preferred by 33% of respondents from firms of 20 to 99 employees, and 56% of those at the largest firms, and demand manufacturer videos were noted by only 11% from firms with 20 to 99 employees and 23% from firms with 100 or more employees.

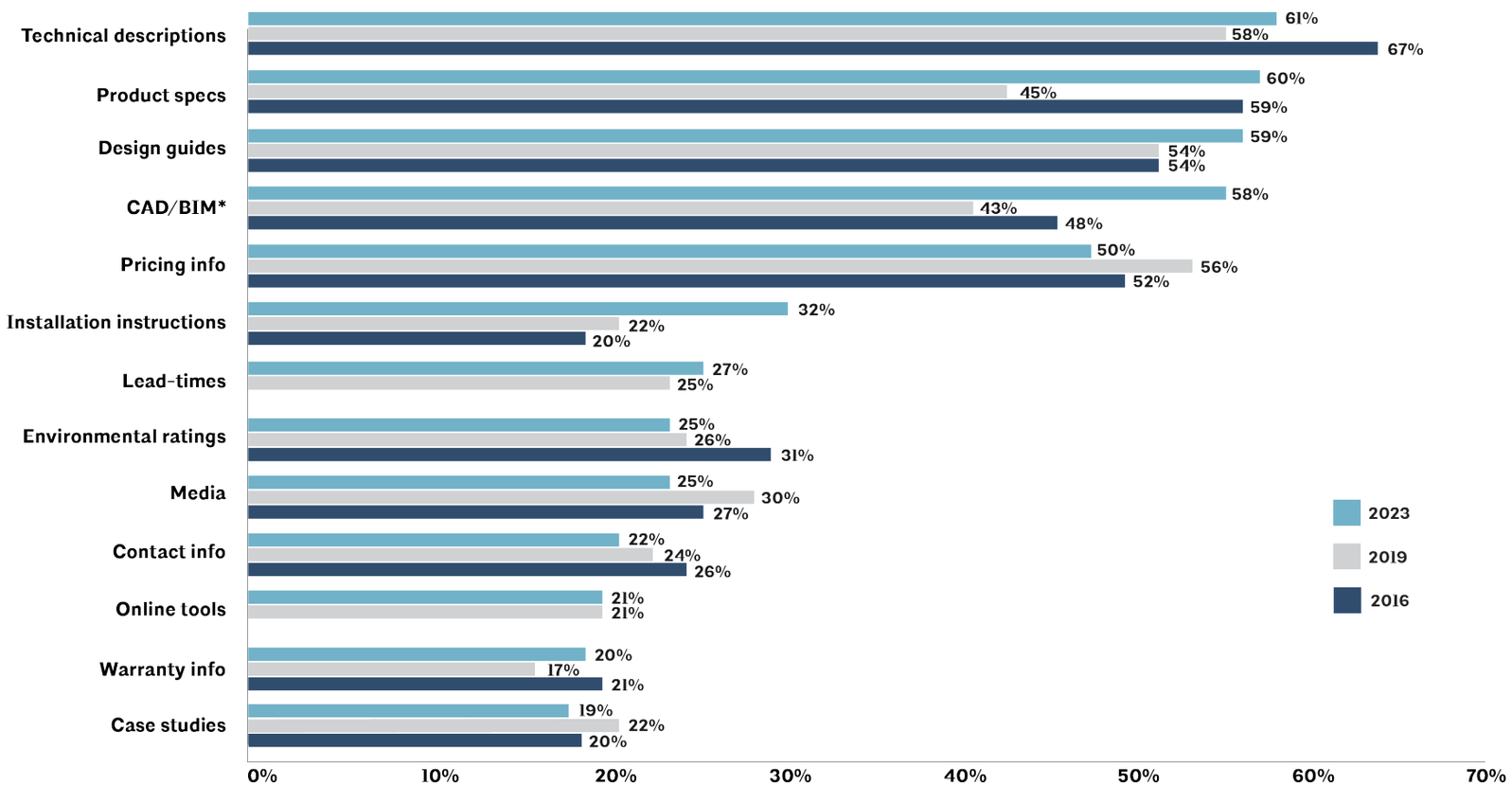
Product specification

When selecting products or materials, over half of architects seek technical descriptions, product specs, design guides, CAD/BIM, and pricing information on a typical project to inform their decisions.

Among these, preferences for using product specs increased significantly from 2019, returning to 2016 levels.

Architects need technical descriptions, product specs, and design guides when selecting a product or material

Share of respondents that selected each option within their top five used sources when selecting a product or material on a typical project



Note: Question type changed from a pick any to rank 5 in 2023, CAD/BIM separated in 2016 and 2023

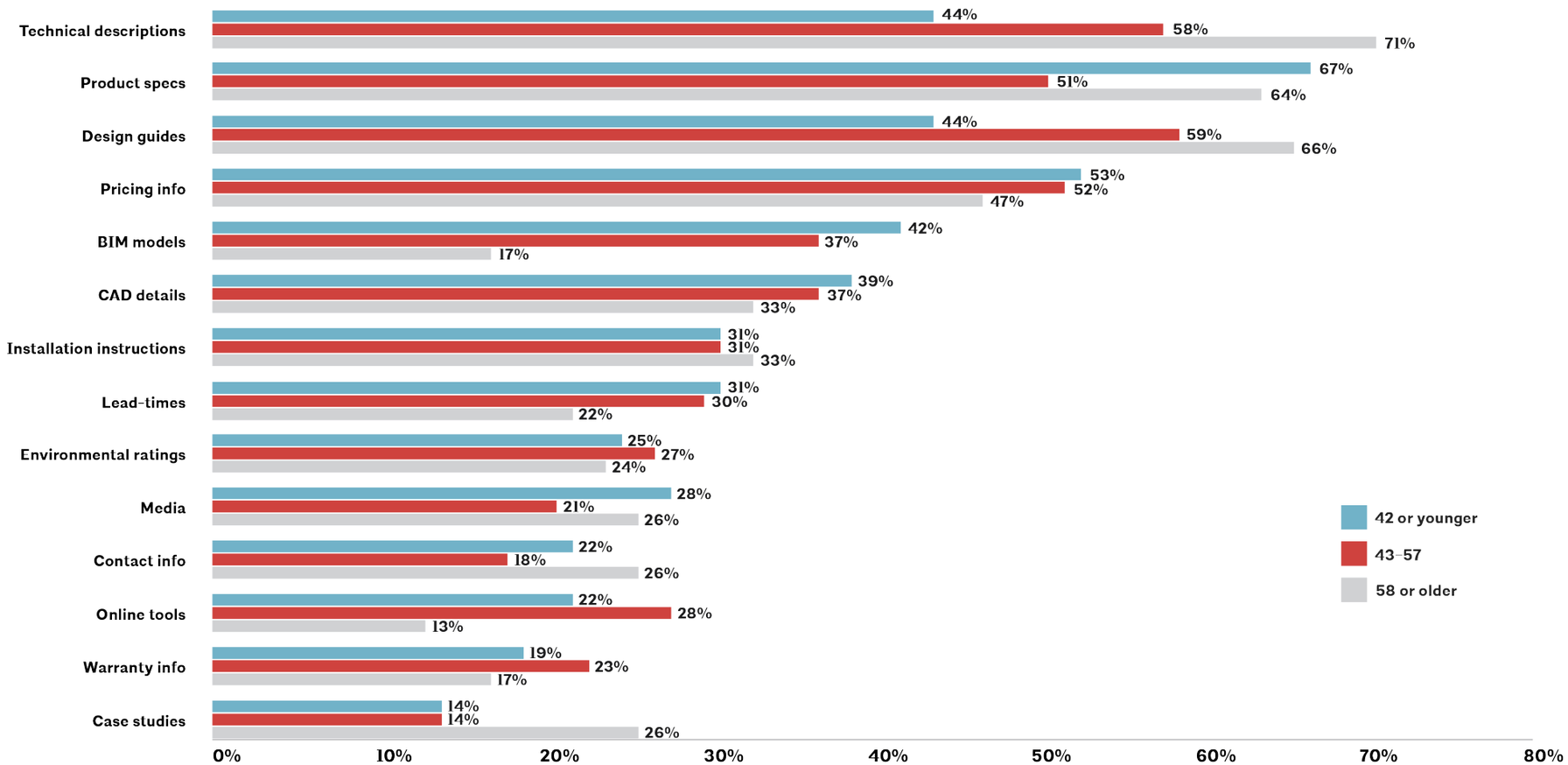
Product specification

While technical descriptions are the overall most sought out type of information when selecting products, younger architects are significantly less likely to use them compared to prior generations.

Younger architects are also significantly less likely to use design guides when selecting products or materials for projects.

Technical descriptions and design guides are less common among younger architects

Share of respondents that selected each option within their top five used sources when selecting a product or material on a typical project, by respondent age



Chapter 4

Firm culture and architect attitudes

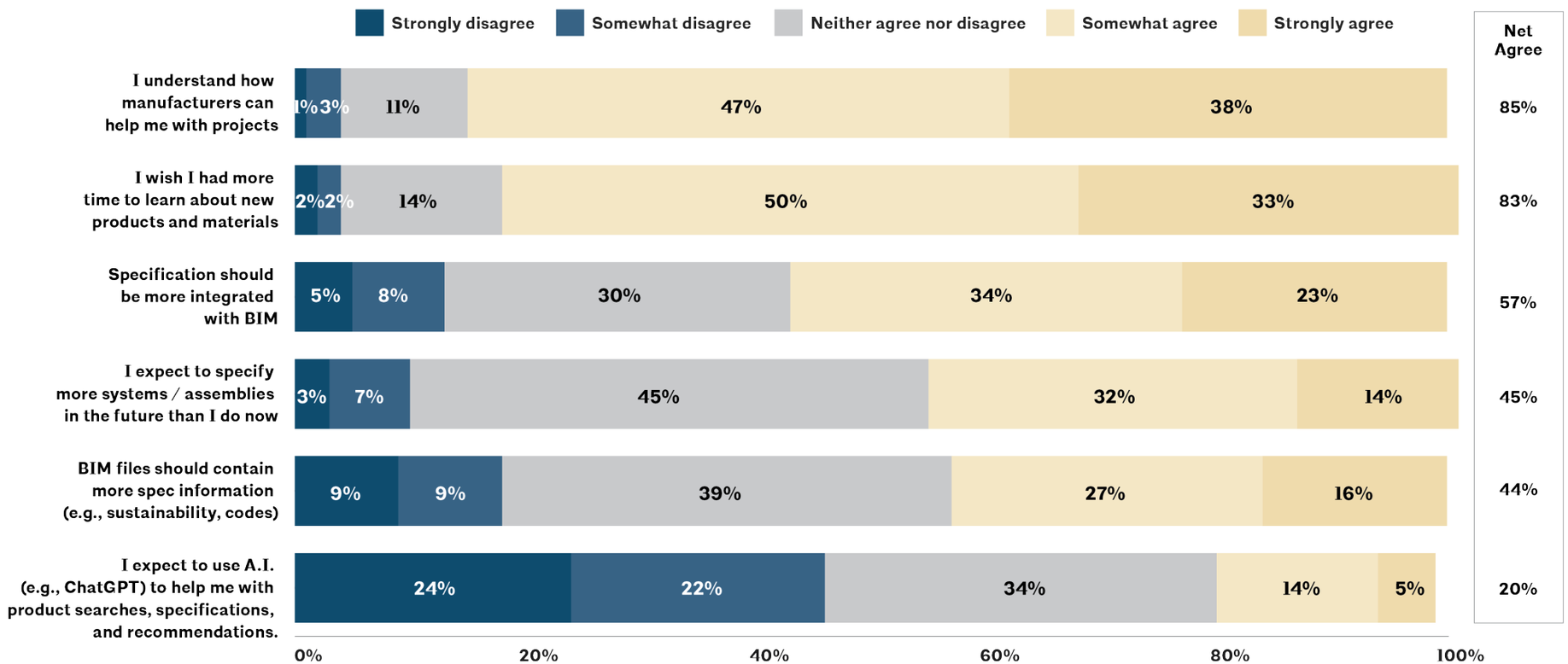
Relationships between architects & product manufacturers

The relationship between architects and product manufacturers is an important one but can take on different forms.

- Overall, 85% of architects agree that they understand how manufacturers can help them with their projects.
- 83% of respondents wish they had more time to learn about new products.
- The majority of architects also agreed that specification should be more integrated with BIM (57%).
- Architects were more mixed on whether they would be specifying more systems in the future and whether BIM files should contain more spec information.

Architects understand how manufacturers can help them with projects and wish they had more time to learn about new products

Share of respondents indicating whether they agree or disagree with each of the following statements



Relationships between architects & product manufacturers

There were some different views by different demographic groups:

Different views on A.I. based on position in firm:
Few respondents expect to use A.I. to help them with product searches, specifications or recommendations, particularly those in architect roles (only 10%). On the other hand, 34% of project managers do expect to use A.I.

Younger architect preferences:
Respondents under 43 are significantly more likely to expect to specify more systems than they do today (72%, compared with 50% of older respondents), and agree that specification should be more integrated with BIM (67%, compared with 34% of older respondents).

Larger firm respondents & BIM integration:
Respondents from larger firms were more likely to agree that specification should be more integrated with BIM compared with those from smaller firms (over 60% versus 49%, respectively).

The seven measurements of architect firm culture

To better understand the culture of firms our specifying architects work in, we asked them to rate their agreement with each opposing statement below on a scale of: “only slightly,” “somewhat,” or “strongly agree.”

Environmental “We have a strong focus on the environment and sustainability when it comes to specification”	**<– Environmental Focus –>**	**Non-Environmental** “We tend to not focus on the environment and sustainability when it comes to specification”
Outspoken “We have a dynamic and outspoken culture”	**<– Culture Of Interaction –>**	**Studied** “We have a quiet and studied culture”
Flexible “We keep our options open, stay flexible, & focus on the big picture”	**<– Planning Culture –>**	**Structured** “We focus on getting the job completed with structured early planning”
Risk Taker “We encourage any and all ideas, even if some will fail”	**<– Risk Culture –>**	**Risk Averse** “We prefer to use ideas which we know will be successful”
Open Ideation “We believe the best ideas come from working with external sources”	**<– Ideation Culture –>**	**Closed Ideation** “We believe the best ideas come from within the architecture studio”
Experimental “We prefer to experiment with new and different products / materials”	**<– Approach To Experimentation –>**	**Habitual** “We prefer to specify products/materials we have specified before”
Early Adopter “We are among the first firms to specify products / materials which are new-to-market”	**<– Approach To Innovation –>**	**Laggard** “We are among the last firms to specify products / materials which are new-to-market”

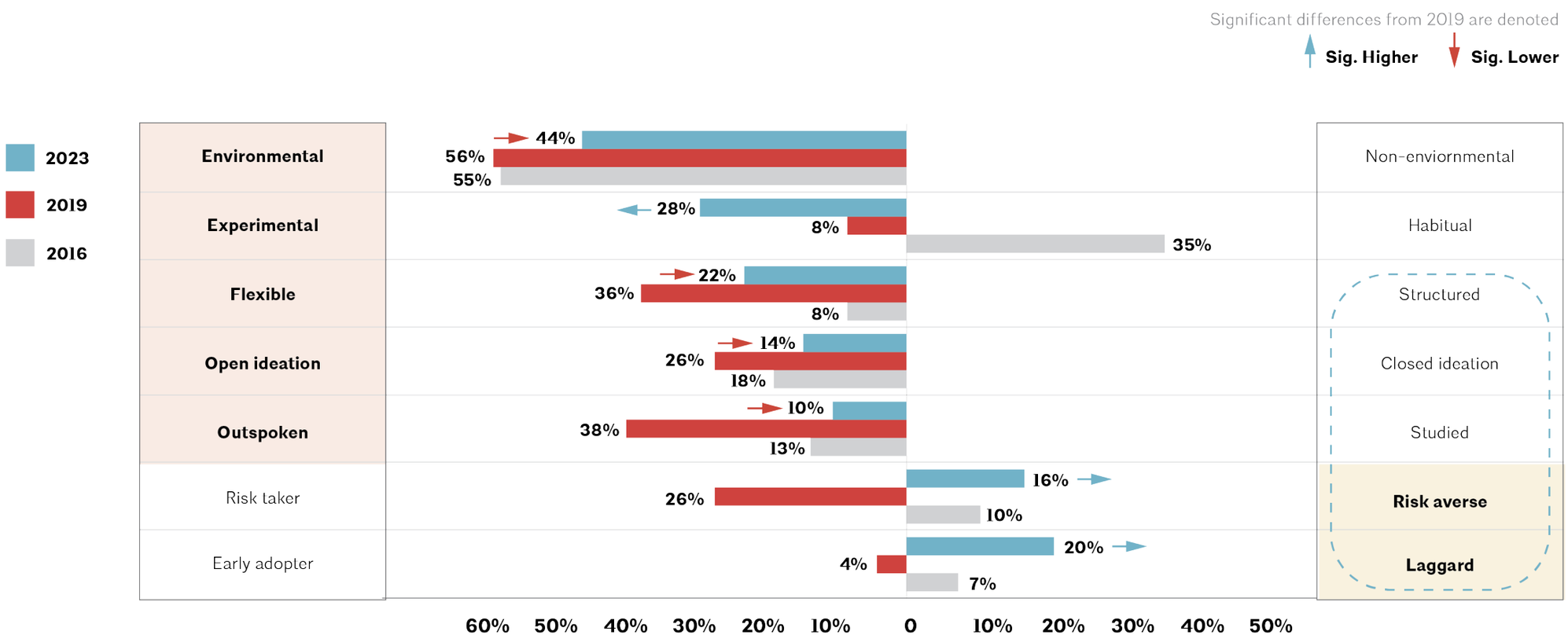
The seven measurements of architect firm culture

According to these criteria, firm culture has shifted significantly since 2019.

Risk taking, early product adoption, and collaboration significantly declined between 2019 and 2023. This is likely an impact from COVID and the ensuing recession, supply chain issues, and remote working, all of which may have contributed to a shift towards risk-aversity and a less collaborative culture. On the other hand, firms have become more experimental as supply chain issues have likely forced firms to try products they haven't specified before.

Firm culture has shifted significantly to a more risk-averse and less collaborative culture

Share of respondents indicating which statement best describes their organization



Chapter 5

Meeting the needs of architects

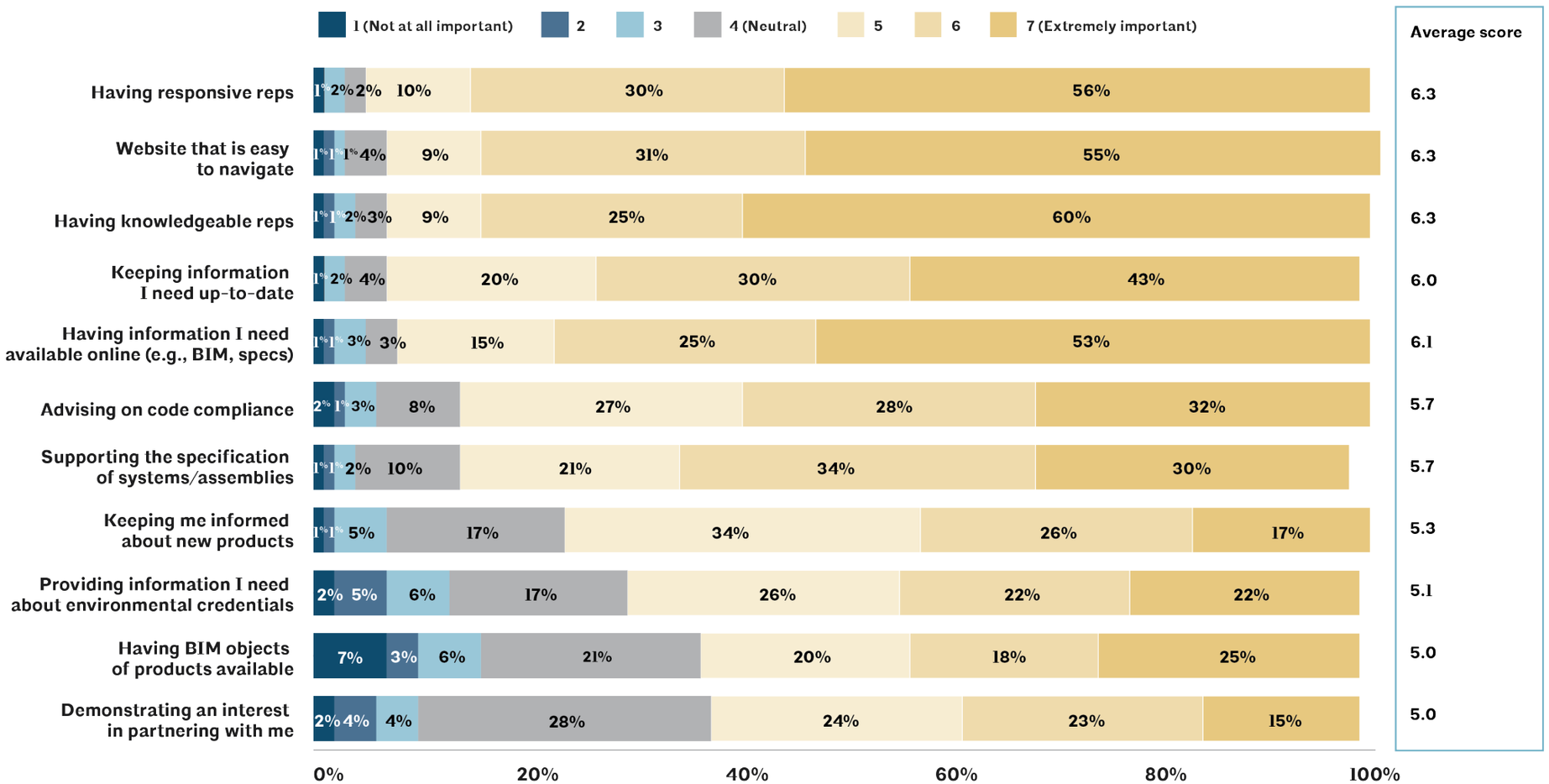
Importance

Architects find many things important when working with building product manufacturers.

Architects most need product manufacturers to have responsive reps and a website that is easy to navigate. They also want information readily at hand. While availability of BIM objects and partnering interest is of lower import, more than half of architects value these from product manufacturers.

Having a responsive and knowledgeable rep and an easy to navigate website are the most important attributes when working with product manufacturers (BPM)

Share of respondents rating how important each attribute is when working with a BPM and the average score for each



Importance

When comparing the importance architects place on different aspects of working with product manufacturers across firm size, job roles, and age, the greatest differences in responses are among younger and older architects.

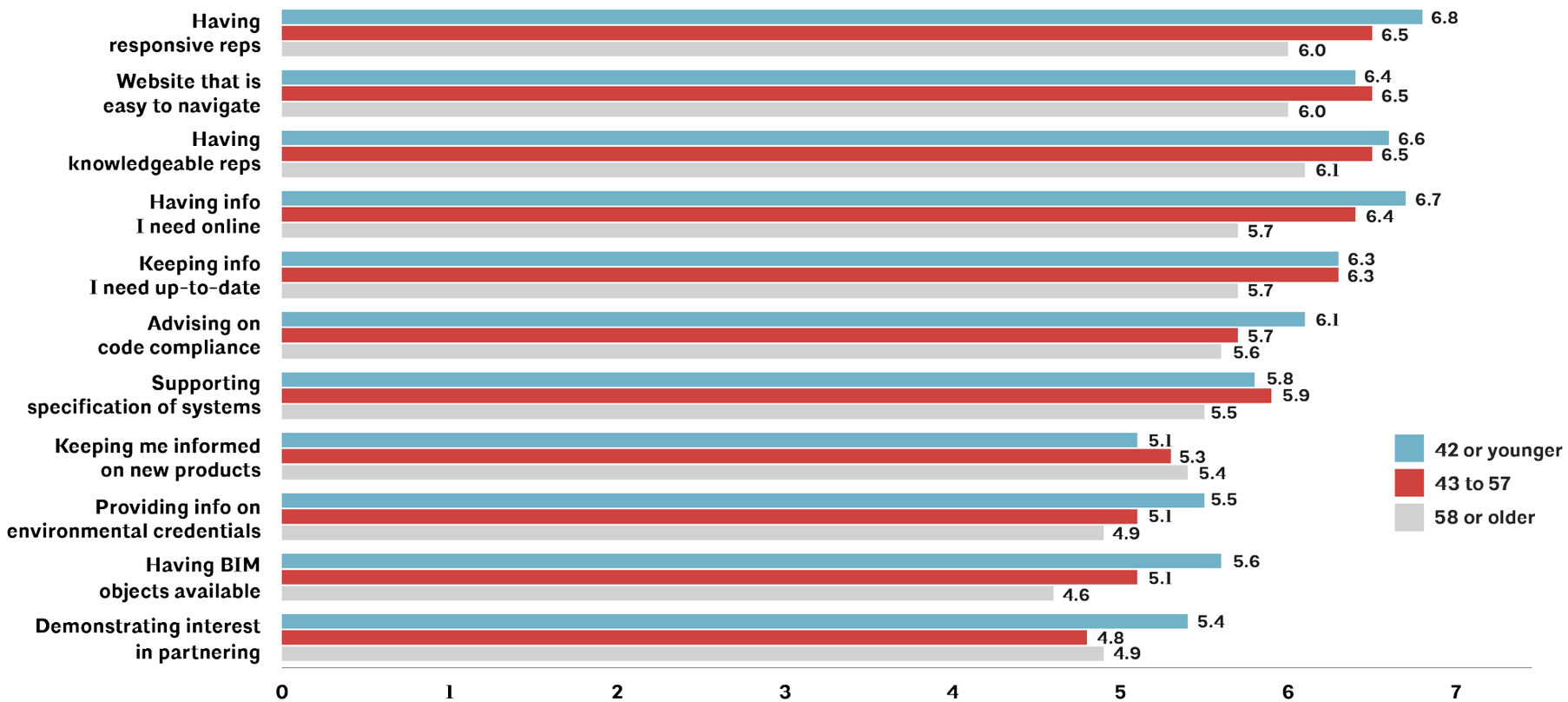
The digital manufacturer experience, for example, is significantly more important to younger architects who want information online and an easy-to-navigate website.

The digital manufacturer experience is significantly more important to younger architects

Average importance score for each attribute when working with building product manufacturers, by respondent age

There are two notable differences by job role:

- Partners/principles rate supporting specification of systems and keeping architects informed on new products as important, at an average of 5.9 and 5.5, respectively.
- For those in an architect role, supporting specification (rated at 5.4) and providing information on environmental credentials (4.8) are significantly less important than other aspects of working with manufacturers.



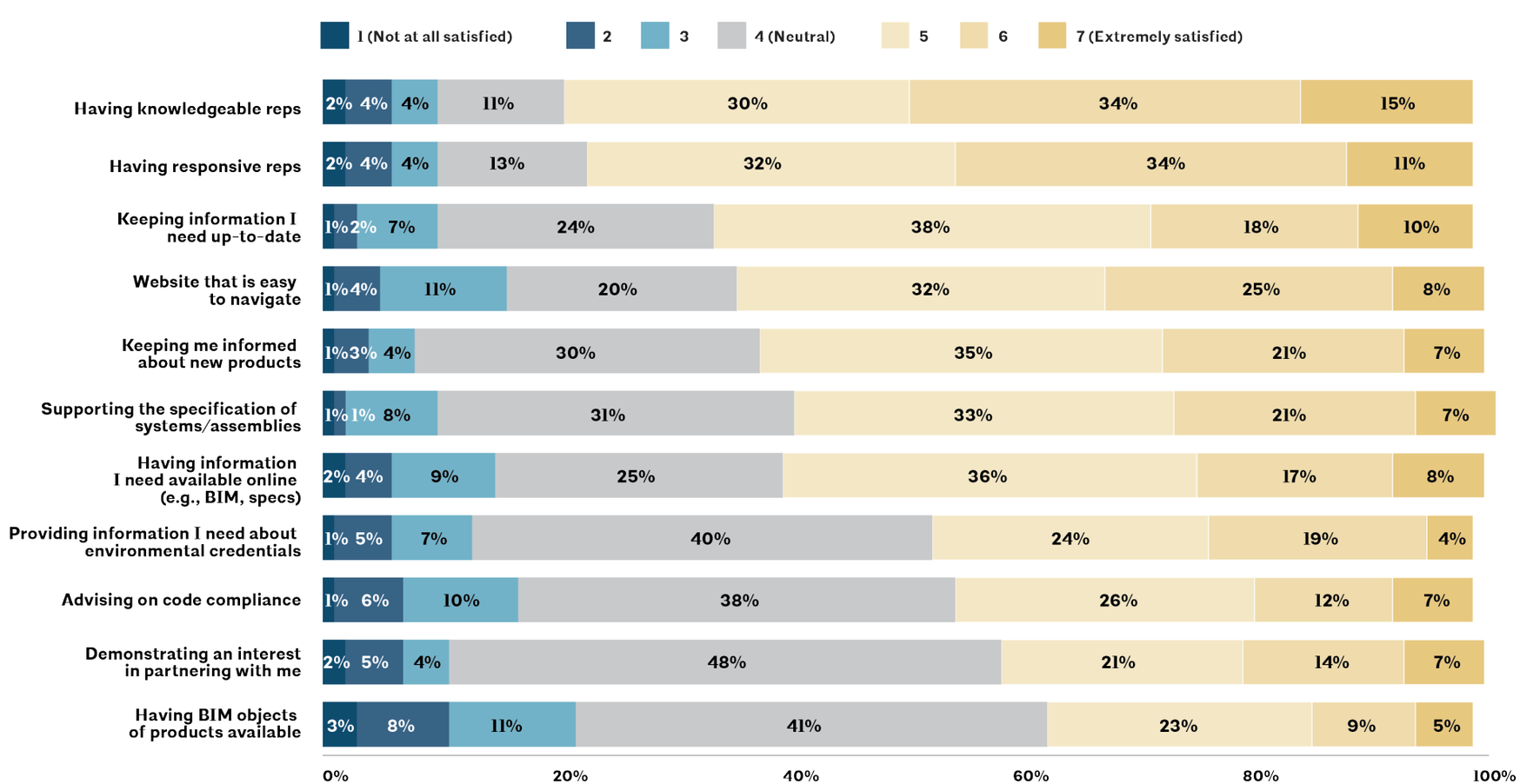
Satisfaction

In general, architects rated their satisfaction with building product manufacturers across all attributes as neutral/slightly satisfied.

Architects remain most satisfied with manufacturers reps' knowledge and responsiveness, which were also among the most important to architects when working with BPMs. Satisfaction has directionally increased across nearly all attributes from 2019 to 2023. The exception was architects' satisfaction with building product manufacturers' interest in partnering with them decreased.

Architects remain most satisfied with manufacturers reps' knowledge and responsiveness

Share of respondents indicating how satisfied they are with building product manufacturers on a scale from 1 to 7 for each of the following attributes; average scores for each attribute over time



Average score	2023	2019
Having knowledgeable reps	5.3	4.9
Having responsive reps	5.2	4.7
Keeping information I need up-to-date	4.9	4.3
Website that is easy to navigate	4.8	4.3
Keeping me informed about new products	4.8	4.7
Supporting the specification of systems/assemblies	4.8	N/A
Having information I need available online (e.g., BIM, specs)	4.7	4.3
Providing information I need about environmental credentials	4.5	4.3
Advising on code compliance	4.4	N/A
Demonstrating an interest in partnering with me	4.5	4.8
Having BIM objects of products available	4.2	3.7

Respondents across different firm sizes showed very little variation in their satisfaction with product manufacturers:

- Younger architects reported noticing manufacturer interest in partnering with them but want improvement in BIM model availability.
- Individuals in architect roles were significantly less satisfied in manufacturers' performance in keeping information they need up to date, keeping them informed about new products, supporting them in specifying systems, and providing information on environmental credentials.

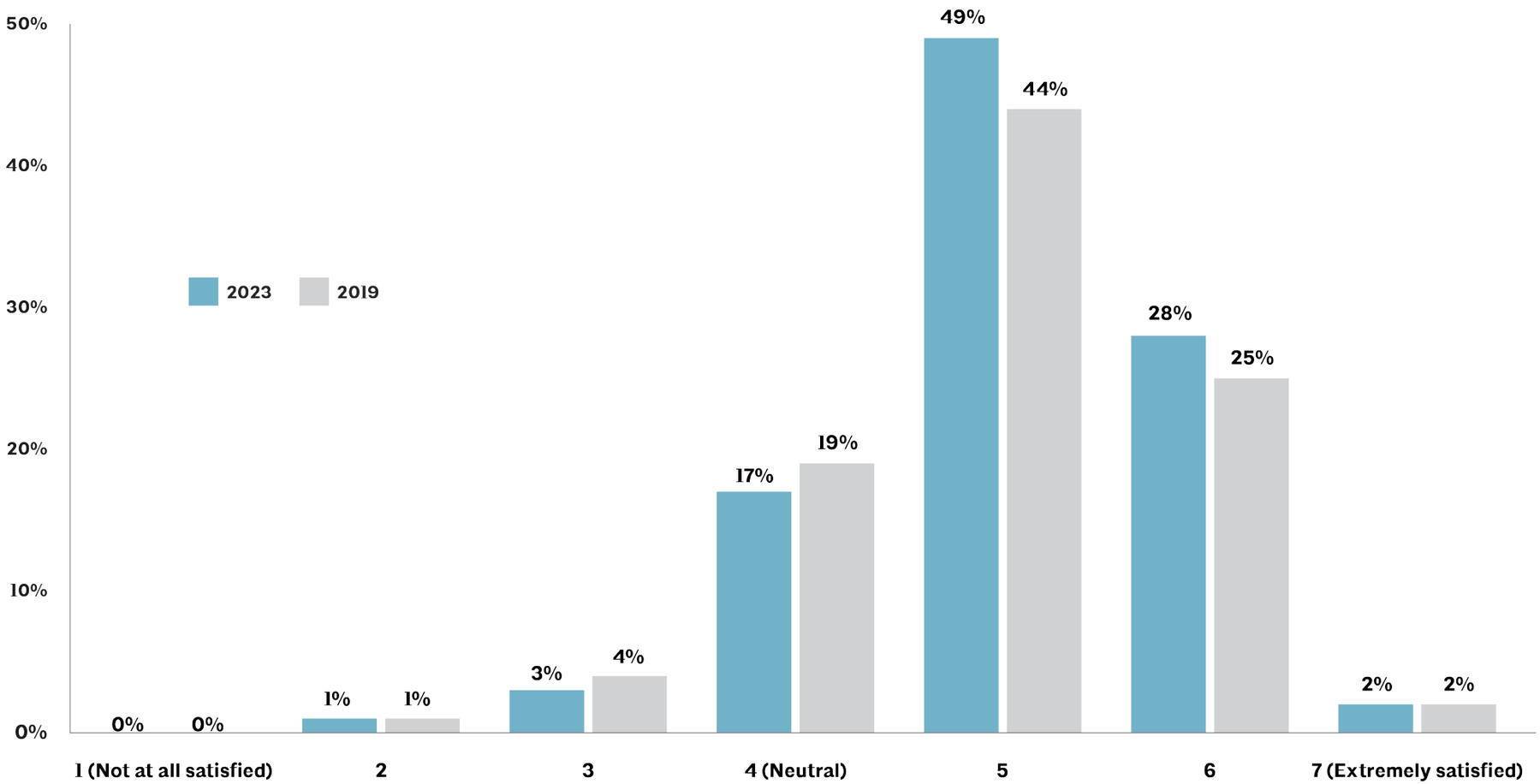
Satisfaction versus importance

Overall, satisfaction with how manufacturers provide architects information has directionally increased, though not significantly so.

Overall, architects rate their satisfaction across different elements as approximately 5 out of 7—leaving ample area for improvement.

Overall, architects are generally satisfied with the information building product manufacturers are providing for projects

Share of respondents



Satisfaction versus importance

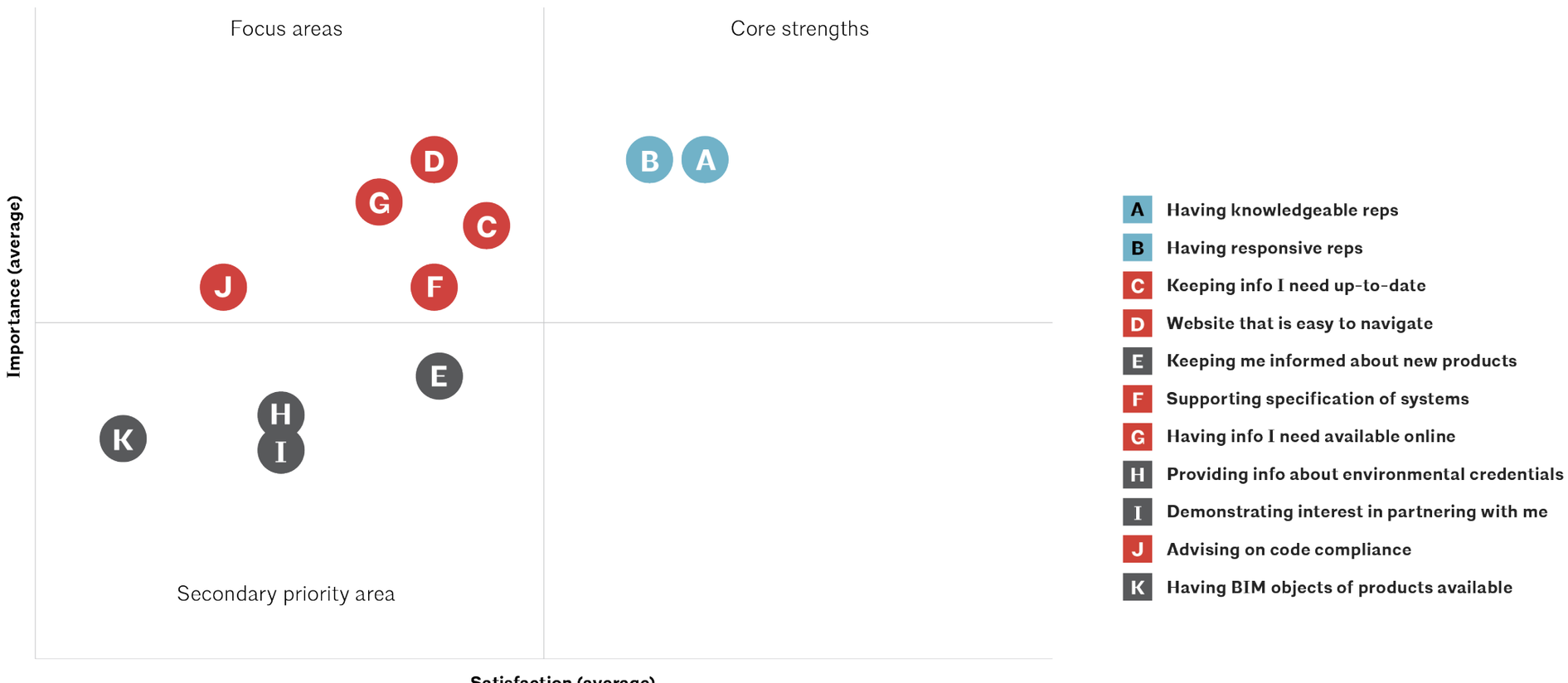
Satisfaction with various aspects of performance from product manufacturers ranges from 4.2 to 5.3 (out of 7).

In each area, there is more importance placed on the attribute than satisfaction level.

- In particular, manufacturers are still falling short in their websites—in both ease of navigation and available online information.
- There is an opportunity for manufacturers to be stronger partners in helping advise architects on code compliance and supporting their specification of systems.
- Satisfaction with BIM object availability is lowest.

Satisfaction with the performance of product manufactures continues to lag the level of importance architects place on each attribute

Average scores for satisfaction with product manufacturers and importance when working with them across each attribute



Chapter 6

Methodology & respondent profile

Methodology & respondent profile

The electronic survey that yielded the new data presented in this report was developed by AIA with support of project partners.

Survey programming and finalization, data collection, and tabulation were handled by Werk Insight & Strategy.

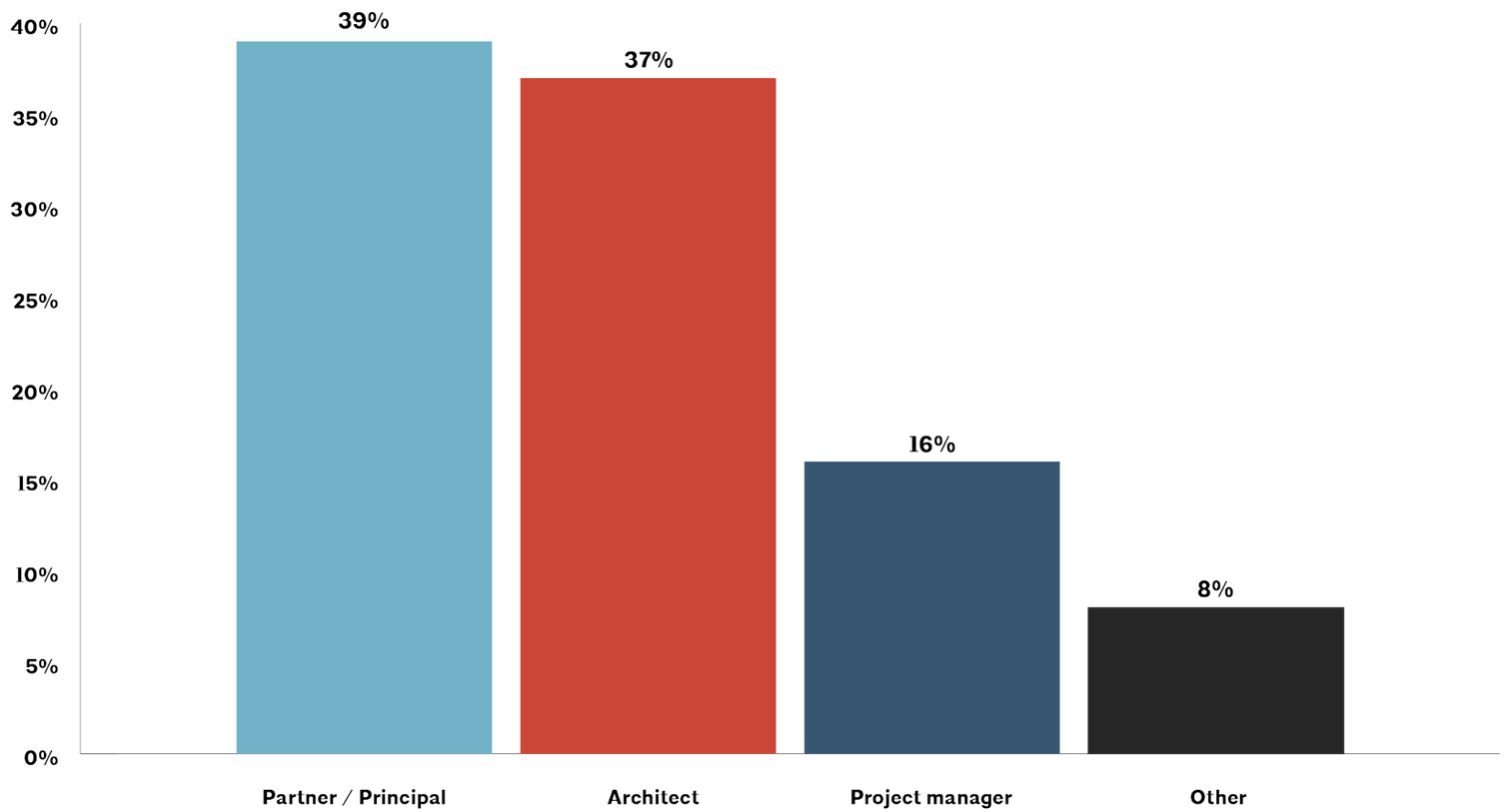
AIA sent the survey to a random sampling of 8,000 contacts, representative of AIA's membership composition, which itself is representative of the architecture profession. The study fielded through July and August, 2023, with a total of 183 completed surveys.

This study builds off research conducted by AIA in 2016 and 2019. Where available, longitudinal data findings are included.

Respondents tended to be more experienced professionals—42% were over 57, 39% were between 43 and 57 years old, and a fifth were 42 or younger. Correspondingly, 39% were firm partners/principals, and 89% were licensed architects. Nearly all respondents were involved in product specification, and they specified a wide range of materials in 2022 and 2023.

Respondents tended to play senior roles in their firms

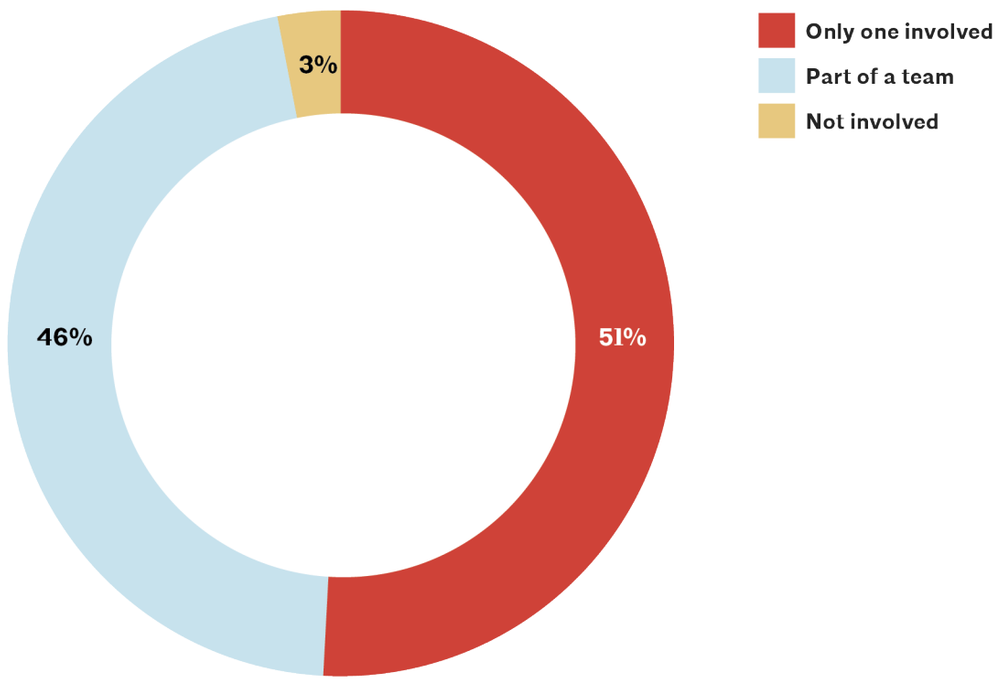
Share of respondents



Methodology & Respondent Profile

Nearly all respondents were involved in product specification

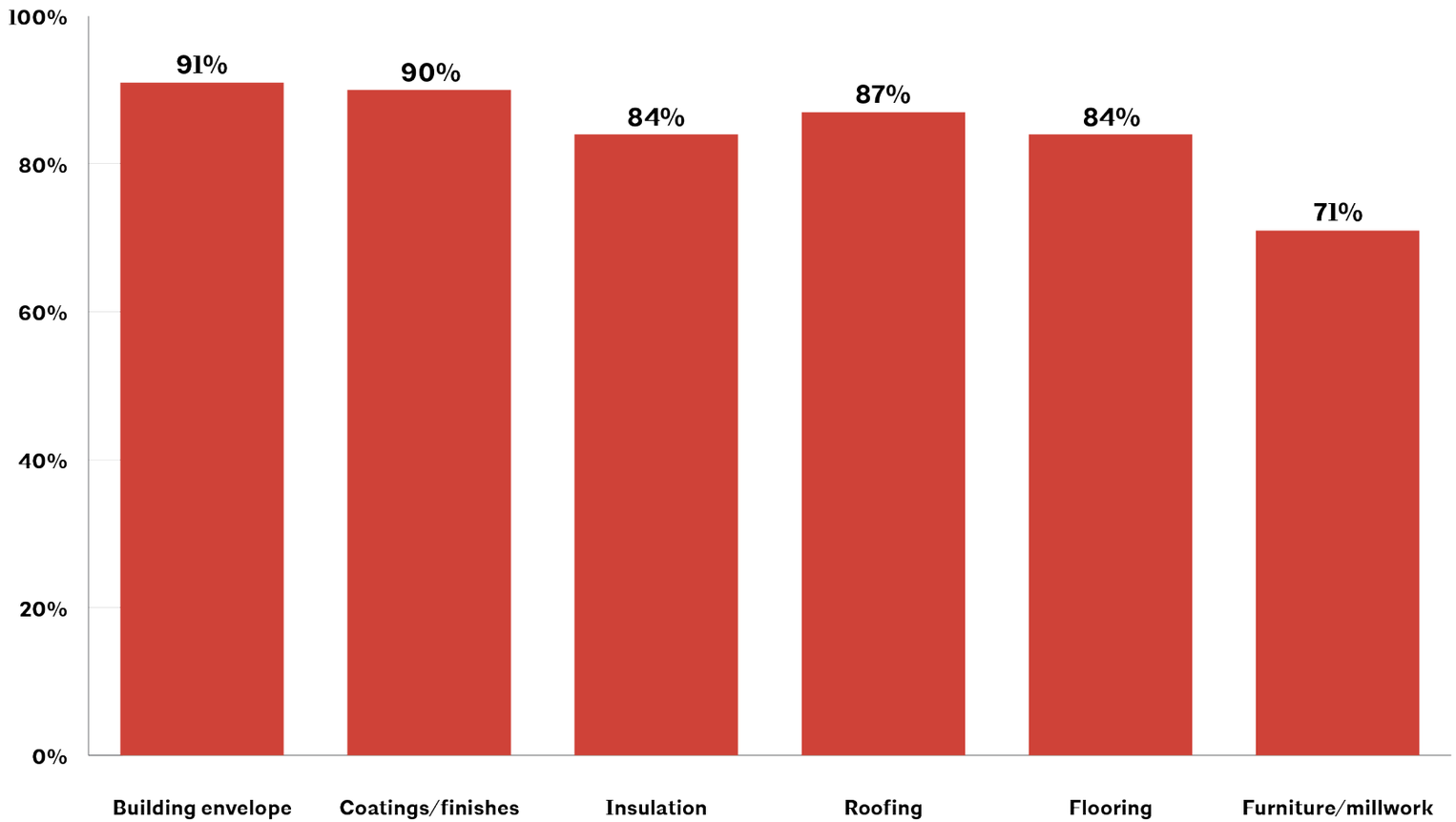
Share of respondents



Methodology & Respondent Profile

Respondents specified a wide range of products over the past year

Share of respondents



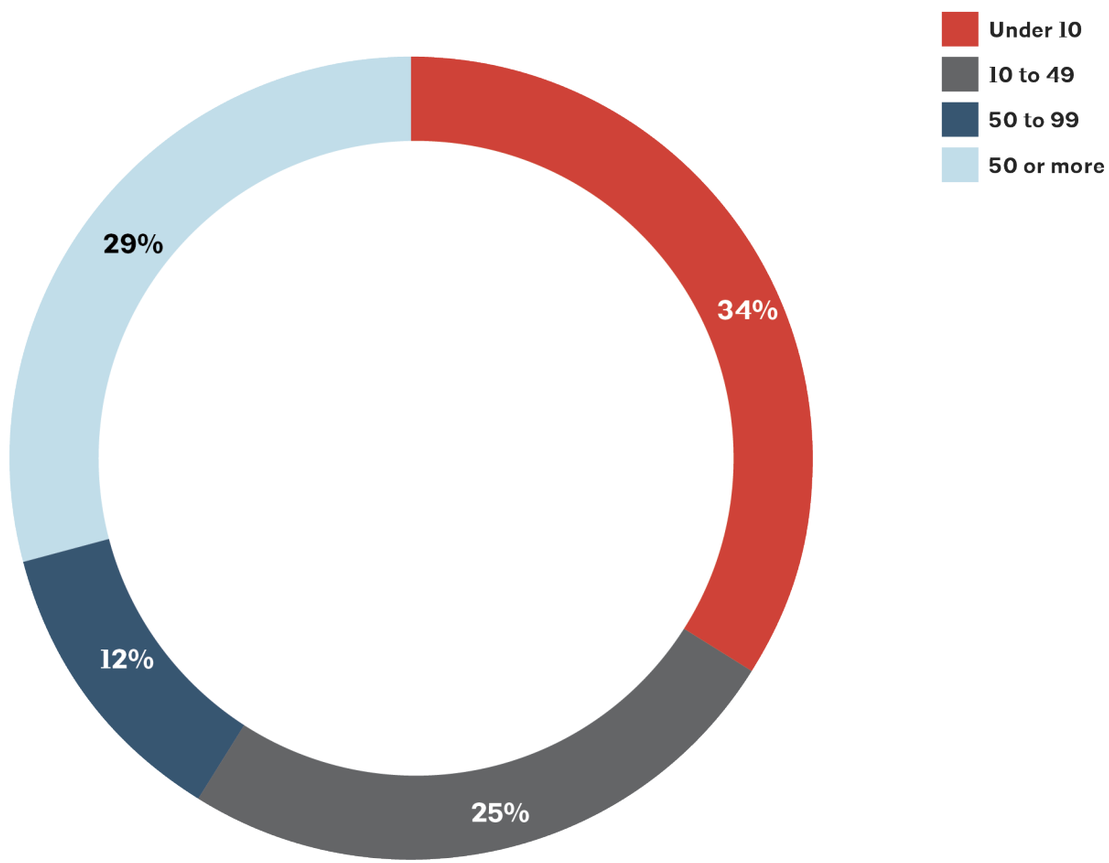
Methodology & Respondent Profile

The demographics of the respondents are consistent with the demographics of the profession, particularly for those at this level of seniority. Most of the respondents were male, at 68%, compared with 26% women. Similarly, most respondents were white (79%), versus 2% Black/African American, 5% Hispanic, 3% Asian, and 2% not specified.

The majority of respondents (58%) were from multidisciplinary architecture firms, and another 36% at single discipline firms. Respondents came from firms of all sizes, with the majority of the work in institutional and commercial projects. There was also geographic diversity, though slightly more respondents were from the South.

Respondents were from firms of all sizes

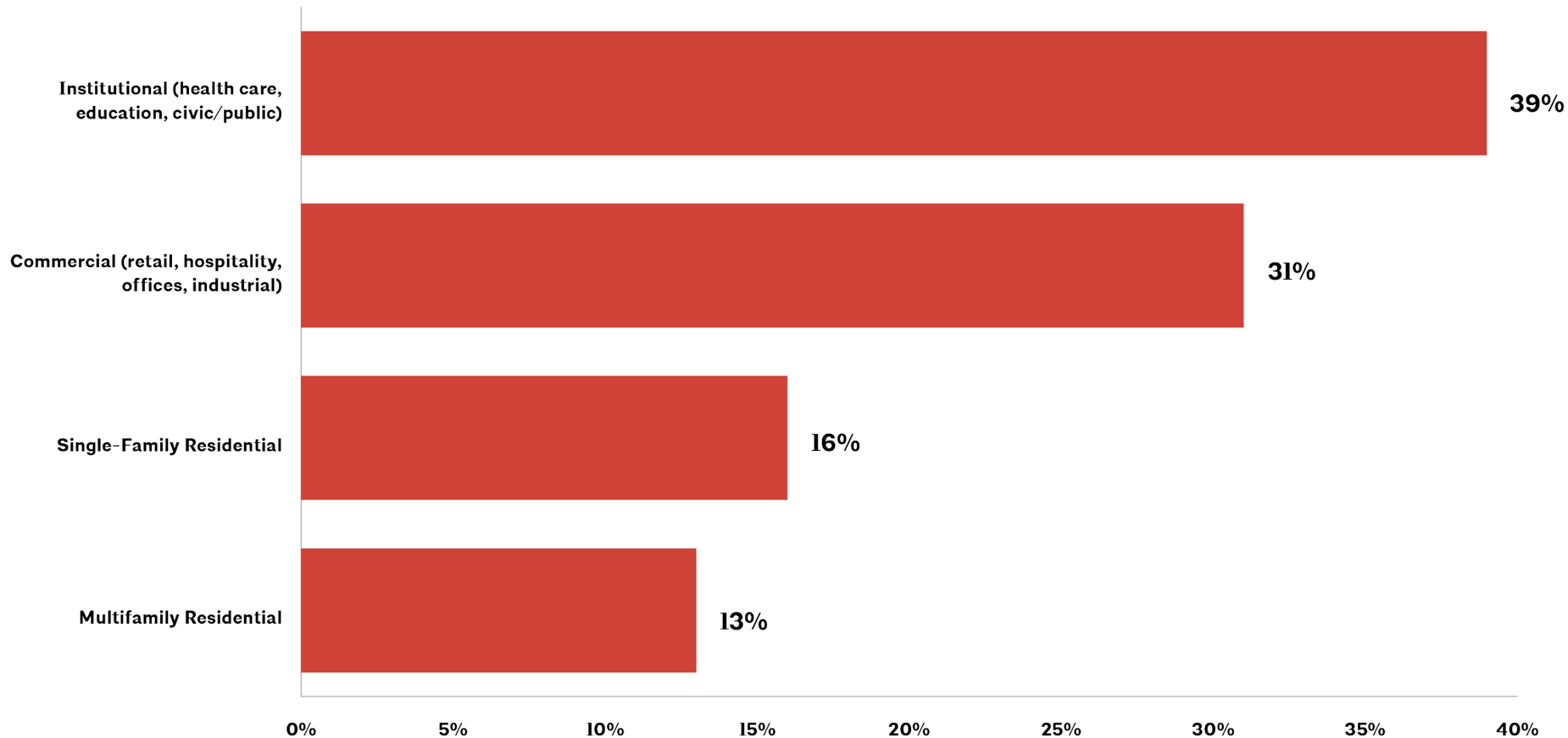
Share of respondents



Methodology & Respondent Profile

Respondents were involved in a range of project types

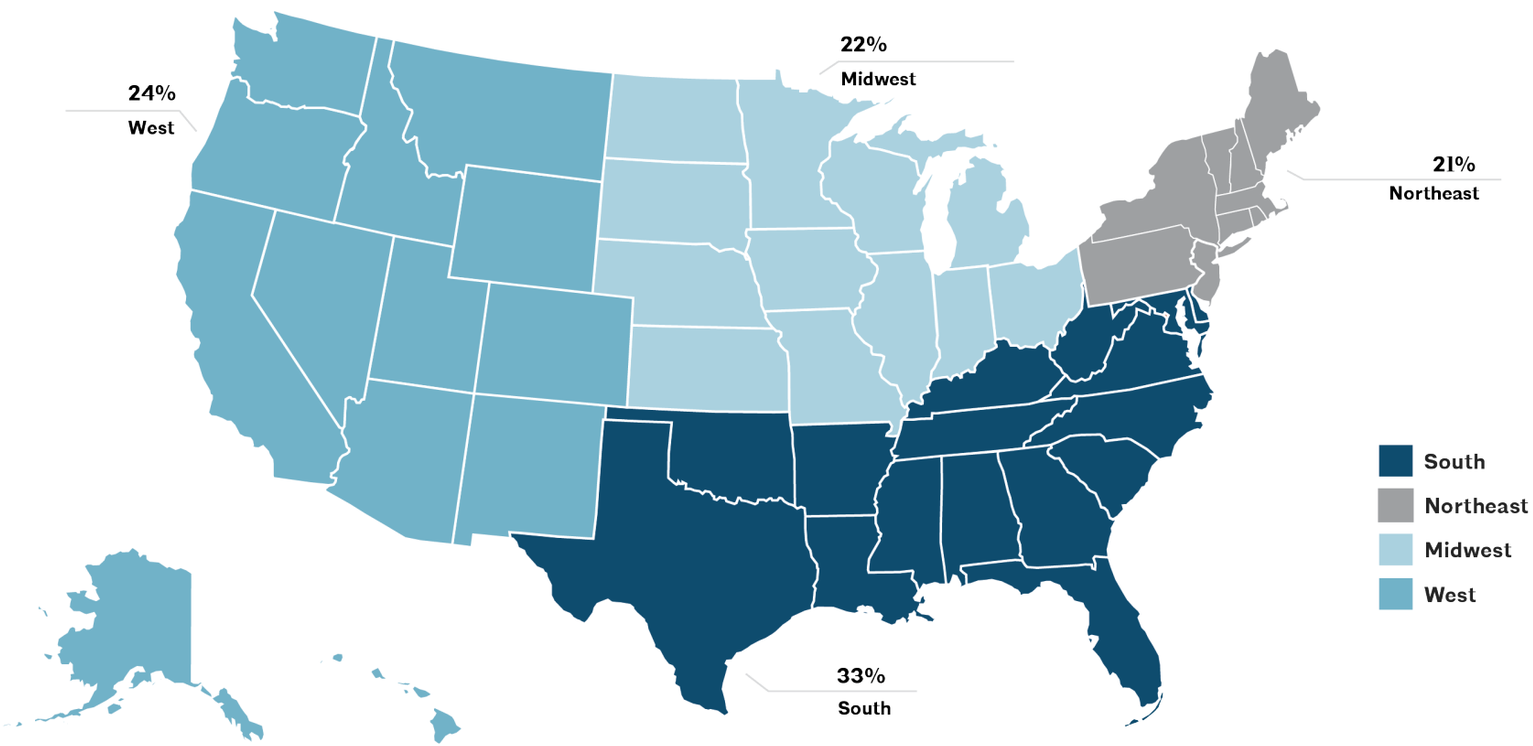
Share of respondents



Methodology & Respondent Profile

Respondents were located across the US

Share of respondents



PUBLISHED DECEMBER 2023 BY
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006
aia.org

© 2023 THE AMERICAN INSTITUTE OF ARCHITECTS
ALL RIGHTS RESERVED.

ISBN: 978-1-57165-021-4

With research support from: anguleris®