IDPro 2022
Skills, Programs & Diversity Survey

Executive Summary

This is the fifth annual skills and programs survey of the digital identity industry executed independently by IDPro; it is made possible through the ongoing support of our members. The survey helps to inform the digital identity management industry about its practitioners and their interests.

The 2022 survey took place against a complex geo-political background including the conflict situation in the Ukraine, the slow and uneven emergence from the global COVID-19 pandemic, and challenging economic factors affecting the majority of the major world economies. Over the past 12 months, Identity technologies and solutions have become firmly established as critical digital infrastructure, enabling corporations and governments alike to improve the the reach, access, and effectiveness of their supply chains, products, and services; whilst at the same time enhancing security and privacy for citizens, customers, workforces, and organizations.

Through the survey, IDPro has established that:

- COVID continues to have a profound impact on our societies and—by extension—on the work the digital identity professional is tasked with, and the breadth of skills they need to address that work.
- There are early indications that a field of 'applied identity' is emerging as individuals within organizations—who do not today consider themselves identity practitioners—apply identity services to address particular business needs.
- The trend away from traditional on-premise directory services is now firmly established, with a combination of IDaaS and IGA technologies and services better suited to evolving requirements.

- Practitioners recognise that personal identity technologies are likely to become important for enterprises over the next 3 years, although enterprises have yet to respond to this trend.
- Enterprise priorities continue to be poorly aligned with practitioner interests—perhaps because most enterprises have yet to understand the deep strategic value that digital identity offers to the business.

Individual practitioners should continue to develop—and to demonstrate through certification as well as experience—a broad set of both technical and non-technical ('soft') skills; and should be alert to emerging opportunities for both new and well-established specialisms.

Managers and leaders should continue to consider diversity and inclusivity practices in developing well-rounded and effective teams. They should also be aware of talent pools emerging outside the extant identity organization structure, and they should support existing and emerging talent by adding robust professional training and certification to their talent development planning and hiring criteria.

Executives and CEOs should review their strategic plans to ensure that they are positioned both to respond to, and to take advantage of, the opportunities presented by the rapidly evolving digital identity business and technology landscape.

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Introducing the IDPro 2022 Skills, Programs and Diversity Survey

Findings

COVID Spring!

The effects of the global COVID pandemic have been felt since its onset throughout the identity industry. In 2020, IDPro wrote:

> Since this survey was still gathering results through the beginning of April [2020], it does reflect some of the early impact of the pandemic. Respondents identified multi-factor authentication (MFA) as the top priority for their employers within the next 18 months. As organizations of all kinds shifted to a "work from home" default, so came the need to raise security postures. Getting sections of the workforce for whom remote work was never planned online and connected to corporate assets was no small feat. With that came the likely assumption that those workers' devices were in hostile territory and MFA became a must.

Skip forward to 2022 and we observe a return to a more normal state. Identity governance and administration has overtaken multi-factor authentication as the top priority for organizations in the next 18 months garnering 31% and 28% of responses respectively: the efforts required to support a "work from anywhere" workforce are starting to decrease with the return to the workplace, but the need to manage who has access to what is a constant. This interpretation is supported by identity-as-a-service (IDaaS) remaining in the top 3 responses (24%) and privileged access moving into the top 5 (18%). Said differently, pandemics come and go but audits and regulatory requirements are eternal.

Customer identity and access management (CIAM) fell out of the top 3 priorities in 2022 and is 4th, with 19% of respondents indicating it was a priority for their organization. This stands in contrast to the 2021 results in which CIAM was 3rd with 25% of respondents. An interpretation of this is that organizations did some amount of CIAM uplift for digital engagement and transformation to get to a sufficient state and the more traditional needs of managing access and resource protection haven't really abated.

The desire to return to a more normal world has individual practitioners thinking about what comes next. Alongside organizational priorities, the Survey asks about areas of interest for individual practitioners. Decentralized and/or self-sovereign identity, IDaaS, identity standard development, verifiable credentials, and identity for IoT and connected devices were the top 5 responses. Leaving IDaaS aside for a moment, these results give a

glimpse of where individual practitioners think identity is going by way of their own interests. These interests, however, differ from where enterprise priorities lay.

The Survey asks about the non-technical skills that practitioners have found useful in their careers. While the top three (lateral thinking, business awareness, and adaptability) have mostly stayed consistent there was an observable change to other responses. 25% of respondents indicated that empathy was a powerful skill for them, up 56% year-over-year. This is likely a reflection of the pandemic; all of our lives have been shaken to some degree and that ask meant an increased need for kindness, grace, and yes, empathy.

Rise of "Applied Identity"

IDPro has observed that across the years of this Survey a majority of respondents share experience in a consistent set of areas within digital identity. The shared areas of expertise include multi-factor authentication, federation, and user provisioning. 2022 was no different in this regard. The top 6 areas of experience in descending order of response rate are MFA, federation, user provisioning, role management, directory services, and identity governance and administration (IGA). Response rates ranged from 80% of respondents indicating experience with MFA, down to 66% for IGA.

But there is another consistency to the Survey over the years—the responses towards the bottom of the list of areas of experience. Here we see a reasonably stable set of areas within digital identity that have 25% or fewer response rates, including privacy-related applications of identity, mobile identity management, verifiable credentials, identity for IoT and connected devices, decentralized and/or self-sovereign identity, and consortia-based identity.

There is a clear step-function between the top and bottom 6 areas of experience. Our hypothesis is that the most common areas of expertise represent "classic" areas of (often) enterprise identity management; and it is reasonable to assume that the respondents with experience in these areas operate systems that provide services such as MFA, IGA, and federation. They are operators of "identity machinery." Meanwhile, respondents with experience in the bottom 6 areas of experience aren't so much operating identity systems but applying identity services to other domains and problem spaces. In other words, we are seeing a distinction between practical identity and 'applied' identity.

The notion that the industry may be beginning to see the emergence of differentiation between practitioners who operate and provide identity services and those who apply those services to business problems is intriguing. It is reasonable to assume that there are (or will be) different skill sets, both technical and non-technical, for operators versus appliers of identity. This hints at what practitioners may already sense - that there are people within their organizations that apply identity services to particular business needs who—today, at least—do not consider themselves to be identity practitioners. If true, this

will have other implications for organizational optimization and career development; and is an area that we will continue to monitor in future surveys.

Governance is the new Directory

In the 2021 survey we noted several responses which, in combination, pointed towards a decline in the importance of traditional user directory technologies. This trend is confirmed by the 2022 results: directory services continue to be of very limited priority both for enterprises and for practitioners; and practitioners report a high level of existing experience.

However: this is not to suggest that user data no longer needs to be stored and managed! Rather, the mechanisms being used to do so are evolving, with IDaaS and IGA solutions emerging as the evolution of identity data storage and management. As mentioned in the COVID Spring!' section, IDaaS was identified as the third highest priority for Enterprises. Identity Governance and Administration (IGA) was introduced this year as a new response for 'enterprise priorities', and immediately went to the top of the list, with over 31% of respondents identifying it as priority.

It is perhaps no surprise that IGA is top of mind for many enterprises. More identity data needs to be managed; identity data increasingly incorporates non-human entities; COVID has accelerated a trend towards remote and contract working; the geo-political climate is driving significant changes to supply chains and workforce location. The volume and the mutability of the data that enterprises collect and manage is increasing, at the same time as compliance requirements become ever more burdensome. It's no wonder that IGA is top of mind for enterprises!

Practitioners report a reasonable level of existing IGA expertise (66% of responses), and relatively low interest in furthering this learning (13%). This might indicate that the level of experience in the community is well-matched to enterprise requirements. However, we note that, in addition to the technical requirements of IGA, there are equally important business and legal implications. IGA perhaps incorporates significant aspects of 'applied identity', and practitioners involved in IGA projects should consider whether additional learning outside of the technical subject matter area might be useful.

'IDaaS and Cloud Identity Management' came a strong 3rd as an enterprise priority; and was also the 2nd highest area of interest for individual practitioners. This alignment has been consistent throughout the COVID years. A likely interpretation of this is that as enterprises have sought to modernize their identity infrastructure, moving from on-prem "classic" access management and user provisioning to cloud-based offerings, there has been a great need for workforce talent. A practitioner having IDaaS skills and experience was and will continue to be beneficial from an employment perspective. This is amplified by an unscientific survey of the #gigs channel in IDPro's Slack workspace, which reveals that the majority of job postings are looking for people with IDaaS product experience.

Given the interest in learning about IDaaS, one might have expected a correspondingly low level of extant experience. Curiously, slightly more than half of the respondent pool report having current or existing knowledge in this area. It is worth noting, however, that the survey does not explore the depth of knowledge in any given topic. IDaaS is a relatively new offering (certainly when compared with on-premise directory deployments) which will evidently take large enterprises considerable time to adopt. Further, the migration of existing on-premise infrastructure to the cloud is a complex undertaking; IDaaS offerings are likely to evolve rapidly as they take account of an increasing number of specialized and non-mainstream use-cases.

Consequently, it seems likely that practitioners will need to further their learning about IDaaS and Cloud Identity Management, even as deployments and migrations proceed apace over the coming years. Those deployments and migrations will throw up novel problems which will require creative solutions from practitioners and vendors alike; leading in turn to an ongoing requirement for learning and best-practice sharing.

New Horizons: Personal Identity

Where enterprise and individual priorities around IGA and IDaaS are well-aligned, the opposite continues to be true for the 'personal identity' technologies such as verifiable credentials, decentralized identifiers and self-sovereign identity; and potentially related application areas including privacy.

Practitioners report relatively low levels of existing expertise in these emerging areas, with all of them appearing in the lowest quarter of responses. These are relatively new technologies — indeed, standards are still under rapid development and product/vendor adoption is in its infancy — so the lack of reported experience is understandable.

But practitioners are also reading the tea-leaves. Various government agencies at regional, national and international level are moving forward with citizen-scale digital identity projects (take, for example, the European Union's Digital Identity projects; the recently released UK Government's response to the Digital Identity and Attributes Consultation, which includes legislative and governance proposals and which is accelerating several trial projects; or recent activity in multiple countries, including North America, around Mobile Driver's License capabilities).

Personal digital identity is going to have a significant impact on almost every aspect of how practitioners think about designing, developing and operating digital identity infrastructure. Although these changes will necessarily take time—particularly in large enterprise, where significant work will need to take place to integrate existing infrastructure—Identity Professionals are more eager than ever to start understanding the implications of new technologies and standards. For the first time in the history of the survey, respondents

selected Decentralized and/or Self-Sovereign Identity as their individual top area of interest for knowledge development over the next 18 months; and by some considerable margin, with 30% of responses against 22% for the next highest area (IDaaS).

On the face of it, Enterprises continue to be behind the curve in this regard: the personal identity technologies have consistently been some of the least selected options for organizational priorities. However: perhaps it is more the case that for most large organizations, personal identity technologies *per se* are less relevant to organizations than the business applications of those technologies. Whilst not in the top three this year, Customer/Citizen Identity Management is still a significant priority for organizations; and Identity Proofing, Vetting and Verification continues to attract reasonable attention.

Misalignment of Individual and Enterprise Interests

IDPro has observed a multi-year trend in which organizational and individual areas of interest within the digital identity world are not wholly aligned. This year is no exception. As mentioned in the COVID Spring section, respondents indicated that over the next 18 months, they as individuals, are interested in topics such as decentralized / self-sovereign identity, standards development, verifiable credentials, and identity for IoT, whereas enterprise interests include IGA, MFA, IDaaS, CIAM, and privileged account management.

It is heartening to see standards development as an area of individual interest with 21% of respondents including it in their selection of priorities for the next 18 months. At the same time, significantly fewer respondents (8%) indicated that standards development was an enterprise priority. This should not necessarily be a surprise. While the entire industry feels the impact of identity standards development, generally speaking it is identity technology providers who actively engage in standards development.

It is crucial, though, that standards develop work should be heavily informed by real-world requirements and experience. A majority of respondents (63%) work in industries other than high-tech and information technology, suggesting a healthy interest from practitioners in both staying abreast of developments, but also contributing to the vital flow of information into the standards groups.

The industry is in a bit of a golden age for standards work. From emergent standards such as verifiable credentials and decentralized identifiers to workhorses such as OAuth and SCIM to those in between such as WebAuthN, it is arguable that there is more work being done and to be done with identity standards than ever before. Whilst that work in and of itself might not be an organization priority, leaders should certainly encourage and support the evident desire to participate shown by practitioners within their organizations, to help ensure that standards (and the products that are built on them) meet their business needs in the longer term

Inclusivity Progress

2021 was IDPro's first attempt to collect meaningful data on practitioners' experiences and opinions about inclusivity across the industry; responses this year have not fundamentally shifted. Employers are deemed to still be acting positively in terms of hiring and other HR practices and behaviors. We suspect that results continue to be somewhat skewed by the sample size and composition, but it is nonetheless heartening to see this consistency from one year to the next.

Also consistent with 2021, a majority of respondents in the 2022 survey identify as male and heterosexual. Notably, however, the skip rate for both of these questions was markedly lower this year. This perhaps suggests that people are more willing to engage in the conversation — an interpretation supported by the fact that fewer than 5% of respondents believe that diversity is unimportant as a personal priority.

There is no doubt that inclusivity has particular import for the digital identity industry, beyond the now well-established performance benefits in any field of diverse teams. As the reach of the annual IDPro survey grows, we will continue to track this key indicator of the health and vitality of our profession.

Methodology

The 2022 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	331

The total response rate for the 2022 survey was higher than 2021; 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?

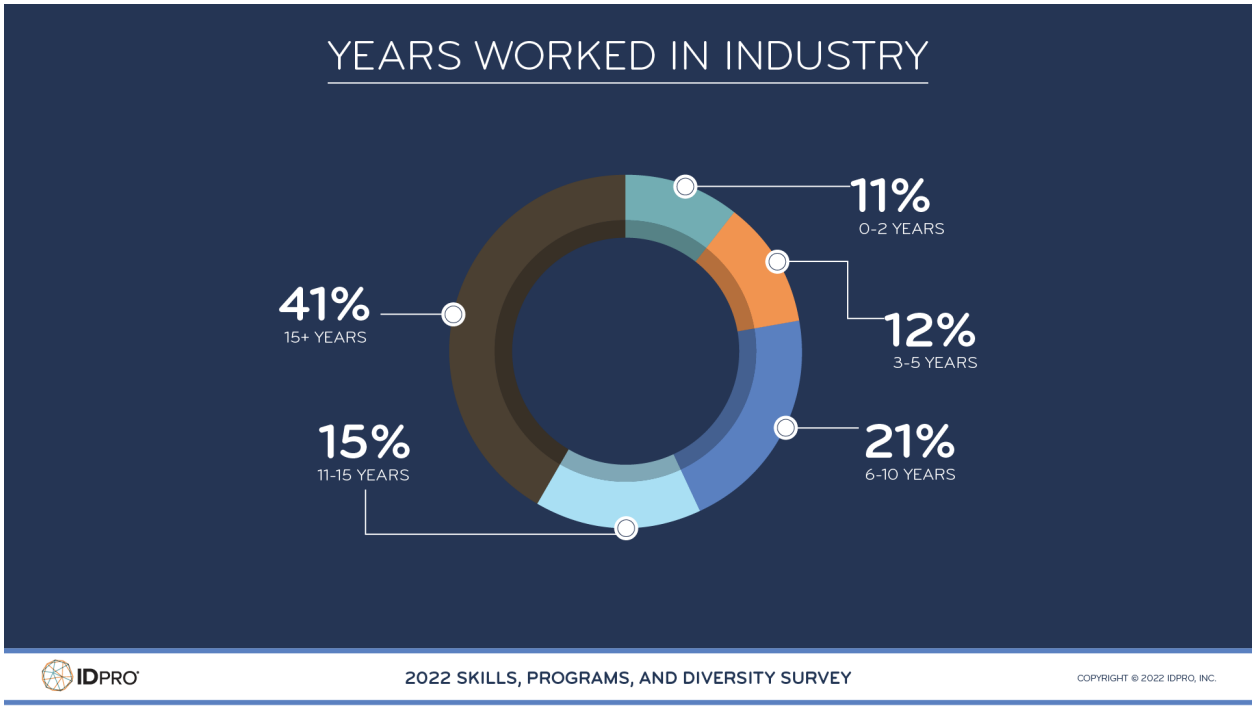
Potential Responses (select one)

- 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



Survey participants continue to skew towards practitioners' longer tenure, with the majority indicating more than 6 years in the industry. This reinforces previous years' perspective that there is a great deal of opportunity for the mentoring of newer practitioners. With over 40% of industry professionals having more than 15 years of experience, there is a great deal of legacy experience that can be tapped and those individuals should be encouraged to actively participate in industry events, materials development, and engagement opportunities with their less experienced counterparts.

Location

Survey Question
In which geographic region are you based?

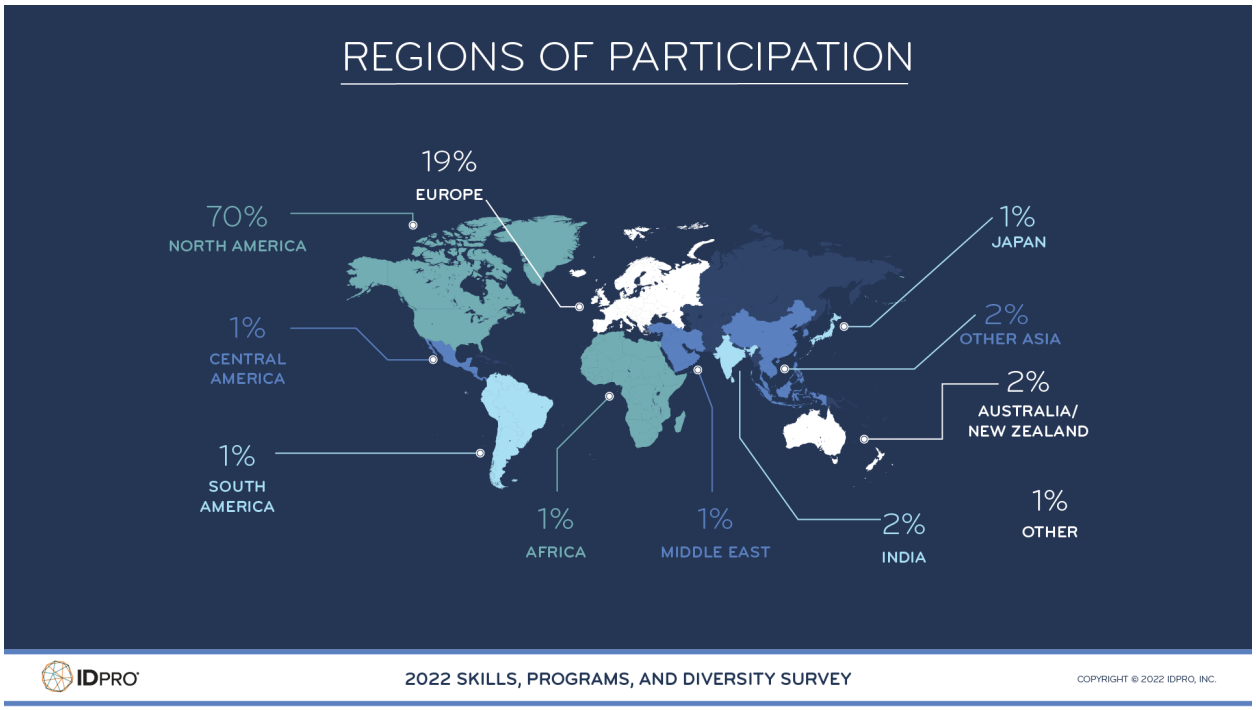
Potential Response (select one)

- 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 2022, there was a slight increase in respondents from the North American region at 70%, up from 65% last year, and the number of respondents from the European region decreased slightly from 21% to 19%. Most notably, there was an uptick in responses from the India and Australia/New Zealand regions which may be due to the increased expansion of remote work on a global scale. However, our previous observation holds for another year: *the industry as a whole must continue to consider how it can foster global participation and the exchange of ideas.*

Industry

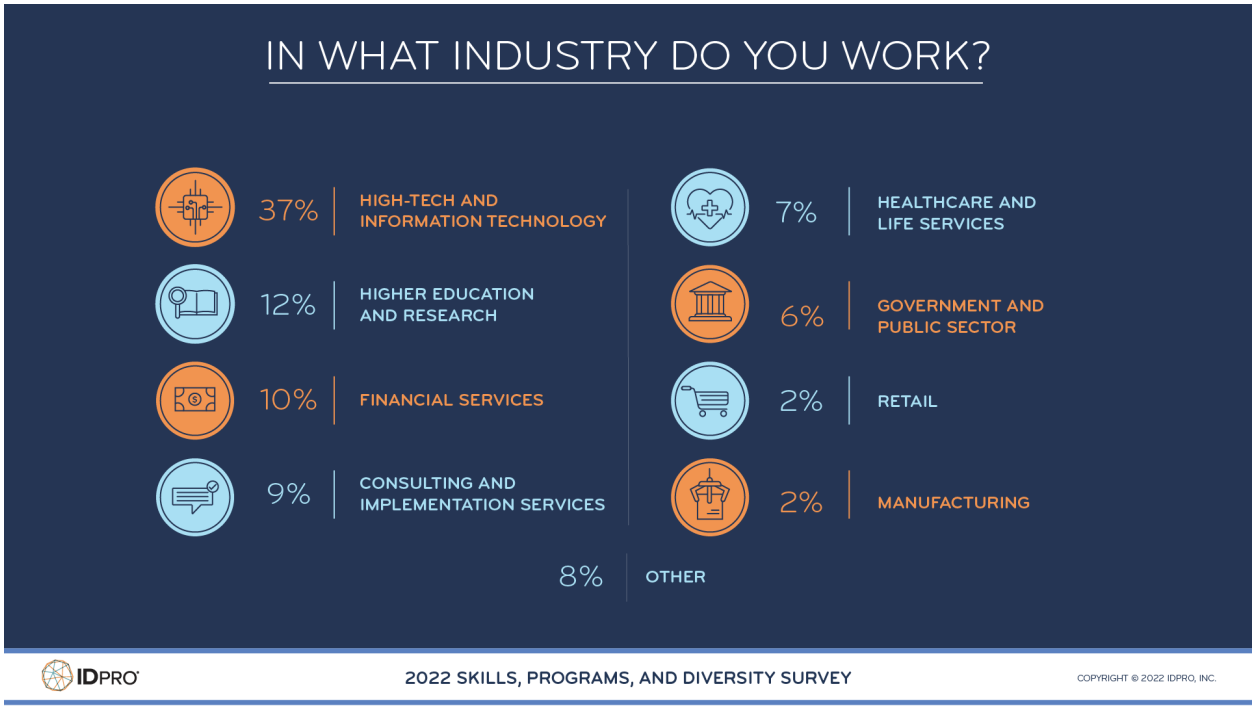
Survey Question
In what industry do you work?

Potential Response (select one)

- Aerospace and Defense
- Automotive
- Consulting and Implementation Services (added for 2019)
- 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



With the addition of *High-Tech* and *Information Technologies* to the response options, there was a noticeable shift with most survey participants selecting this category. We believe that this option most accurately describes the primary industry for identity professionals. However, the increase in respondents selecting this option could also indicate that it is too broad, encompassing too many career paths and we may need to parcel this category further in future surveys. Notably, the *Higher Education* category also received an uptick in responses.

Employer Size

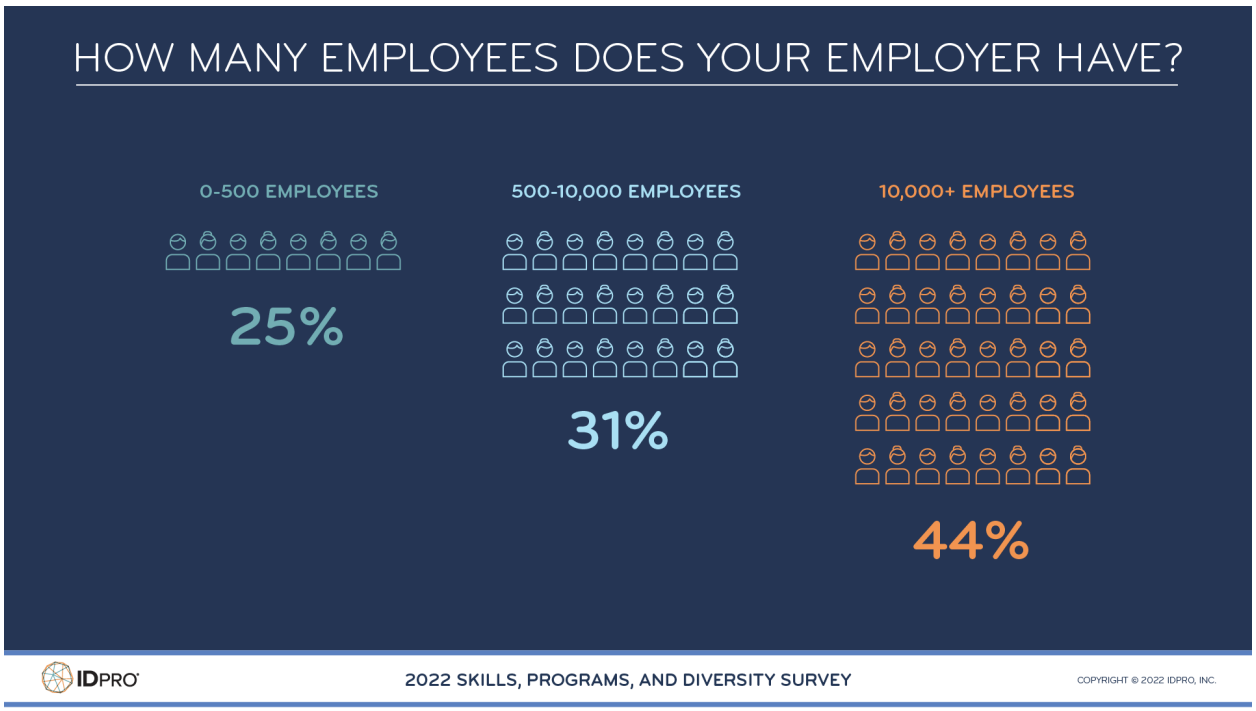
Survey Question
How many employees does your employer have?

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 a slight increase in participation within companies that have 501-10,000 total employees—increasing from 26% in 2021 to 31%. Companies with 0-500 employees continued to see a decrease, dropping from 32% last year to 25% while those in the 10,000+ category remained roughly the same. These numbers represent the commitment of employers to support staff within the industry. However, they should consider additional ways for providing development and skill set growth opportunities—including participation in industry organizations and certification.

Experience

Areas of Experience

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

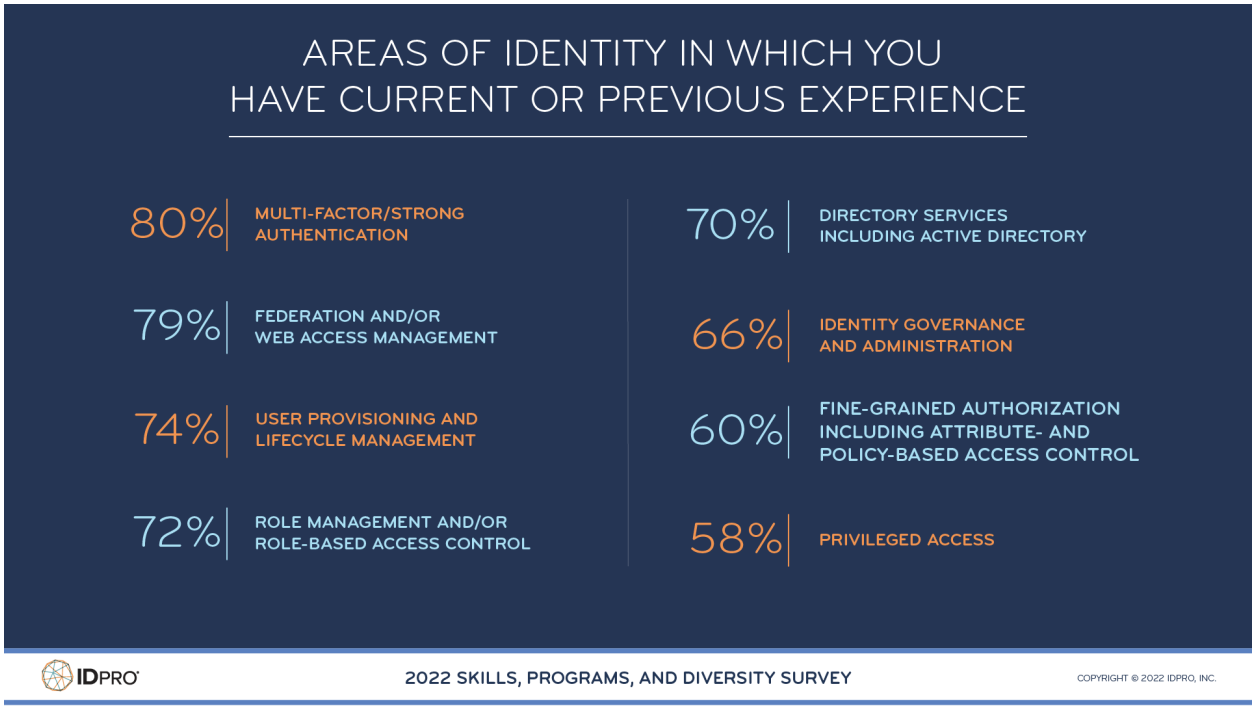
Potential Responses (Select all that apply)

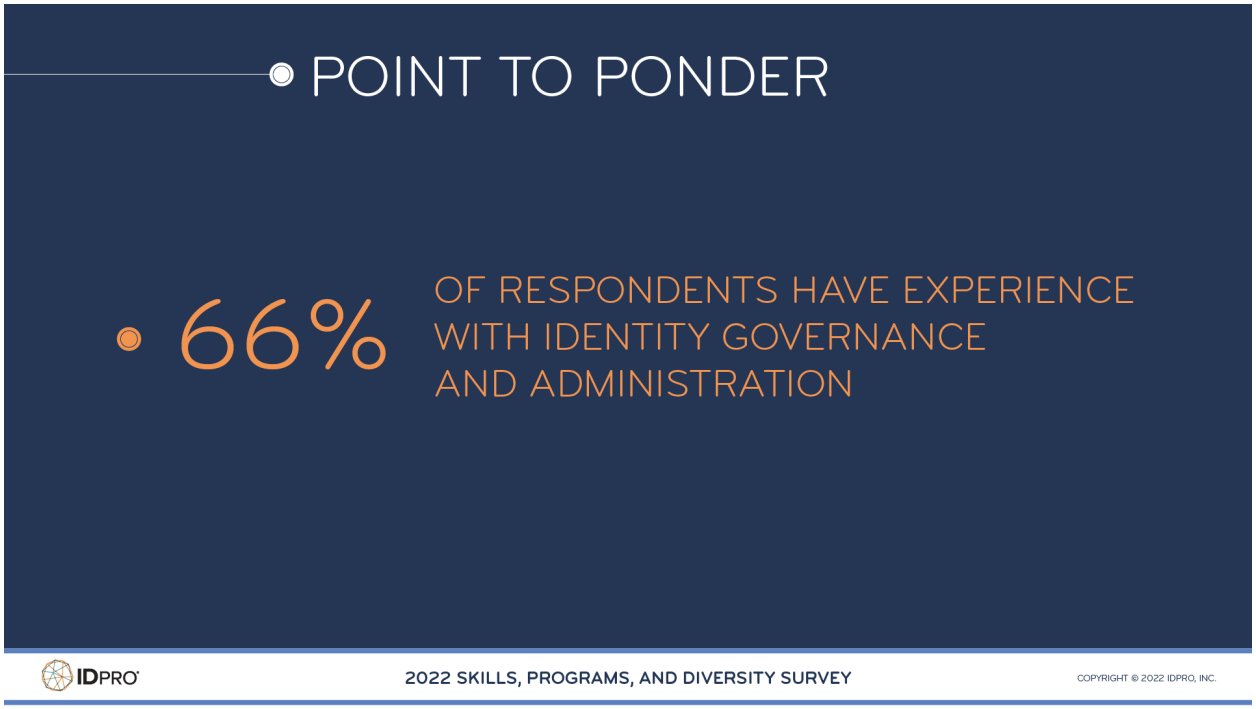
- Access Certification
- API Protection
- Biometrics
- Consortia-based Identity
- Contextual/Risk-based Authentication
- Customer/Citizen Identity and Access Management
- Decentralized and/or Self-Sovereign Identity
- Directory Services including Active Directory
- Federation and/or Web Access Management
- Fine-grained Authorization including Attribute- and Policy-based Access Control
- IDaaS; Cloud Identity Management
- Identity for IoT and Connected Devices
- Identity Governance and Administration
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Mobile Identity Management
- Multi-factor/Strong Authentication
- Privacy-related Applications of Identity
- Privileged Access
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- User provisioning and Lifecycle Management
- Verifiable Credentials
- Other

Question Commentary

Many responses have been changed in the 2022 edit to allow for a wider understanding of our respondents' skills and expertise. Removed response options included *Access Certification Identity Standards Development, API Protection Mobile Identity Management, Blockchain (or similar) Identity, Fine-grained Authorization and/or Attribute-based Access Control, Self-sovereign or user-centric identity, and Web Access Management and/or Federation Identity Proofing/Vetting. Added categories included Access Certification, API Protection, Biometrics, Decentralized and/or Self-Sovereign Identity, Federation and/or Web Access Management, Fine-grained Authorization including Attribute- and Policy-based Access Control, IDaaS: Cloud Identity Management, Identity Governance and Administration, Identity Proofing/Vetting/Verification, Identity Standards Development, Mobile Identity Management,* and *Verifiable Credentials*.

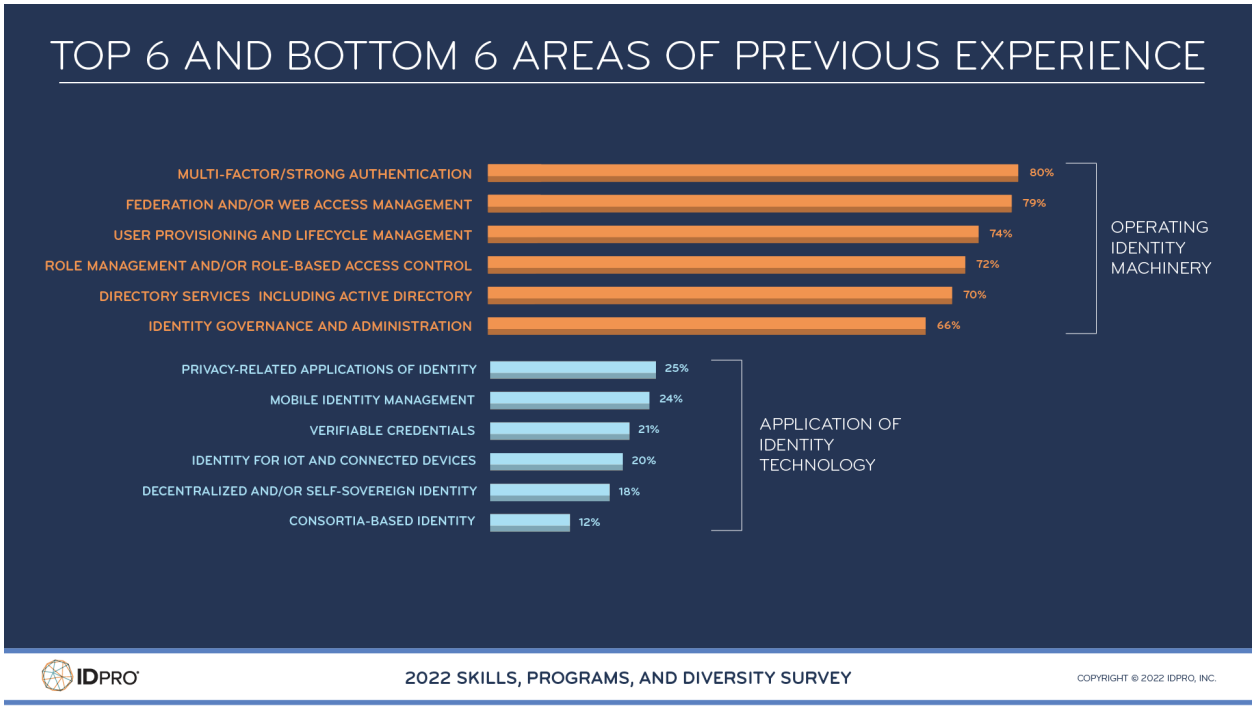
Responses and Observations





Although *Multi-Factor/Strong Authentication* remained in the number one spot, top responses this year shifted fairly significantly from 2021. *Federation and/or Web Access Management* took second place while *User Provisioning and Lifecycle Management* moved

into third. These changes are likely due to adjustments of the response options. We look forward to seeing how these changes will track in coming surveys.



Years to Proficiency

Survey Question

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

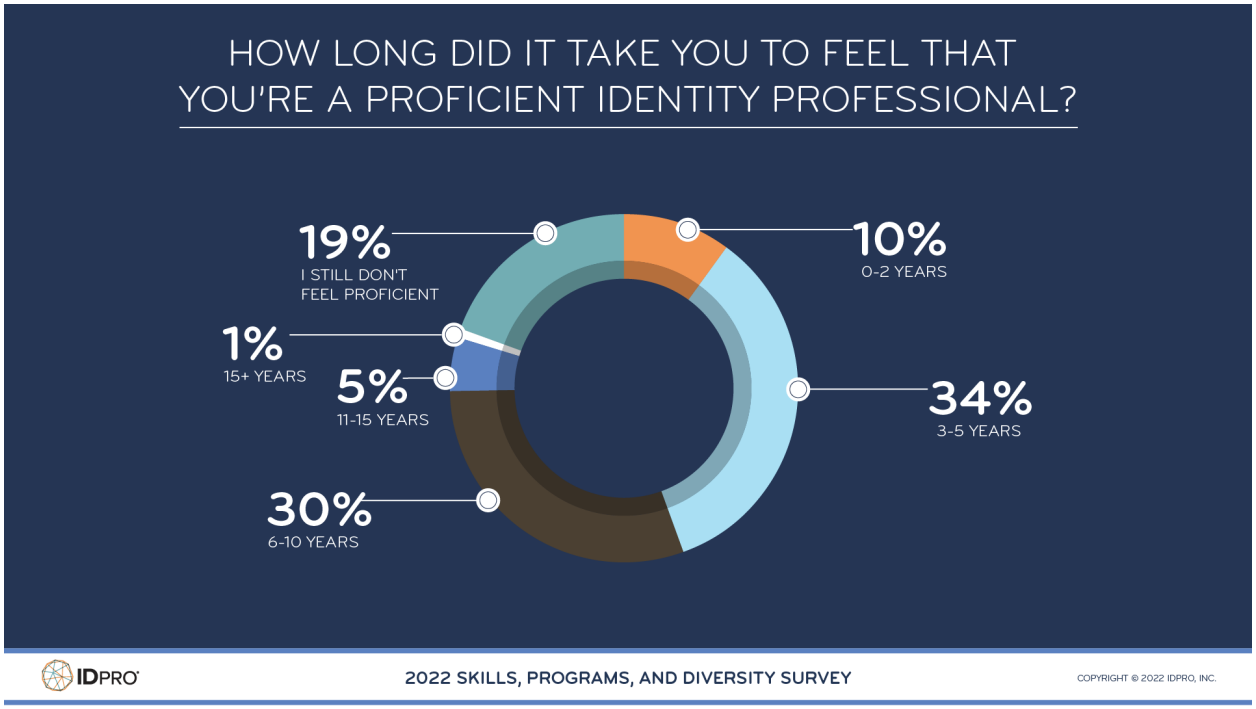
Potential Response

- 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 with the time brackets changing slightly this year to correct overlap in the response options.

Responses and Observations



Participants continue to indicate that they begin feeling proficient after working within the industry after a minimum of 3 years. ,Although a notable amount of respondents question their proficiency regardless of their years of experience, it is good to see that the total has decreased this year, from 25% in 2021 to 19%.

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.)

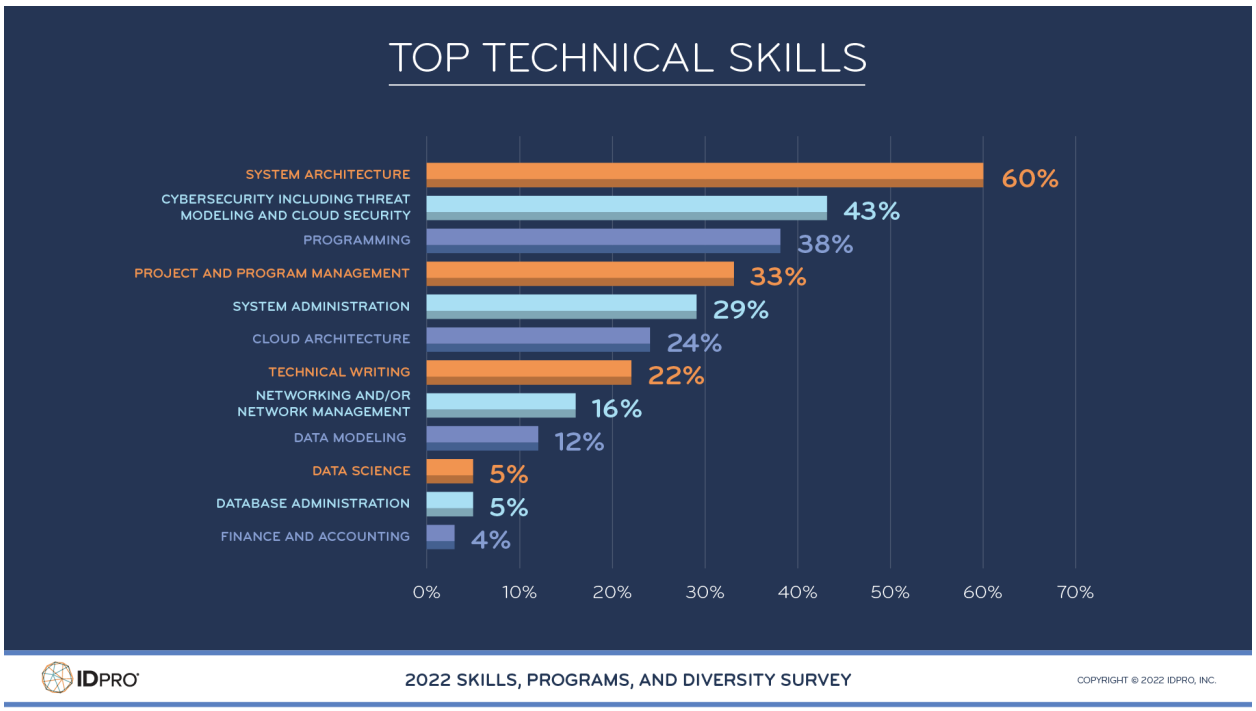
Potential Responses

- 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 Administration* had a 3% decrease this year while *System Architecture* saw a 7% increase to 60%. The

pandemic has likely continued to impact these two categories as administrators are forced to adjust designs to support workforce location changes.

Non-technical Skills

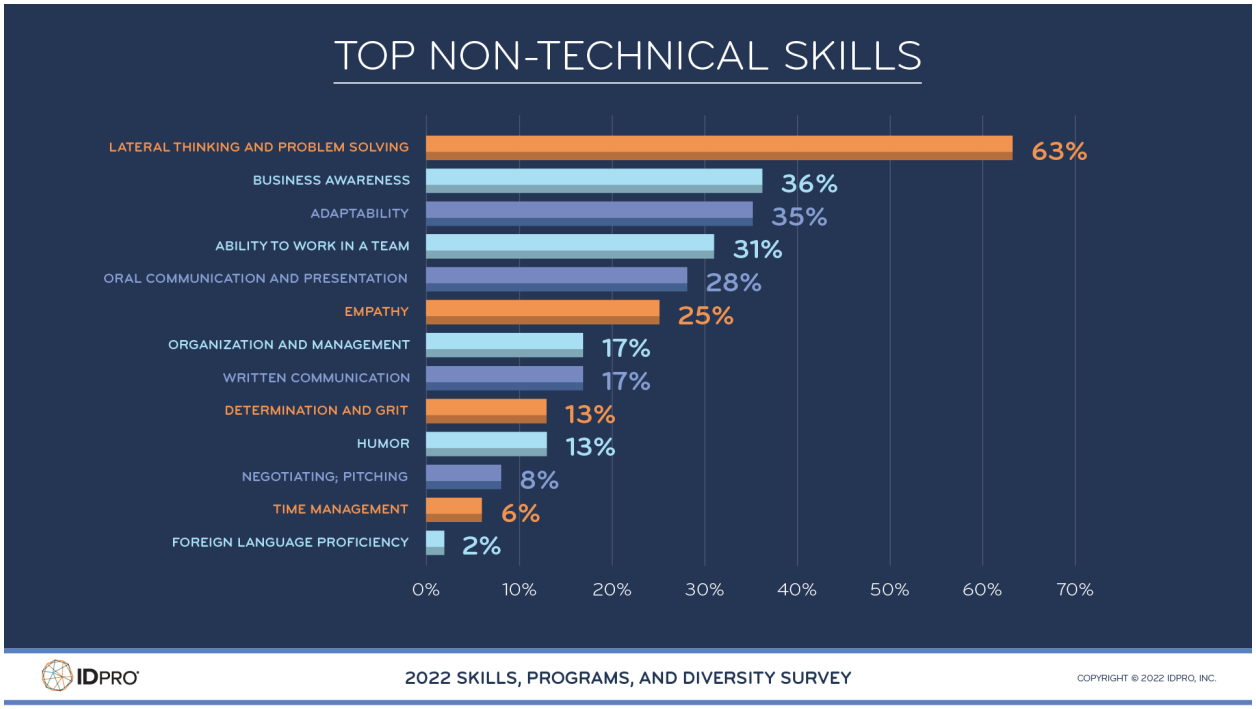
Survey Question
Which of the following would you consider to be the top 3 non-technical skills that have served you well in your career within the identity industry? (Choose no more than 3 skills.)

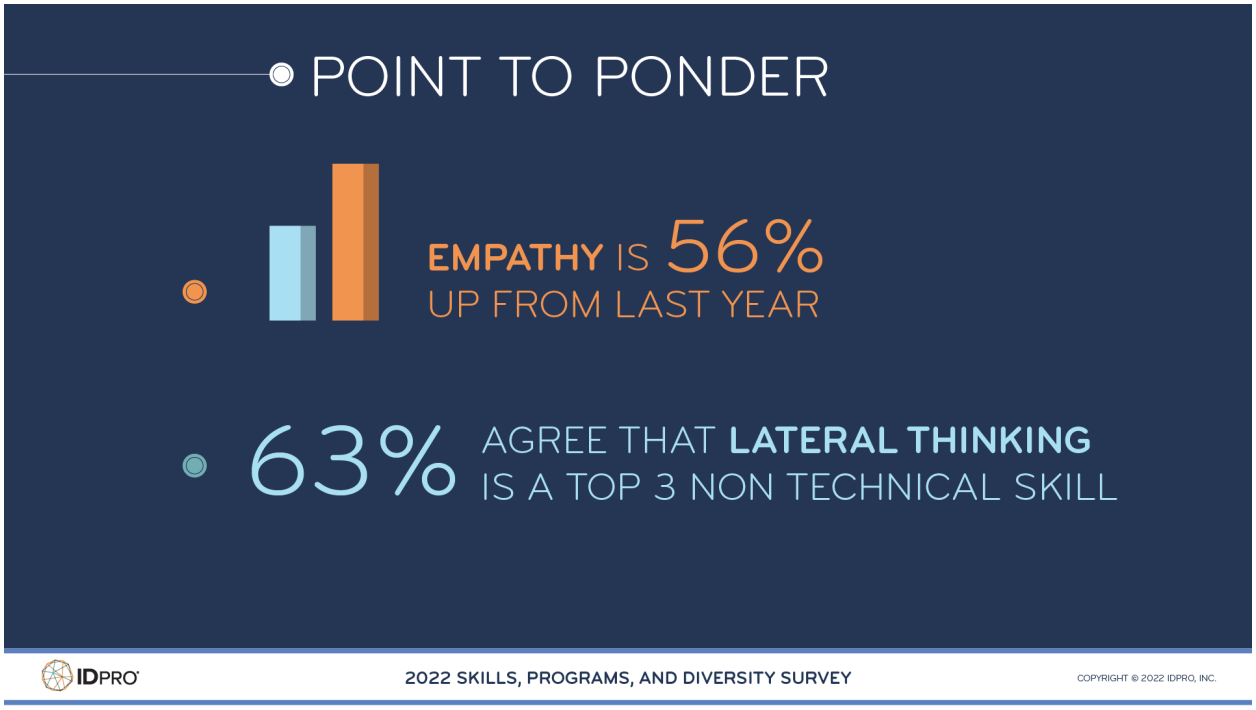
Potential Responses

- 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

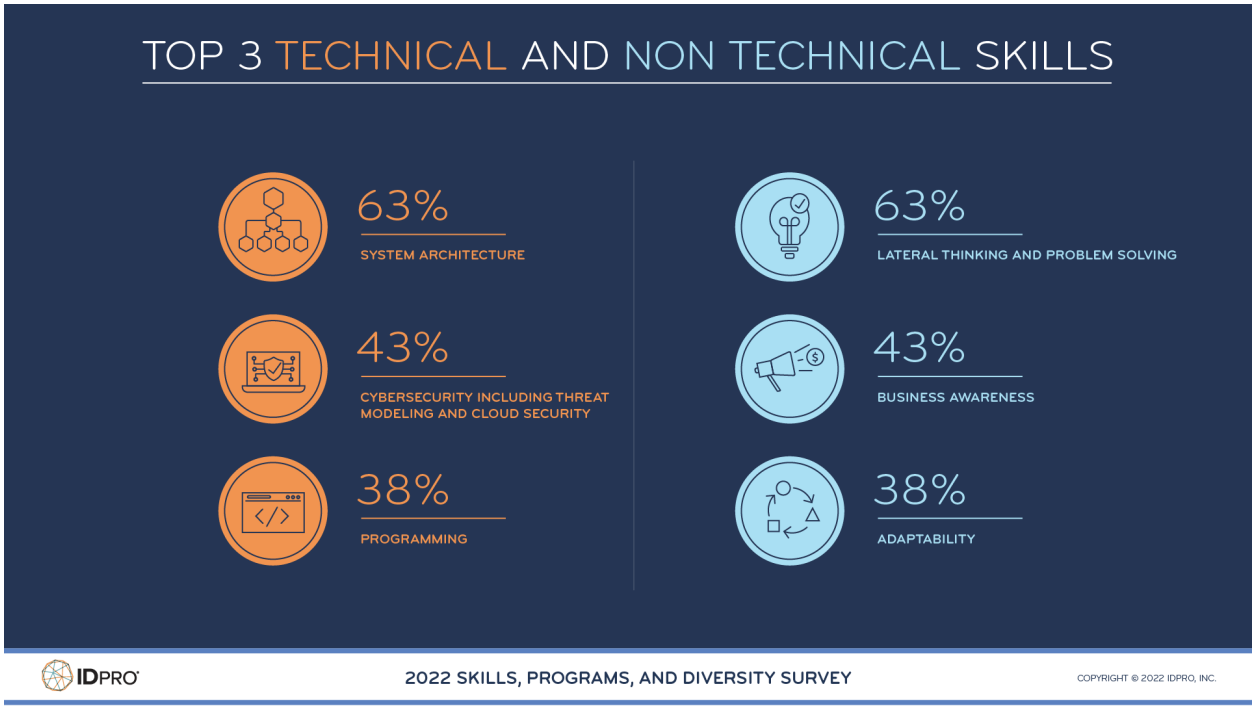
Question Commentary
The list of responses is unchanged from 2019 and takes a more in-depth look at which intangible skills survey participants feel are important to their success. The question was edited slightly to include “within the identity industry” in an effort to improve clarity.

Responses and Observations





The top 5 responses shifted this year with *Business Awareness* moving to second place, *Adaptability* shifting to third place, and *Ability to work in a team* changing to fourth place. *Empathy* saw a significant increase from 16% last year to 25% this year, moving it to fifth place. We believe this is due to the ongoing struggle with COVID-19 and the prominent issues facing those within the identity industry to meet the demands of a shifted workforce.. .



Survey Question
Please describe how these non-technical skills served you in your career within the identity industry? (Optional)

Question Commentary
This is an open text question intended to garner additional insight into the reasons why respondents feel non-technical skills are important. Responses to this question provide additional context that informs the analysis of other data. The question was changed slightly this year to improve clarity, adding “within the identity industry.”

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

Participation in Professional Organizations and *Scholarships/Grants to attend industry conference* responses were both added this year. The question was also changed slightly to improve clarity, adding "professional.".

Responses and Observations

Mentoring and training continue to be viewed as essential to ensuring success within the identity industry. However, *Receiving Mentorship* experienced a significant decrease in responses—dropping from 35% last year to 23% this year. *Peer-to-Peer Networking Opportunities* and *Certification in One or More Areas of Identity* maintained their priority status, showcasing the importance of IDPro's CIDPRO™ program. which continues to provide the first ever opportunity for global industry certification. *Opportunities to present at*

an industry meet-up or conference saw a notable increase in responses, from 5% last year to 10%. This is likely due to the return of in-person activities and events.

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 3 identity-related priorities for the next 18 months? (Select no more than 3)

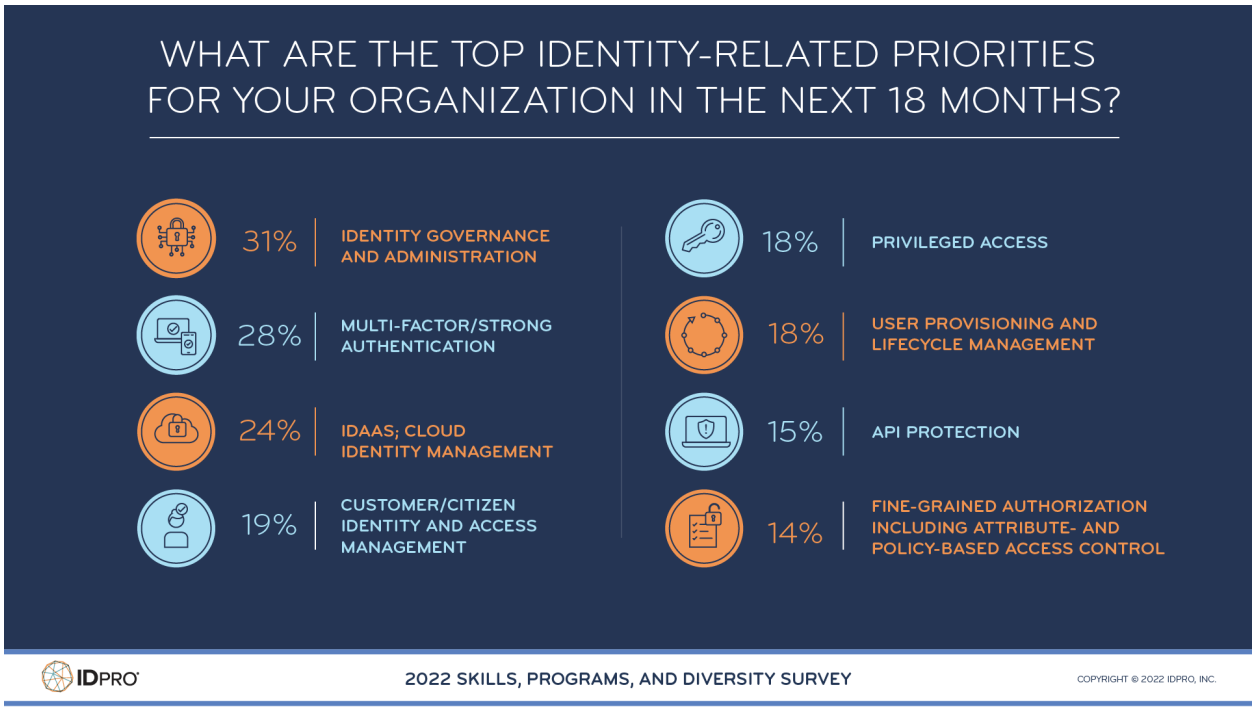
Potential Responses

- Access Certification
- API Protection
- Biometrics
- Consortia-based Identity
- Contextual/Risk-based Authentication
- Customer/Citizen Identity and Access Management
- Decentralized and/or Self-sovereign Identity
- Directory Services including Active Directory
- Federation and/or Web Access Management
- Fine-grained Authorization including Attribute- and Policy-based Access Control
- IDaaS; Cloud Identity Management
- Identity for IoT and Connected Devices
- Identity Governance and Administration
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Mobile Identity Management
- Multi-factor/Strong Authentication
- Other (please specify)
- Privacy-related Applications of Identity
- Privileged Access
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- User provisioning and Lifecycle Management

- Verifiable Credentials

Question Commentary
The list of potential response options was expanded this year and the question was also slightly changed to improve clarity. 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



The newly-added *Identity Governance and Administration* option takes the first position this year, shifting *Multi-Factor/Strong Authentication* to the second position. Meanwhile, *IDAAS; Cloud Identity Management, Customer/Citizen Identity and Access Management* ,and *Privileged Access* remain at the forefront.

Individual Priorities

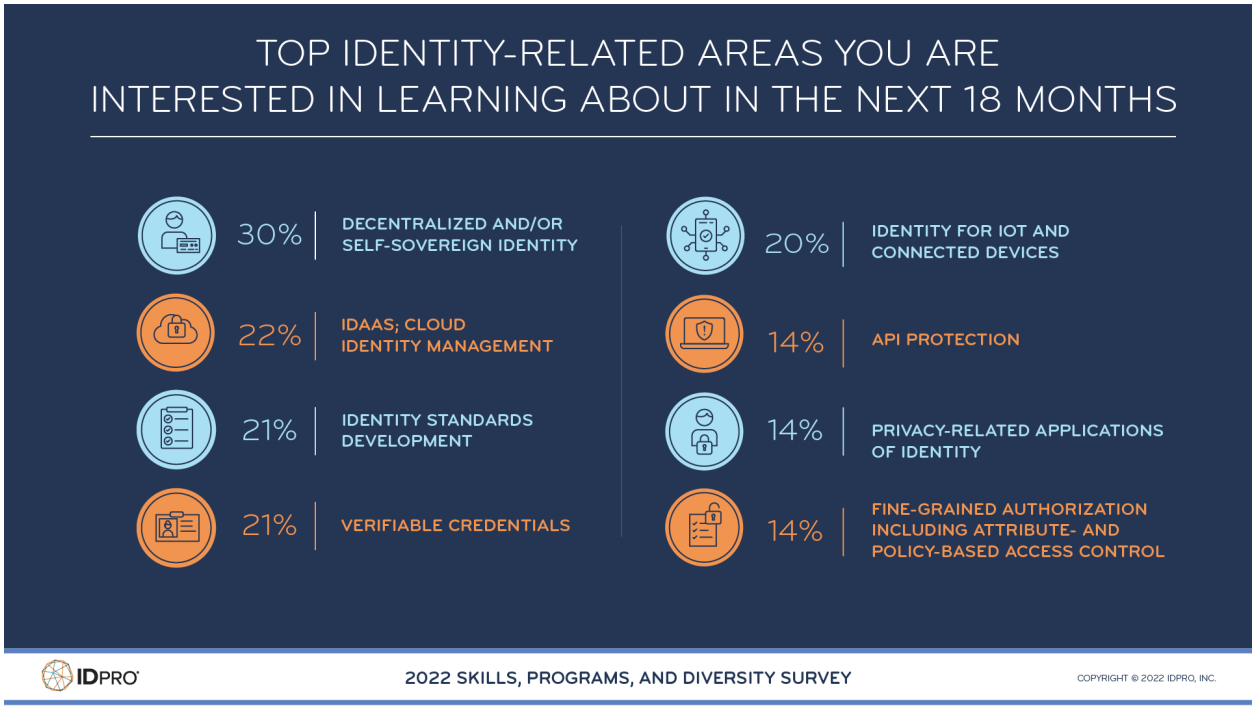
Survey Question
As an individual practitioner, what are the top identity-related areas you are interested in learning about in the next 18 months? (Choose no more than 3.)

Potential Responses

- Access Certification
- API Protection
- Becoming a mentor
- Biometrics
- Blockchain (or similar) Identity
- Consortia-based Identity
- Contextual/Risk-based Authentication
- Customer/Citizen Identity and Access Management
- Decentralized and/or Self-sovereign Identity
- Directory Services including Active Directory
- Federation and/or Web Access Management
- Fine-grained Authorization including Attribute- and Policy-based Access Control
- IDaaS; Cloud Identity Management
- Identity for IoT and Connected Devices
- Identity Governance and Administration
- Identity Proofing/Vetting/Verification
- Identity Standards Development
- Mobile Identity Management
- Multi-factor/Strong Authentication
- Privacy-related Applications of Identity
- Privileged Access
- Receiving mentorship
- Role Management and/or Role-based Access Control
- Security Applications of Identity
- User provisioning and Lifecycle Management
- Verifiable Credentials

Question Commentary
The list of potential responses is changed this year providing more options. The question was also slightly changed for clarity purposes.

Responses and Observations

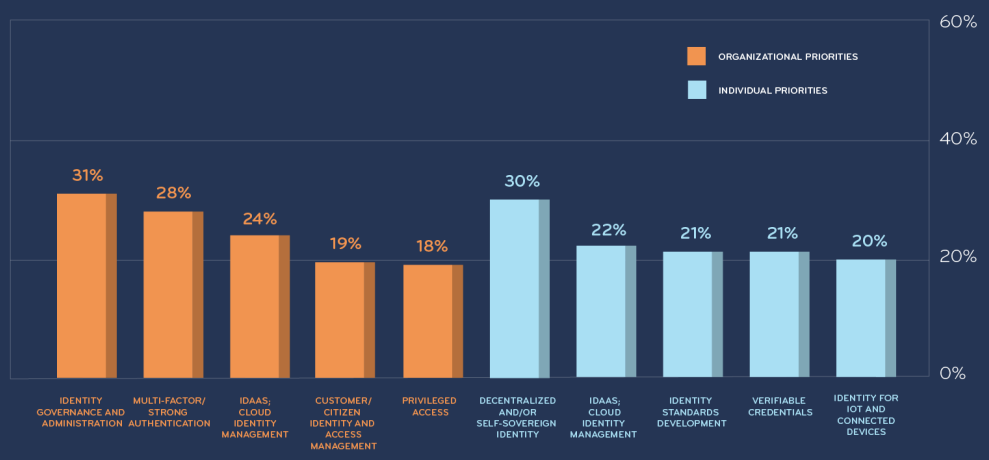


Decentralized and/or Self-sovereign Identity shifted to the first position this year with *IDaaS; Cloud Identity Management* now in the second position, after decreasing by 7%. Newly added *Identity Standards Development* moved to the third position sharing close importance with *Verifiable Credentials* as skills practitioners are most interested in developing over the next 18 months.

POINT TO PONDER

7% INDIVIDUAL INTEREST IN LEARNING ABOUT IDAAS AND CLOUD IDENTITY MANAGEMENT IS DOWN 7% FROM LAST YEAR

ORGANIZATIONAL PRIORITIES COMPARED TO INDIVIDUAL PRIORITIES



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

Almost all of the survey participants either agreed or were at least neutral that their organization is dedicated to diversity and inclusion. While this decrease from last year in the number of participants responding that they disagree with this statement is, at first look, good news, responses could be skewed by the percentage of IDPro members who work at large software companies known to have highly active diversity programs; and by the relatively small representation of respondents from outside of North America and Europe.

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

Again, *prima facie* a sense that the 'diversity health' or organizations in the identity sector is good. As with the previous question, however, it is likely that the sample size and scope is an influence on the responses.

Sense of Belonging

Survey Question

I feel like I belong at my company/organization.

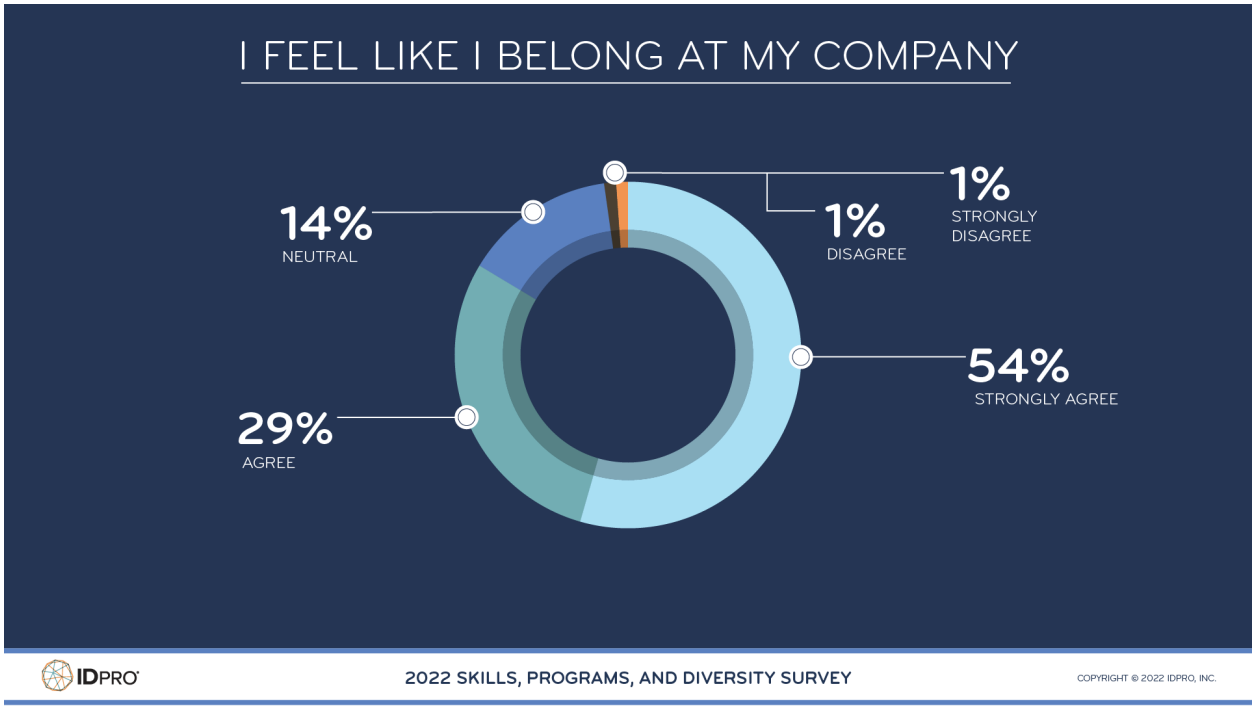
Potential Responses

- 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



A healthy majority of respondents in the survey indicated that they feel well-settled within the organization they work. As with prior questions in this section, it is likely that sample size and scope impact the responses. Nonetheless, the number of respondents feeling fundamentally at odds with their place of work decreased this year.

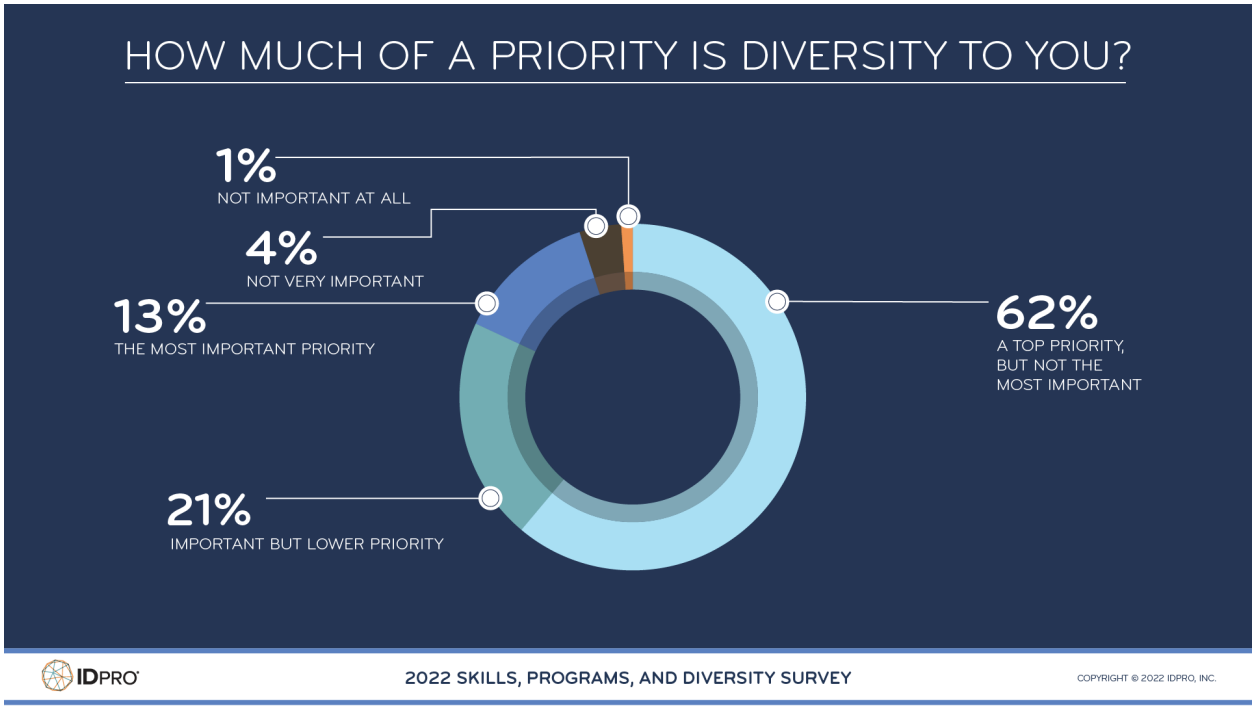
Diversity Priority

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



A significant number of respondents have shifted from the *Not important at all*, *Not very important* and *important but lower priority* options to placing significantly increased importance upon diversity in this year's survey. We might extrapolate and suggest that this also means that a majority of practitioners understands that more inclusive teams and practices result in better products, services and business outcomes. Also, as a result of the COVID-19 pandemic, there may be a broadening of approach to new hiring practices as more companies are welcoming a work from home environment which naturally allows for employees located around the world.

Sexual Orientation

Survey Question
What is your sexual orientation?

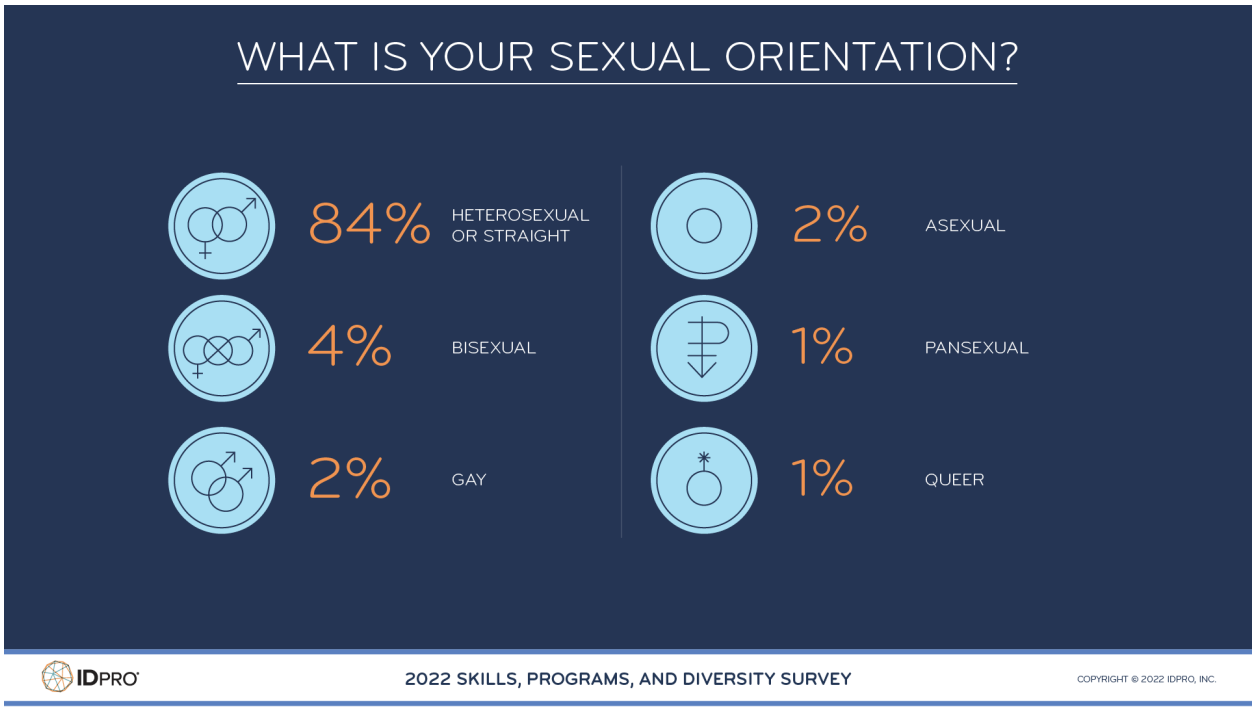
Potential Responses

- 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



As might be expected, response rates for this question were particularly low 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

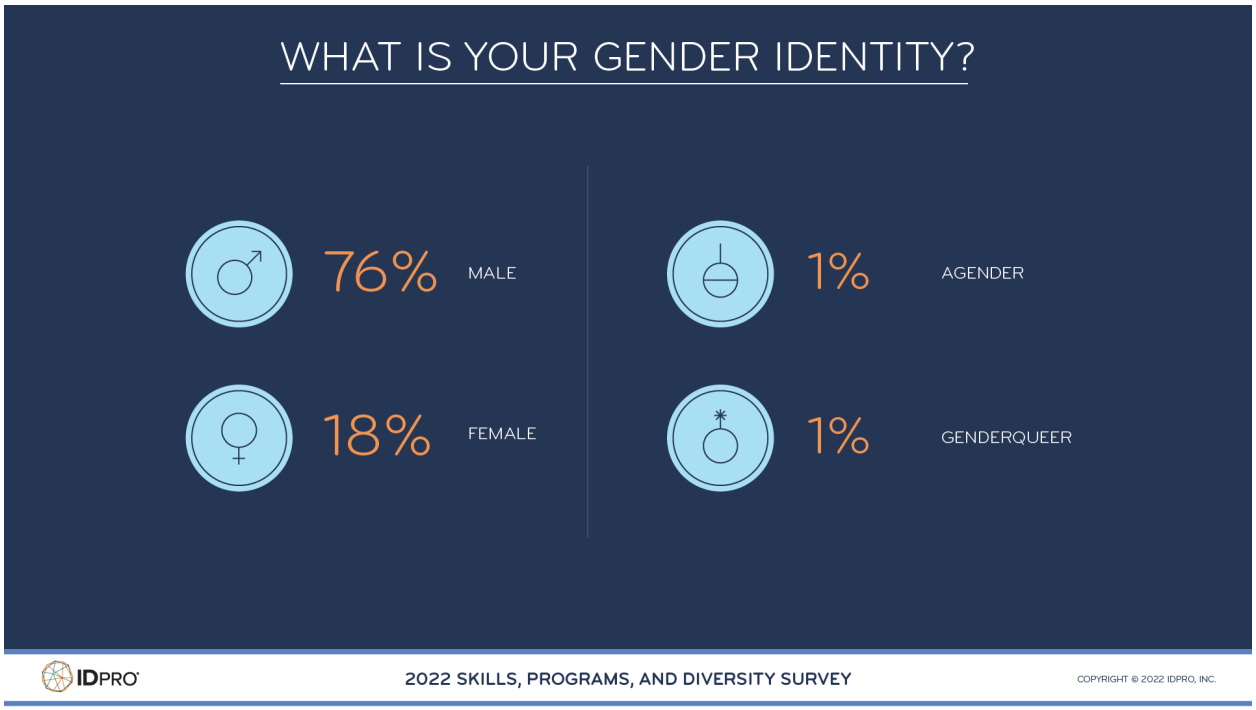
Survey Question
What is your gender identity?

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.



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

IDPro is pleased to provide aggregated and summary results under the Creative Commons Attribution Non-Commercial Non-Derivative 4.0 license. For raw data and all other uses of the data, please contact director@idpro.org.

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.

