IDPro 2023 Skills, Programs, & Diversity Survey

Executive Summary

This is the sixth annual skills, programs, and diversity survey of the digital identity industry executed independently by IDPro; it is made possible through the ongoing support of our members. The survey serves to inform the digital identity industry about its practitioners and their interests. This in turn helps provide career, hiring, and strategic guidance to individual practitioners and to organizations running an identity management program of any scale. The survey data additionally informs digital identity technology and service providers of emerging opportunities.

Attracting nearly 30% more respondents than last year, the 2023 survey is set against a backdrop of economic uncertainty, the ongoing after-effects of the COVID-19 pandemic, and significant geo-political challenges. The role that digital identity technologies, processes, and programs—and associated laws and regulations—play continues to grow as our reliance on the Internet deepens. Our digital world simply cannot operate without digital identity: digital identity is critical infrastructure for the internet.

Within this context, through the 2023 survey IDPro has established the following:

- The industry is growing rapidly — reflected both in practitioner demographics and in a reported need for continuing professional development, particularly amongst the longest-serving practitioners—with implications for individual career development and for enterprise talent acquisition and management programs.

- Enterprises have yet to fully recognize the value of their digital identity programs in enabling customers (both internal and external), versus managing and protecting systems, evidenced by an ongoing focus on technologies like (multi-factor) authentication and authorization, coupled with a relatively lack of interest in enabling technologies like CIAM and the personal identity technologies including self-sovereign identity ("SSI"), verifiable credentials ("VCs"), and digital wallets.
- Enterprises will increasingly turn their attention to authorization deployments; and practitioners should be well-positioned to support these initiatives, unless technological approaches evolve significantly (which they may).
- In common with many other sectors, Artificial Intelligence and Machine Learning technologies are likely to have a significant impact on the digital identity industry and digital identity practitioners. Risks and opportunities will emerge; but it is still too soon to draw any firm conclusions about specifics.
- There is less practitioner interest in standards development, and an increased focus on combining existing standards and technologies to solve business problems. To some extent this reflects the greater reach of the survey, but it may also indicate a phasic maturity within the industry: with a few notable exceptions, many of the technical problems are seen as 'solved', if not yet fully realized. It is unlikely, however, that this will remain the case.

Individual practitioners should be alert to a rapidly evolving market landscape, and should stay closely attuned to business, regulatory, and legislative evolution as much as to technical developments.

Team leaders and managers should consider how to enable their teams to engage more effectively in non-technical conversations, the better to help influence business strategy. At the same time, continuing to implement leading practices in diversity and inclusivity will help to develop well-rounded groups with broad perspectives. Supporting those teams with regular and robust professional training and certification will ensure continuity of excellence through periods of rapid change.

C-Level Executives and Boards should consider how to best engage with their identity teams, with commercial opportunity and business advantage in mind, as well as cybersecurity and business risk mitigation.

Technology and service providers should be cognizant of the continued interest in authentication, likely spurred on by interest in passwordless authentication techniques, and a renewed practitioner and organizational interest in authorization.

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Introducing the IDPro 2023 Skills, Programs, and Diversity Survey

Findings

A Growing Profession
The identity management profession is growing, and growing in multiple ways.

New practitioners entering and staying
First, more new practitioners are entering and staying in the industry. The number of respondents with five or fewer years of experience in the industry grew from approximately 22% in 2022 to 32% this year. Respondents who indicated three to five years of experience increased from being the fourth most popular response to the third. These are practitioners who grew up, so to speak, with IDPro's Body of Knowledge ("BoK"). Over the five years since its inception, the BoK has grown into a reputable source of vendor-neutral learning material—supported by a robust development and refresh process—that practitioners can rely on. The availability of the BoK perhaps explains why the interest from this year's respondents in vendor-neutral materials dropped from the second to the fourth most desirable thing they were looking for to advance their skills—the materials now exist.

By contrast, this year IDPro observed an increase in interest in professional certification. Increased responses moved the need for certification up five points to be the second most desirable thing for which practitioners were looking, up from the fourth most in 2022. Interestingly, 28% of the respondents with three to five years of experience indicated that professional certification was the most important thing they needed, whereas only 11% of respondents with 11+ years of experience indicated similarly. A hypothesis here is that the less tenured wave of practitioners are looking for means to differentiate themselves in an increasingly competitive job market.

Growing means outgrowing
The absolute number of respondents with 15+ years of experience stayed the same year over year from 2022; the portion of responses shrank from 41% to 31% in the same timeframe. Consider that the total number of respondents grew significantly this year (423, up from 331 in 2022). Some hypotheses why IDPro observed this decline in practitioners with 15+ years of experience responses include:

- More tenured practitioners likely retired at the tail end of the pandemic;
- Some might have been impacted by the recent waves of high-tech company layoffs;
- Others still may have graduated "out."

This last point is worth unpacking. More tenured practitioners have undoubtedly grown other skills and experience in adjacent practices. At the executive level, subject matter expertise is less important than more general skills as a leader. It is likely that more tenured practitioners have grown those leadership skills over their years as identity specialists and are now putting them to use in different or larger areas of their organizations.

Global growth

Not only did we see changes in the experiential demographic, but also the geographic distribution of responses. For example, the number of respondents from the Australia and New Zealand (ANZ) region tripled year over year. Whilst this reflects the evident observations that digital identity is globally relevant, and that the reach of the IDPro survey is growing over time, it is also indicative of the impact that individuals can have within their communities. In the case of the ANZ region, anecdotal evidence both from within IDPro and from conferences including Identiverse® indicates that local champions are significantly influencing the development and engagement of the professional community. As the profession develops, there are tremendous opportunities for individuals to continue to influence and drive their respective communities.

Sectoral growth

This year's survey saw a notable change to the industries in which respondents work. While 'High Tech' has continued to dominate, the 'Consulting and Implementation Services' sector increased by eleven points, moving into second place at 20%. Similarly, 'Government' moves into four with a five-point increase. These changes reflect the more general statement that digital identity is relevant not only in every geography but also every industry.

Authentication driving Authorization

We're not done yet…

Authentication continues to be a major organizational priority, with 40% of respondents affirming its importance. But what is surprising is that authentication rose nearly fourteen

points to move into third place in terms of a personal area of interest for practitioners. While that is mildly surprising (but explainable), the mystery grows when combined with the fact that 83% of respondents indicated that they had experience in authentication. If all of these practitioners have experience, why is it a top-three priority in terms of what individual practitioners want to learn about in the next eighteen months?

Our hypothesis is that both are explained by the existence of phishing-resistant authentication methods and the increase in awareness of standards-based strong authentication, including WebAuthn and Passkeys, which promise improved security and an optimized user experience. In the last year, incidents such as the [Oktapus phishing campaign](#) as well as highly publicized breaches at Uber and other companies have drawn considerable attention to potential weaknesses in multi-factor authentication methods. Enterprises with cause for concern have likely dispatched practitioners to at least examine the potential risk and—where necessary—to explore mitigations. Meanwhile, WebAuthn and, more recently, passkeys have grown in mindshare throughout the year. Practitioners, being the curious bears that they are, want to learn more about passkeys, if only for their potential use at home.

...But old challenges are back with a vengeance
This year IDPro observed a resurgence of authorization as an area of focus for the enterprise, and an area of knowledge for respondents: 71% of respondents indicated that they had experience with 'Authorization and Access Control (including fine-grained, ABAC, PBAC, etc.)' versus 60% the year prior. The increase in practitioners' experience was accompanied by a massive thirteen-point increase in organizations' prioritization of authorization in the coming eighteen months. In fact, authorization was the second highest priority, as indicated by respondents for their organizations this year - a marked change from 2022, in which authorization was not even in the top five priorities.

While nothing specific in the IDPro survey data speaks to the reason for this increase in prioritization, a plausible explanation is that organizations have hit a tipping point with their authorization mechanisms. The increase in the usage of cloud computing services has only increased the number of resources to which access needs to be governed and the number of places authorization needs to be enforced. Classic models like attribute-based access control may no longer suffice for such dynamic environments and organizations are looking for alternatives. With the introduction of technologies such as Amazon Web Services Cedar, there are more authorization-related technologies that organizations can

use. However, those organizations are still looking for efficient ways to manage those options.

Further, although enterprises evidently still have work to do to bring their 'front-door' Authentication systems up to the most modern standards, there is perhaps a realization that Authorization—protecting the 'internal doors'—has not had sufficient focus over the past two years, given the significant attention MFA has had from the enterprise over the past 3 years (MFA was top of enterprise priorities in the 2022 Survey, second in 2021, and top in 2020).. With authentication standards and architectures now reasonably well-settled, it is logical for organizations to turn to the next rung in the protection ladder.

It is interesting to note that authorization ranked tenth in terms of respondents' personal interests. This is not necessarily surprising given the high number of practitioners indicating they already had experience in the space. However, if there is a sort of rebirth of authorization in the eyes of organizations, the 2024 IDPro Skills Survey ought to evidence an increase in personal interest - following a pattern IDPro has observed over the years in the ebb and flow of organizational and personal areas of prioritization.

AI will rule the world… or not

Clearly AI, ChatGPT, and LLMs are dominating the high-tech zeitgeist. Instead of asking the industry what they thought would be the impacts, IDPro chose instead a different route: using ChatGPT to summarize responses to two questions.

In this year's survey, IDPro added a new question: "If you could ask the entire identity industry one question, what would it be?" IDPro observed some curiosity about why we were asking that question; we admittedly and deliberately did not provide further explanation in the survey itself. The goal was to see if we could glean what is top of mind for practitioners.

IDPro received nearly 200 responses to this question. Some responses were humorous and very much tongue-in-cheek ("what is the wing velocity of an un-ladened swallow?"); others were more topical. What follows is a copy of the interaction IDPro had with ChatGPT to summarize those responses, edited for conciseness and readability (a full copy of the transcript is available in the appendix).

IDPro: If I give you a list of questions people have asked me, can you group them together and summarize the groups?

ChatGPT: Yes, I can certainly try to group the questions together and provide a summary of the groups. Please provide me with the list of questions and I will do my best to group them together.

…

ChatGPT: After analyzing the list of questions, I have grouped them into several categories:

1. Identity ecosystem and standards: These questions focus on how to improve the interoperability and standardization of identity systems, as well as how to promote adoption of new technologies and reduce overlap between different identity standards.
2. Security and privacy: These questions address how to maintain a balance between security and privacy, and how to leverage advanced technologies like AI and machine learning to better secure consumer technologies.
3. Access management: These questions explore various aspects of access management, including privileged access, identity proofing, and how to manage multiple diverse cloud "tenant-level" spaces.
4. Future of identity: These questions ask about the future of identity, including the impact of self-sovereign identities, the role of identity in a decentralized web, and the potential of virtual reality and augmented reality to shift or evolve digital identity.
5. Professional development: These questions focus on how to prepare for certifications and how to stay up to date in the field of identity and access management.
6. Social impact: These questions consider how identity affects society as a whole, including questions about the privacy and security implications of collecting user data, and how to serve individuals with limited digital access.
7. Miscellaneous: These questions cover a variety of other topics, including job-related concerns, the use of abbreviations and terms, and the challenges associated with implementing transformational changes in the IAM space.

Overall, the questions reflect a range of interests and concerns related to identity and access management, including technical, social, and professional aspects of the field.

In full transparency, one of the people writing this report saw this interaction and thought, "Well, I better go update my resumé." It is, at the very least, a highly plausible précis of raw text. But, we decided to push further with ChatGPT:

IDPro: Awesome! What are the three most frequently asked questions in that list?

ChatGPT: Based on the frequency of appearance, the three most frequently asked questions in that list are:

1. What is the future of passwords?
2. How can we create secure and trustworthy digital identities that protect individual privacy and are widely accepted and interoperable across different systems and platforms?
3. Should identity be part of security? Or should it function as an independent entity?

Again, the response from ChatGPT at least appeared to be pretty believable and certainly resonates with the authors.

But, before you go update your resume for fear the robots are coming to take your job, consider this next use of ChatGPT. IDPro has asked this question every year: Any other comments you'd like to provide about skills and how you got them? What follows is the interaction with ChatGPT:

IDPro: If I gave you a list of skills people find important and the ways they got those skills, could you group them together and summarize the groups?

ChatGPT: Yes, I can certainly help you group together the skills people find important and the ways they got those skills. Please provide me with the list of skills and the corresponding ways people acquired those skills, and I will do my best to group them and summarize them for you.

…

ChatGPT: Here are some suggestions on how to identify candidates trained in DevOps and who are happy not to work in that space:

1. Check for relevant keywords: When reviewing a candidate's CV, look for relevant keywords that indicate experience or skills related to DevOps. These may include tools like Docker, Kubernetes, Jenkins, and Git, or methodologies like continuous integration/continuous deployment (CI/CD) or infrastructure as code (IaC).
2. Look for relevant experience: Candidates with experience in software development or operations may have gained relevant skills in DevOps practices. Look for experience in areas like automation, deployment, configuration management, monitoring, and collaboration across teams.
3. Ask about preferences: During the interview process, ask candidates about their preferences and interests in terms of working with specific technologies or practices. If a candidate expresses a preference for working with traditional operations rather than DevOps, this may be an indication that they are not as interested in that space.
4. Use online platforms: Consider using online platforms like LinkedIn, GitHub, or StackOverflow to search for candidates with specific skills or experience related to DevOps. Look for candidates who have contributed to relevant projects or have participated in relevant communities or events.
5. Partner with recruiting agencies: Partner with recruiting agencies that specialize in DevOps or related fields to help identify candidates with the right experience and skills.

It's worth noting that DevOps is a broad and evolving field, and candidates with experience in related areas may have transferable skills that could be relevant in a DevOps role. It's important to keep an open mind and be willing to consider candidates who may not have direct experience in DevOps but have demonstrated success in related areas.

At this point, the author felt a sense of relief… the robot was comically wrong. What would happen if we told ChatGPT that it was wrong? What follows is this interaction:

IDPro: <feedback given>

ChatGPT: Based on the list provided, there are several ways people have gained skills in the identity and access management (IAM) field. Some have learned on the job through trial and error, others have had mentors or engaged in

apprenticeships, and many have turned to resources like industry events, vendor products, and online communities to broaden their understanding of the field. Some also mention the importance of being curious, asking questions, and never stopping learning, while others emphasize the need for accessible foundational training and more community-driven programs to address the skills gap in the IAM industry.

Obviously, this is a very different response and one that feels fairly plausible. The meta-lesson here is although these new large language models can produce fascinating results, fascination should not be confused with immediately usable. Humans still (for now?) need to remain in the loop.

Other Notable Observations

Declining Skip Rates; Increasing Willingness?

This year's survey saw a decrease in the number of respondents who chose to skip/not respond to the Diversity questions. The eight-point decrease (from 25% in 2022 to 17% this year) may indicate a willingness to discuss diversity and inclusion topics in larger settings.

A Rare Alignment

For the majority of years that IDPro has been running this survey, we observed a misalignment between organizational priorities and those of individuals. This is most commonly noted by the individual interest in self-sovereign identity and related topics and the lack of it on the part of organizations. This year, however, we saw an alignment with respect to authentication. As discussed more fully above, it will be interesting to see if this alignment lasts into the 2024 Survey or if it was just a moment in time.

Decentralized Identity: Looking for an Enterprise Use-case?

The various decentralized and/or self-sovereign identity technologies and standards, including verifiable credentials, have been high up the list of practitioners' interests for at least three years; and have similarly been low on the list of reported enterprise priorities. This consistent divergence is interesting, especially given the increasing focus from solution vendors in VC capabilities. One possible explanation is that the business applicability for SSI is still unclear — and until it is, there are more pressing security and user experience considerations that will take priority. However, it is increasingly evident that VCs and other SSI initiatives are becoming sufficiently mature and can be applied to solve a sufficient weight of real-world use cases better than existing technologies. Enterprises will need to start to pay attention—soon—or risk being left behind. The good news is that when these

areas do become a priority for the Enterprise, practitioners are likely to be well-prepared to respond.

Methodology

The 2023 IDPro Skills, Programs, and Diversity Survey was conducted online. Responses were solicited from IDPro members and from non-members via several public channels including Twitter, LinkedIn, and the IDPro website. Respondents self-selected to participate.

The Survey sets out to get a sense of the size, scale, and training or educational needs of the industry. This objective informs the question selection. The Survey is designed to be quick and easy to take in order to reduce as many barriers to participating as possible. Where appropriate, questions and responses are consistent year over year to allow for trend analysis. Prior years' survey reports and data can be found on the IDPro website. This survey is made possible by the generous support of our members.

Tools

IDPro used SurveyMonkey to execute this anonymous survey and a combination of SurveyMonkey, Microsoft Excel, and Google Sheets to analyze the data.

Response Rates

Total Respondents	423

The total response rate for the 2023 survey was higher than 2022; the survey continues to be increasingly representative of the industry.

Survey Questions and Results

Demographics

The questions in this section examined the practitioner's years of experience, their location, and information about their employer.

Years in the Identity Industry

Survey Question

How many years have you worked in the identity industry or directly with identity technologies and systems?

Potential Responses (select one)

- 15+ years
- 11–15 years
- 6–10 years
- 3–5 years
- 0–2 years

Question Commentary

This question provides a sense of the depth of experience of respondents and allows for segmentation of some of the other responses. Duration brackets are consistent across survey years, allowing for clear comparison.

Responses and Observations

For how many years have you worked in the identity industry or directly with identity technologies and systems?

- 14% 11-15 YEARS
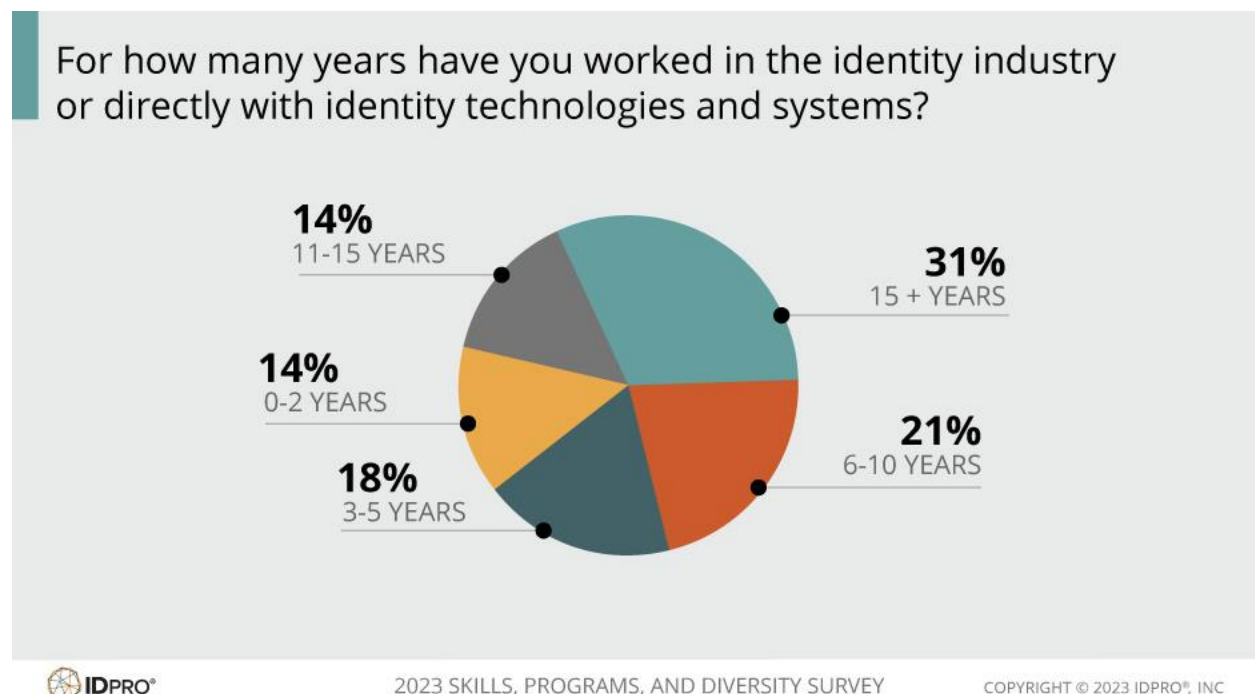- 31% 15 + YEARS
- 14% 0-2 YEARS
- 21% 6-10 YEARS
- 18% 3-5 YEARS

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Survey participants are starting to show a change in the demographics of tenure. The number of individuals with over 15 years of experience has dropped overall from over 40% to just over 30%. This is a change that could potentially impact knowledge continuity. It certainly emphasizes the need for organizations to prioritize knowledge transfer and retention to ensure that valuable knowledge and experience is not lost as experienced professionals leave the industry.

Location

Survey Question

In which geographic region are you based?

Potential Response (select one)

- Africa
- Australia and New Zealand
- Central America
- Europe
- India
- Japan
- Middle East
- North America
- Other (please specify)
- Other Asia
- South America

Question Commentary

A selection of high-level geographies was provided for respondents to select from (e.g. North America, Europe, etc.) to better form a picture of how responses might be skewed regionally and to allow for segmentation of other responses. Regions are consistent across survey years, allowing for comparison.

Responses and Observations

In which geographic region are you based?

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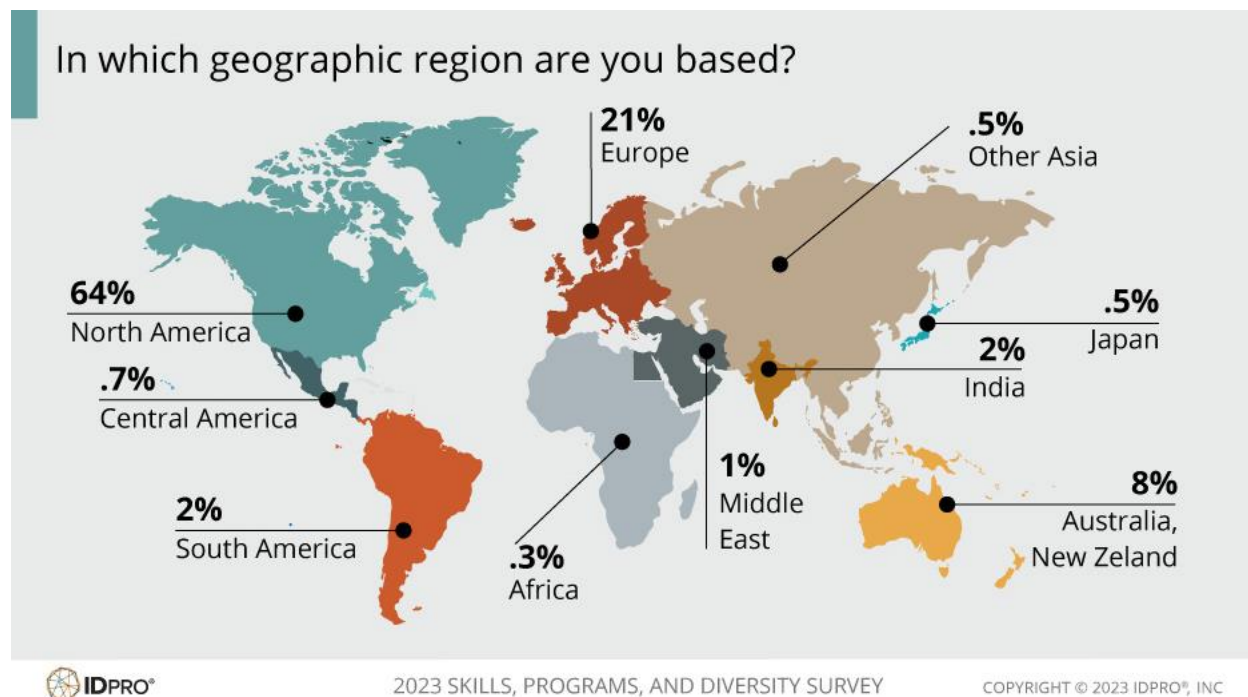
In 2023, there was a decrease in respondents from the North American region at 64%, down from 70% last year, whereas the number of respondents from the European region increased slightly from 19% to 21%. These numbers map fairly closely to the regional numbers from two years ago in 2021. Australia/New Zealand saw the largest increase in participation in 2023 at 8%, up from 2% in 2022. South America saw a small increase from 1% to 2%. Asia, including Japan and Other Asia, dropped to less than 1% each. Africa also dropped to below 1%, as did Central America. As noted in previous years: *the industry as a whole must continue to consider how it can foster global participation and the exchange of ideas.*

It is interesting to note that the regional survey participation is not entirely in alignment with the IDPro Body of Knowledge usage numbers (see The BoK interactive map). Asia in particular shows a significantly higher use of the BoK than Australia.

Industry

Survey Question
In what industry do you work?

Potential Response (select one)

- Aerospace and Defense
- Automotive
- Consulting and Implementation Services
- Consumer Packaged Goods
- Financial Services
- Government and Public Sector
- Healthcare and Life Sciences
- Higher Education and Research
- High-Tech and Information Technologies
- Insurance (added for 2019)
- K-12 Education
- Manufacturing
- Media and Publishing
- Non-Profit or Charity
- Other (please specify)
- Retail
- Telecommunications

Question Commentary

Some previous response options were removed and a few new were added this year in an effort to gain a more precise understanding of respondents' industries. Categories removed included *Cloud Computing, Enterprise Software,* and *Public Sector*. Those added were *Government and Public Sector, High-Tech and Information Technologies,* and *Non-Profit or Charity*.

Responses and Observations

In what industry do you work?

32% High-tech & Info Tech
20% Consulting & Implementation
11% Financial Services
11% Govt. & Public Sector
9% Higher Ed & Research

All others < 5%

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High-Tech and Information Technologies dropped down to 32% in 2023; those numbers were made up, however, by a significant increase in *Consulting and Implementation Services,* which grew from 9% in 2022 to 20% in 2023, and *Government and Public Sector*, which grew from 6% to 11%. Responses from *Financial Services* stayed relatively flat at 11% this year as compared to 10% in 2023, and *Higher Education and Research* dropped slightly from 12% to 9%. All other industries filled in the remaining 5% of responses.

IDPro Membership

Survey Question:
Are you an IDPro member?

Potential Response (select one)
- Yes
- No
- Unsure

Question Commentary

Responses and Observations

Are you an IDPro member?

6% Not Sure

41% Yes

52% No

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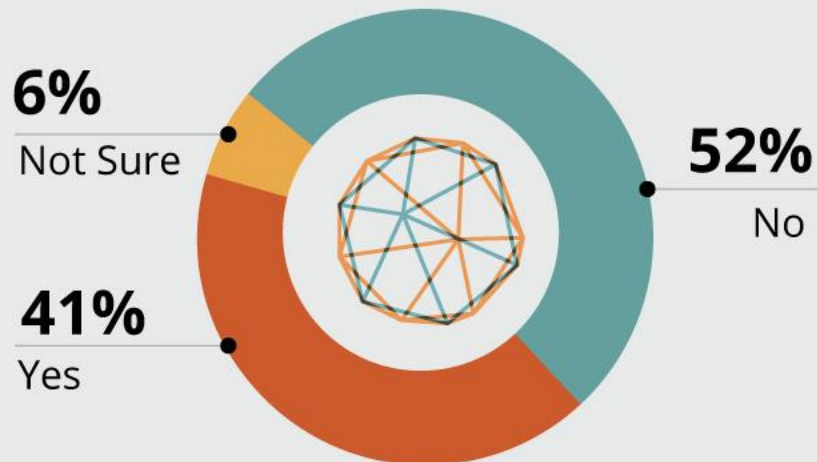
CIDPRO

Survey Question

Do you hold the IDPro Certified Identity Professional (CIDPRO) certification?

Potential Response (select one)

- Yes
- No

Question Commentary

Responses and Observations

Do you hold the IDPro Certified Identity Professional (CIDPRO®) certification?

89% No

10% Yes

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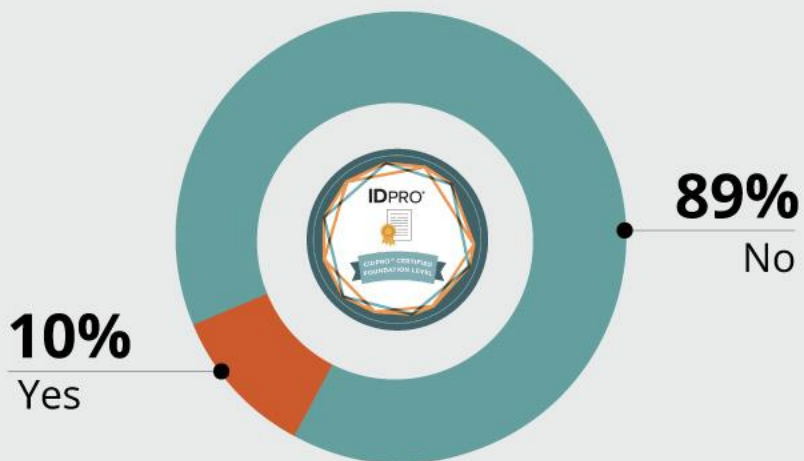
Employer Size

Survey Question

How many employees does your employer have?

Potential Response (select one)

- 0–25 employees
- 26–50 employees
- 51–100 employees
- 101–500 employees
- 501–1000 employees
- 1001–10,000 employees
- More than 10,000 employees

Question Commentary

The available bracket sizes options have been kept consistent since the initial Survey in 2018.

Responses and Observations

This year's survey saw the percentages make some significant shifts between medium and large-sized companies. Medium-sized companies increased from 31% to 38%, whereas large-sized companies decreased from 44% to 36%. Small companies held steady at 25%.

Experience

Areas of Experience

Survey Question
Areas of identity in which you have current or previous experience.

Potential Responses (Select all that apply)
- Access Certification
- API Protection
- Biometrics
- Decentralized and/or Self-sovereign Identity
- Contextual/Risk-based Authentication

- Customer/Citizen Identity and Access Management
- Directory Services including Active Directory
- Authorization and Access Control (including fine-grained, ABAC, PBAC, etc.)
- IDaaS; Cloud Identity Management
- Identity Governance and Administration
- Identity for IoT, Mobile Identity, and/or Connected Devices
- Identity for Services, Processes, and Hosts
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Authentication (including, strong, multi-factor, WebAuthn, etc.)
- Non-person Entity Identity
- Privacy-related Applications of Identity
- Privileged Access
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- Verifiable Credentials and Identity Wallets
- User Provisioning and Lifecycle Management
- Federation and/or Single Sign-On
- Other (please specify)

Question Commentary

The options available for responses changed again in the 2023 edit to allow for a wider understanding of our respondents' skills and expertise. Removed response options included *Fine-grained Authorization including Attribute- and Policy-Based Access Control*; *Machine to Machine*; *Mobile Identity Management*; *Multi-factor/Strong Authentication*; and *Web Access Management*. In their place we added *Authorization and Access Control (including fine-grained, ABAC, PBAC, etc.)*; *Mobile Identity, Identity for Services, Processes, and Hosts*; *Authentication (including, strong, multi-factor, WebAuthn, etc.)*; *Non-person Entity Identity*; and *Verifiable Credentials and Identity Wallets.*
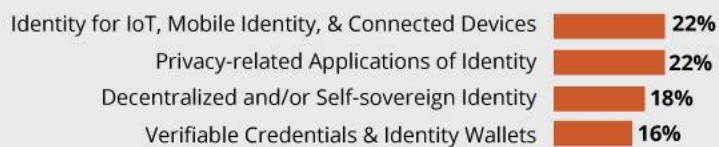
Responses and Observations

In which of the following areas do you have current or previous experience?

Top 8

Area	Percentage
Authentication	83%
Federation and/or Single Sign-On	76%
Authorization and Access Control	71%
Role Management &/or Role-based Access Control	69%
User Provisioning and Lifecycle Management	64%
Directory Services including Active Directory	61%
Privileged Access	53%
Identity Governance and Administration	52%

Bottom 4

Area	Percentage
Identity for IoT, Mobile Identity, & Connected Devices	22%
Privacy-related Applications of Identity	22%
Decentralized and/or Self-sovereign Identity	18%
Verifiable Credentials & Identity Wallets	16%

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Authentication and *Federation* remain in the top two spots with *User Provisioning* and *Role Management* swapping places for third and fourth. *Directory Services* dropped significantly from 70% in 2022 to 61% in 2023. *IGA* dropped as well, from 66% to 52%.

While a hot topic at all identity-related conferences in 2023, *Verifiable Credentials & Identity Wallets* remain quite low at 16% when it comes to practitioners reporting any experience with these technologies.

Years to Proficiency

Survey Question

How long did it take you to feel that you're a proficient identity professional?
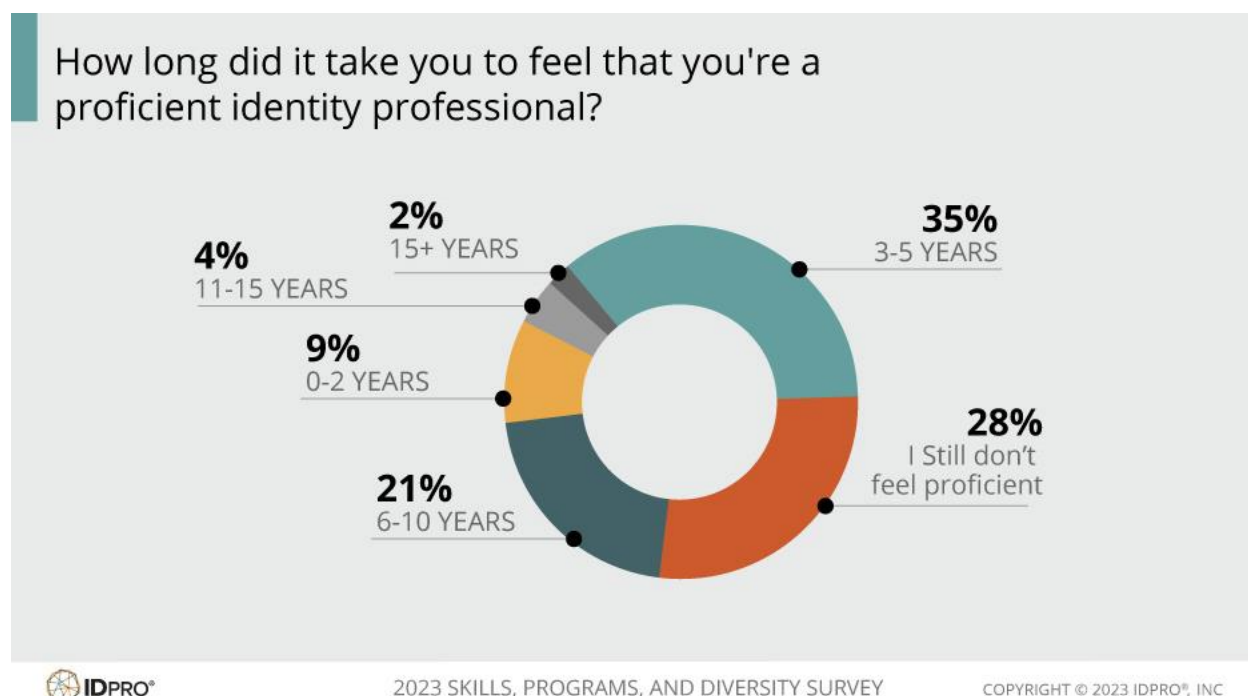
Potential Response

- 0 to 2 years

- 3–5 years
- 6–10 years
- 11–15 years
- 15+ years
- I still don't feel proficient

Question Commentary

This question is necessarily and deliberately subjective; the time brackets match the options in question 1 regarding years of experience in the field.

Responses and Observations

How long did it take you to feel that you're a proficient identity professional?

- 2% 15+ YEARS
- 4% 11-15 YEARS
- 9% 0-2 YEARS
- 21% 6-10 YEARS
- 35% 3-5 YEARS
- 28% I Still don't feel proficient

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Rather than feeling more proficient over time, more respondents reported that they still do not feel proficient in the field, growing from 19% in 2022 to 28% in 2023. These numbers balanced out the change in the percentage of practitioners that indicated it took 6-10 years to feel proficient; that number dropped from 30% to 21%. All other percentages stayed relatively stable.

Skills

Questions in this section explore which technical and non-technical skills practitioners rely upon to be effective as well as things they wish they had to make them even more successful.

Technical Skills

Survey Question

Which of the following would you consider to be the top 3 technical skills that have served you well in your career within the identity industry? (Choose no more than 3 skills.)
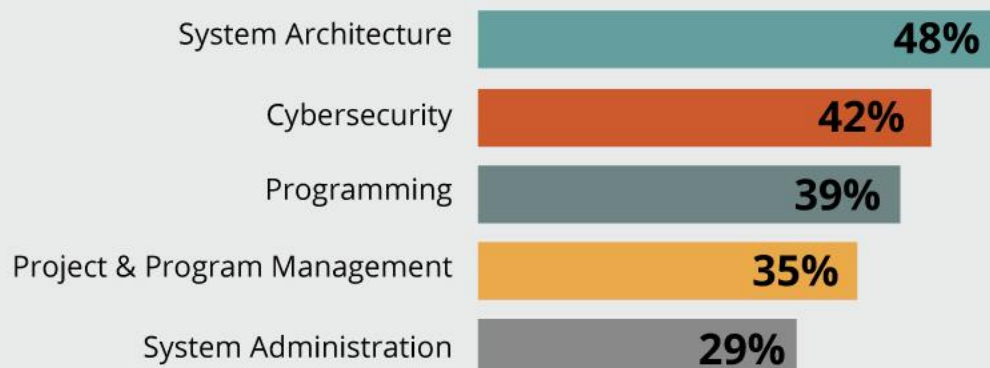
Potential Responses

- Cloud Architecture
- Cybersecurity including threat modeling and cloud security
- Data Modeling
- Data Science
- Database Administration
- Finance and accounting
- Networking and/or Network Management
- Other (please specify)
- Programming
- Project and Program Management
- System Administration
- System Architecture
- Technical Writing

Question Commentary

The list of response options reflects areas typical for individuals working within the identity industry and is unchanged from 2019.

Responses and Observations

The most selected technical skills remain roughly the same, however *System Architecture* had a significant 12% decrease this year.

Non-technical Skills

Survey Question

Which of the following would you consider to be the top 3 non-technical skills that have served you well in your career within the identity industry? (Choose no more than 3 skills.)

Potential Responses

- Ability to work in a team
- Adaptability (added for 2019)
- Business Awareness
- Determination and grit
- Empathy
- Foreign language proficiency
- Humor
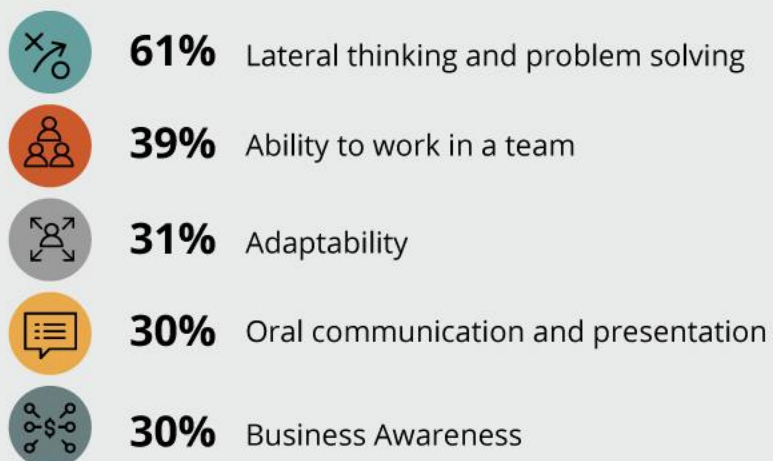- Lateral thinking and problem solving

- Negotiating; pitching
- Oral communication and presentation
- Organization and management
- Other (please specify)
- Time Management
- Written communication

Question Commentary

The list of responses is unchanged from 2019.

Responses and Observations

Which are the top non-technical skills that have served you well in your career within the identity industry?

61% Lateral thinking and problem solving

39% Ability to work in a team

31% Adaptability

30% Oral communication and presentation

30% Business Awareness

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Lateral Thinking and Problem Solving remains strongly at the top of the list at 61%. Other skills shifted order, though *Ability to Work in a Team*, *Adaptability*, and *Business Awareness* remain in the top five. *Oral communication and Presentation* returns to the top five for the first time since the original surveys.

If You Could Have One Thing…

Survey Question

If you could have had one of the following, which do you think would have been most useful to you to ensure your professional success:

Potential Response
- Certification in one or more areas of identity
- Opportunities to blog or otherwise contribute to an industry newsletter or publication
- Opportunities to present at an industry meet-up or conference
- Opportunities to teach other identity professionals
- Other (please specify)
- Participation in Professional Organizations
- Peer to peer networking opportunities
- Providing mentorship
- Receiving mentorship
- Scholarships/Grants to attend industry conference
- Vendor-neutral technical training materials

Question Commentary

The options for responses remained the same from 2022.

Responses and Observations

Which do you think would have been most useful to you to ensure your professional success?

23% Receiving mentorship

14% Peer to peer networking opportunities

16% Certification in one or more areas of identity

14% Vendor-neutral technical training materials

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Mentoring and training continue to be viewed as essential to ensuring success within the identity industry and has stayed steady at 23%. *Peer-to-Peer Networking Opportunities* dropped slightly to 14% from 16%, whereas *Certification in One or More Areas of Identity* increased to 16% from 11%, showcasing the importance of IDPro's CIDPRO™ program. *Vendor-neutral Technical Training Materials* has dropped slightly from 19% to 14%, suggesting that having the vendor-neutral materials via the IDPro Body of Knowledge may be having an impact on the industry.

Priorities

This section of the Survey explores what respondents consider to be their employer's top identity-related priorities for the next 18th months, as well as their own individual areas of interest. This helps to elucidate the differences between personal and corporate priorities and explores any potential gaps in skill sets, training, development and staffing, at the trend level.

Enterprise Priorities

Survey Question

What are your organization's (or your customer's organizations) top 6 identity-related priorities for the next 18 months? (Select no more than 6)

Potential Responses

- Access Certification
- API Protection
- Biometrics
- Decentralized and/or Self-sovereign Identity
- Contextual/Risk-based Authentication
- Customer/Citizen Identity and Access Management
- Directory Services including Active Directory
- Authorization and Access Control (including fine-grained, ABAC, PBAC, etc.)
- IDaaS; Cloud Identity Management
- Identity Governance and Administration
- Identity for IoT, Mobile Identity, and/or Connected Devices
- Identity for Services, Processes, and Hosts
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Authentication (including, strong, multi-factor, WebAuthn, etc.)
- Non-person Entity Identity
- Privacy-related Applications of Identity
- Privileged Access
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- Verifiable Credentials and Identity Wallets
- User Provisioning and Lifecycle Management
- Federation and/or Single Sign-On
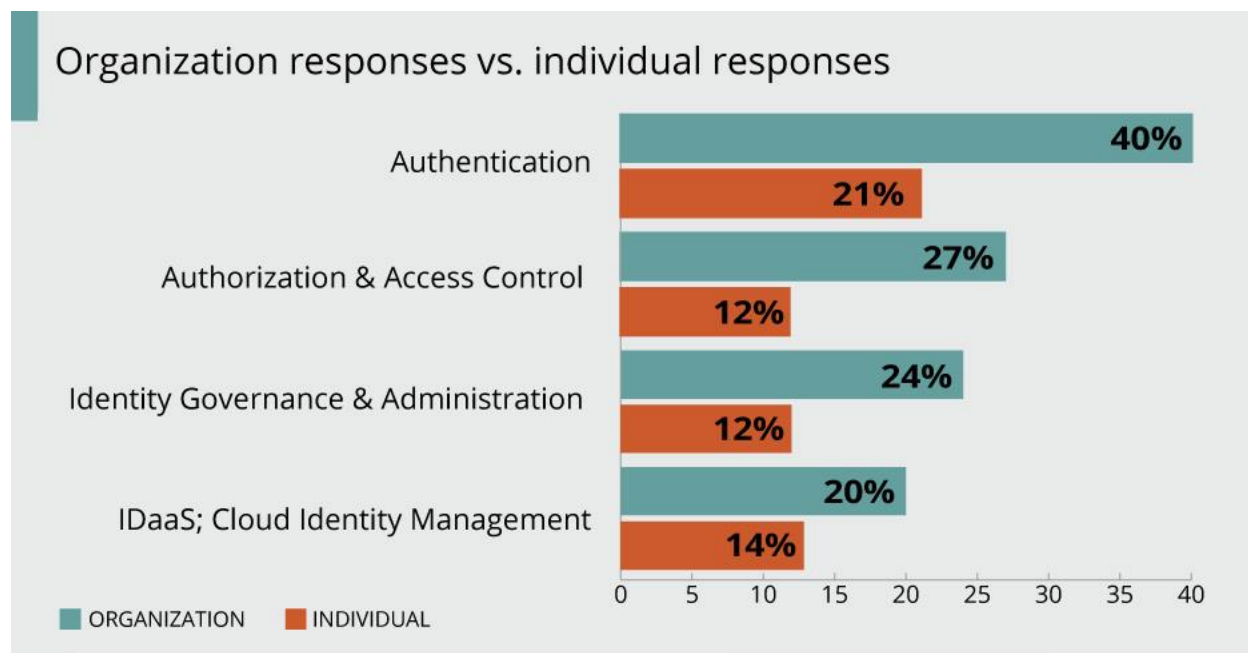- Other (please specify)

Question Commentary

The options available for responses changed again in the 2023 edit to allow for a wider understanding of our respondents' skills and expertise. The list matches the options in Question 7, "In which of the following areas do you have current or previous experience?"

It is important to note that responses given here are from the individual practitioners' perspective. As such, they may not directly align with the actual organizational priorities but instead provide insight into what the practitioner perceives as important to their employer.

Responses and Observations

What are your organization's top 6 identity-related priorities for the next 18 months?

- Authentication — 40%
- Authorization & Access Control — 27%
- Identity Governance & Administration — 24%
- IDaaS; Cloud Identity Management — 20%
- Customer/Citizen Identity & Access Management — 19%
- Federation and/or Single Sign-On — 19%

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The prioritization of *Authentication* saw a huge jump in 2023 for organizations, growing from 28% in 2022 to 40% in 2023. This is particularly interesting as it matches an increase in interest on the part of identity practitioners as well. Enterprise prioritization of *Authorization and Access Control* also grew significantly in 2023, jumping from 14% to 27%. *IGA* in turn dropped from its top slot at 31% to third at 24%. IDaaS also dropped from third at 24% to fourth at 20%.

Organization responses vs. individual responses

Category	Organization	Individual
Authentication	40%	21%
Authorization & Access Control	27%	12%
Identity Governance & Administration	24%	12%
IDaaS; Cloud Identity Management	20%	14%

ORGANIZATION   INDIVIDUAL

When enterprise priorities are mapped to individual priorities, we see an alignment for the first time since the survey began: everyone is interested in *Authentication*.

Individual Priorities

Survey Question

As an individual practitioner, what are the top identity-related areas you are interested in learning about in the next 18 months? (Choose no more than 6.)

Potential Responses
- Access Certification
- API Protection
- Biometrics
- Decentralized and/or Self-sovereign Identity
- Contextual/Risk-based Authentication
- Customer/Citizen Identity and Access Management
- Directory Services including Active Directory
- Authorization and Access Control (including fine-grained, ABAC, PBAC, etc.)
- IDaaS; Cloud Identity Management
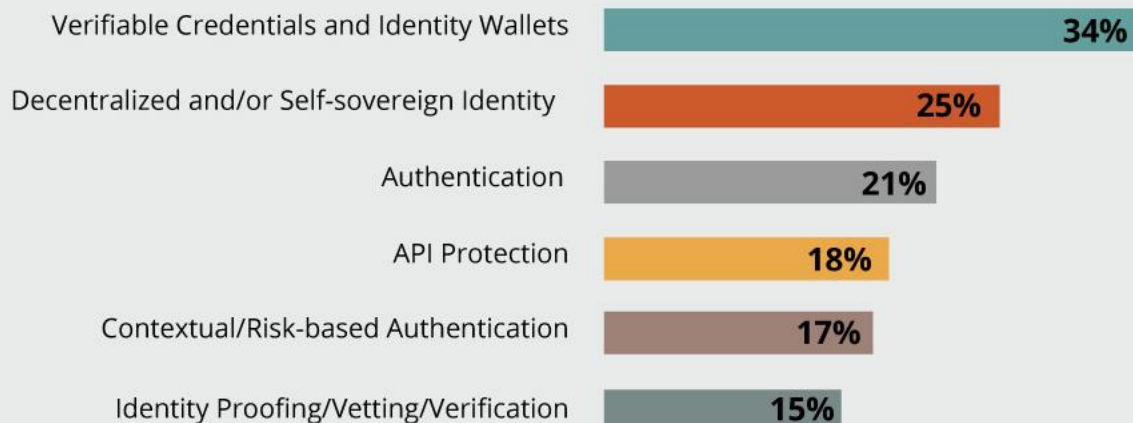- Identity Governance and Administration

- Identity for IoT, Mobile Identity, and/or Connected Devices
- Identity for Services, Processes, and Hosts
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Authentication (including, strong, multi-factor, WebAuthn, etc.)
- Non-person Entity Identity
- Privacy-related Applications of Identity
- Privileged Access
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- Verifiable Credentials and Identity Wallets
- User Provisioning and Lifecycle Management
- Federation and/or Single Sign-On
- Other (please specify)
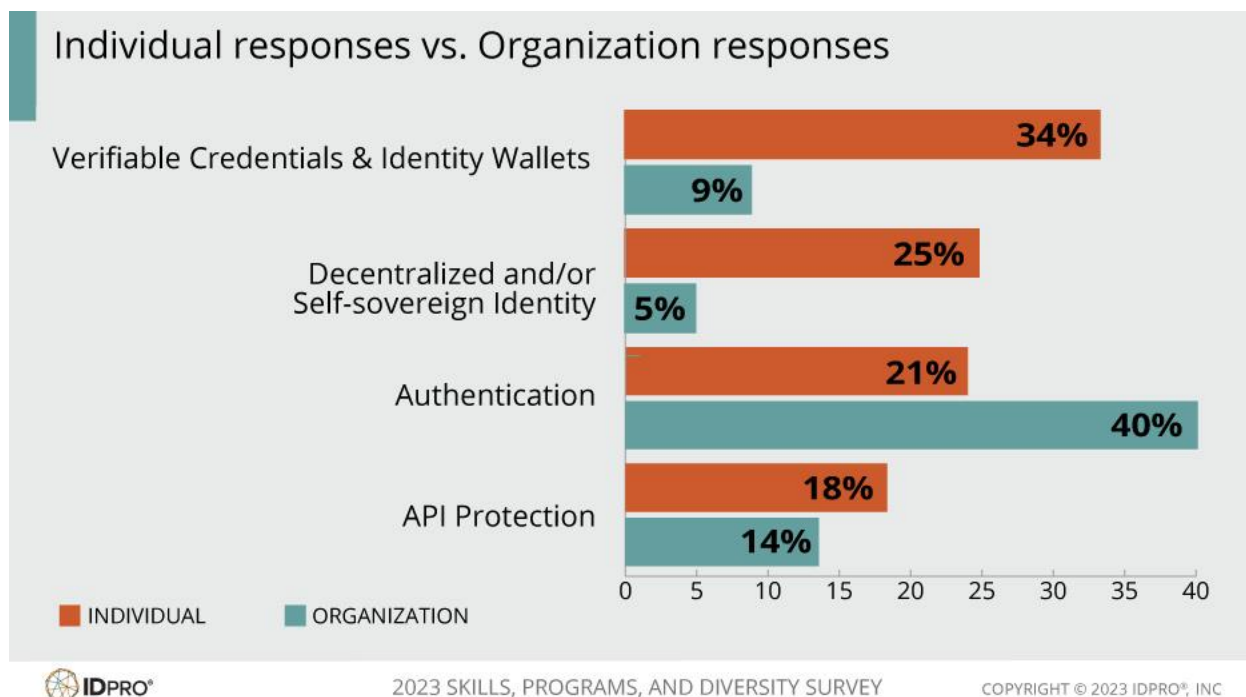
Question Commentary

The options available for responses changed again in the 2023 edit to allow for a wider understanding of our respondents' skills and expertise. The list matches the options in Question 7, "In which of the following areas do you have current or previous experience?"

-33-

Responses and Observations

What are the top 6 identity-related areas you are interested in learning about in the next 18 months?

Verifiable Credentials and Identity Wallets	34%
Decentralized and/or Self-sovereign Identity	25%
Authentication	21%
API Protection	18%
Contextual/Risk-based Authentication	17%
Identity Proofing/Vetting/Verification	15%

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Personal identity technologies held the top two slots this year for individual practitioner interests, with *Verifiable Credentials and Identity Wallets* increasing by 13% and taking the top slot and *Decentralized and/or Self-sovereign Identity* dropping to second with a 5% decrease. *Authentication* is notable as this is the first year that a top priority for individuals matches a top priority for enterprises.

Individual responses vs. Organization responses

	INDIVIDUAL	ORGANIZATION
Verifiable Credentials & Identity Wallets	34%	9%
Decentralized and/or Self-sovereign Identity	25%	5%
Authentication	21%	40%
API Protection	18%	14%

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When comparing individual interests to enterprise priorities, the personal identity technologies continue to show a significant disconnect. This may be a result of identity practitioners being interested in identity in ways an individual in other sectors are not. It may also be an area that changes in the next few years as government regulation starts to require more individual control over their digital identity and how it is used.

Diversity

It is now well understood that diverse and inclusive teams perform better work and make better decisions. For the digital identity industry specifically, however, there is the added consideration that the solutions we build must be fit for purpose for a globally representative audience. This requires a diverse body of professionals.

This section of the survey provides some insight into sector-specific data on the overall composition of the identity profession, and the level of proactive attention given to this area by key employers in the sector.

It is important to note that these questions tend to be highly personal, and—for many—emotive and sensitive. For these reasons, this section of the survey was made entirely optional. This year we saw an improved response rate for this section of the survey, albeit reduced relative to the rest of the survey.

Increased engagement and response from both members and non-members alike allow us to start to provide insight and recommendations to the industry as a whole. We will continue to refine this part of the survey in future years.

Workplace Diversity and Inclusion

Survey Question
My organization/organization is dedicated to diversity and inclusiveness.

Potential Responses
- Strongly Disagree
- Disagree
- Neutral/Neither agree nor disagree
- Agree
- Strongly Agree

Question Commentary
Building diverse and inclusive teams requires leadership and support throughout the organization, driven as a priority by senior leadership. This question explores how well established this endeavor is across the industry.

Responses and Observations

My organization/organization is dedicated to diversity and inclusiveness.

0.2% Strongly disagree
0.6% Disagree
11% Netural
49% Strongly Agree
39% Agree

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Almost all of the survey participants either agreed or were at least neutral that their organization is dedicated to diversity and inclusion. This number increased from 63% who Agreed or Strongly Agreed in 2022 to 88% in 2023.

Diversity and Hiring

Survey Question
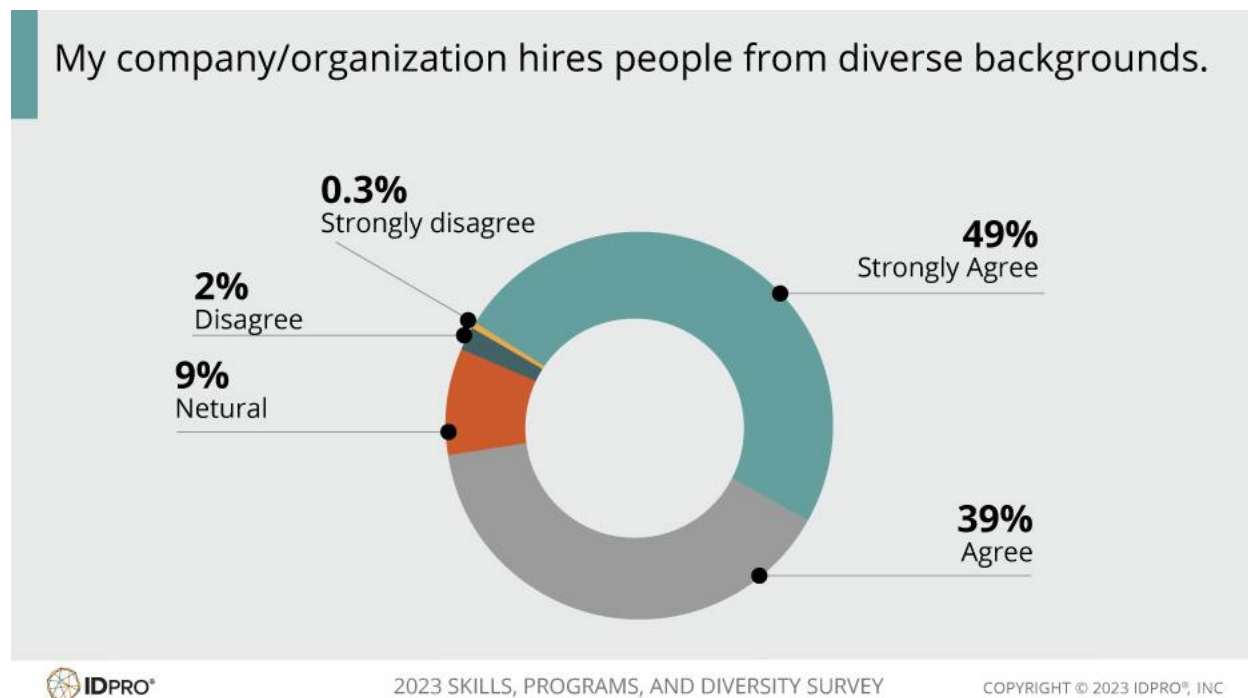My company/organization hires people from diverse backgrounds.

Potential Responses
- Strongly Disagree
- Disagree
- Neutral/Neither agree nor disagree
- Agree
- Strongly Agree

Question Commentary
This question seeks to establish how successful organizations are in fostering a diverse and inclusive workplace.

Responses and Observations

My company/organization hires people from diverse backgrounds.

0.3% Strongly disagree

2% Disagree

9% Netural

49% Strongly Agree

39% Agree

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Again, *prima facie* a sense that the 'diversity health' or organizations in the identity sector is good. The number of respondents that Agree or Strongly Agree matched 2022 numbers.

Sense of Belonging

Survey Question
I feel like I belong at my company/organization.

Potential Responses
- Strongly Disagree
- Disagree
- Neutral/Neither agree or disagree
- Agree
- Strongly Agree

Question Commentary
This question provides a baseline insight into the individual's own perception of inclusion within their organization.

Responses and Observations

I feel like I belong at my company/organization.

0.6% Strongly disagree
1% Disagree
12% Netural
45% Strongly Agree
41% Agree
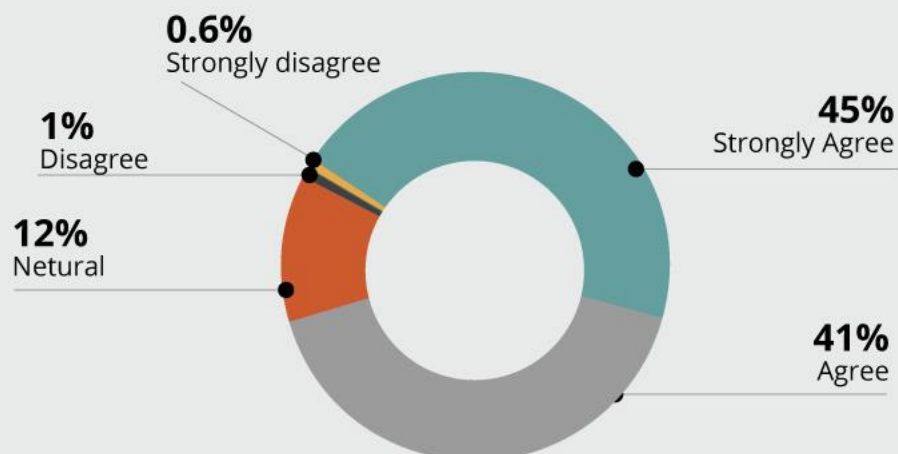
While the majority of respondents continue to indicate that they feel like they belong at their company, the percentages changed quite a bit from 2022 to 2023 between "Strongly Agree" and "Agree." In 2022, 54% strongly agreed, as compared to only 45% in 2023. The numbers for Agree changed from 29% in 2022 to 41% in 2023. All other numbers stayed relatively stable.

Diversity Priority

Survey Question
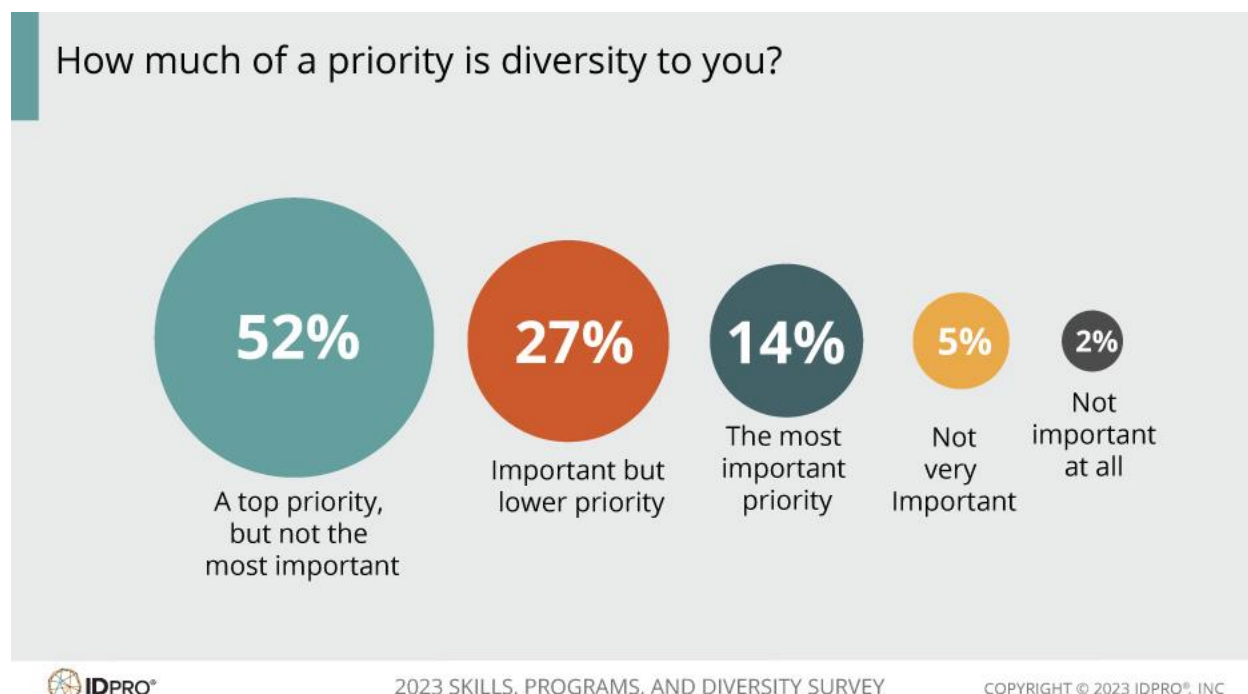How much of a priority is diversity to you?

Potential Responses
- The most important priority
- A top priority, but not the most important
- Important but lower priority
- Not very important
- Not important at all

Question Commentary

This question shifts the focus on to the individual themself, and seeks to establish a baseline of how well the importance of diversity and inclusivity has permeated across practitioners.

Responses and Observations

While responses about diversity at the organization level continue to show a high level of commitment, the numbers for individual commitment have shifted down. *Not important at all*, *Not very important* and *important but lower priority* options this year cover a third of survey respondents, as compared to a quarter in 2022. *A top priority, but not the most important,* dropped from 62% to 52%, whereas The most important priority remained steady at 14%, as compared to 13% in 2022.

Sexual Orientation

Survey Question
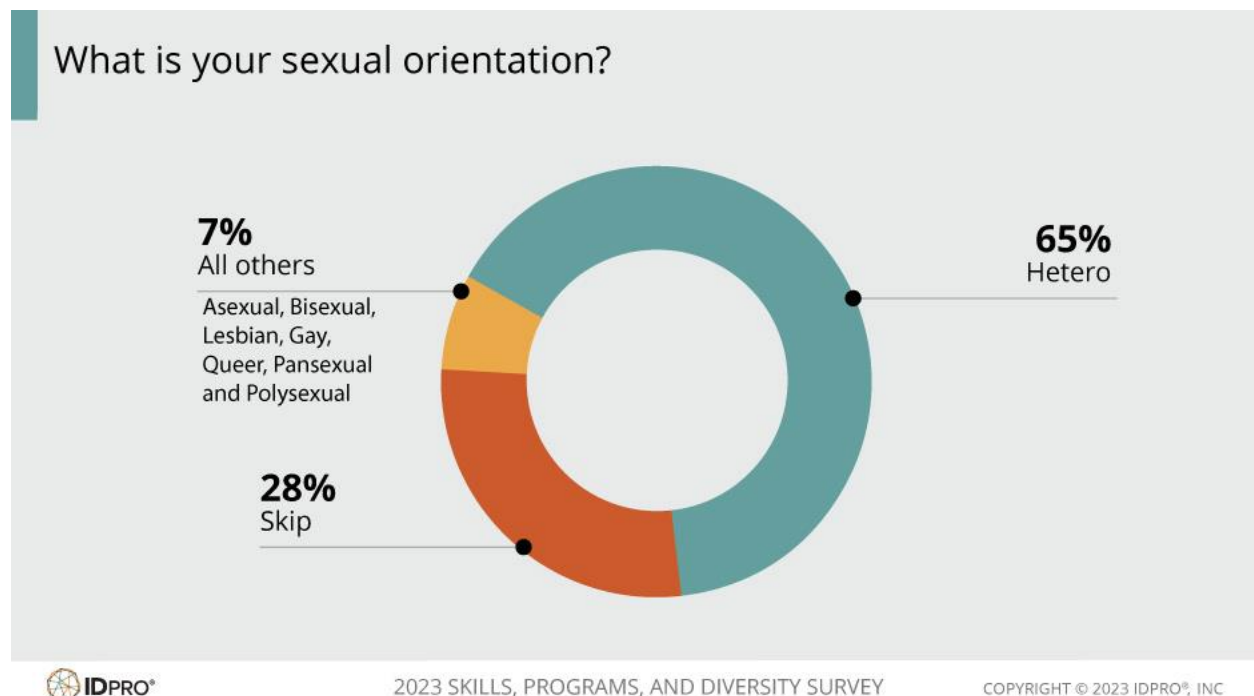
What is your sexual orientation?

Potential Responses

- Asexual
- Bisexual
- Gay
- Heterosexual or straight
- Lesbian
- Pansexual
- Polysexual
- Queer
- None of the above, please specify

Question Commentary

This question seeks to establish a baseline of self-identified sexual orientation amongst practitioners, as one indication of overall diversity.

Responses and Observations

What is your sexual orientation?

7%
All others
Asexual, Bisexual, Lesbian, Gay, Queer, Pansexual and Polysexual

65%
Hetero

28%
Skip

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As might be expected, response rates for this question were particularly low with a skip rate of 24% and certainly not sufficient to draw any meaningful conclusions. Nevertheless,

the responses provide at least some indication of the current state across the practitioner cohort.

Gender
Survey Question
What is your gender identity?

Potential Responses
- Agender
- Female
- Genderqueer
- Male
- Pangender
- Third gender
- Transgender
- Two-spirit
- Not specified above, please specify

Question Commentary
This question seeks to establish a baseline of self-identified gender amongst practitioners, as one indication of overall diversity. More potential responses were added to this question.

What is your gender identity?

60% Male

<.1% All others
Transgender, Genderqueer, Pangender, Third gender, Two-spirit, Agender

16% Female

23% Skip

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Response rates for this question were likewise particularly low and insufficient for meaningful analysis. Nevertheless, the responses provide at least some indication of the current state across the practitioner cohort.

Survey Data

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Acknowledgements

This survey is produced independently by IDPro thanks to the kind support of all our members. We would like particularly to thank all our founding members, and to recognise our [premier supporters](#) for their ongoing support.