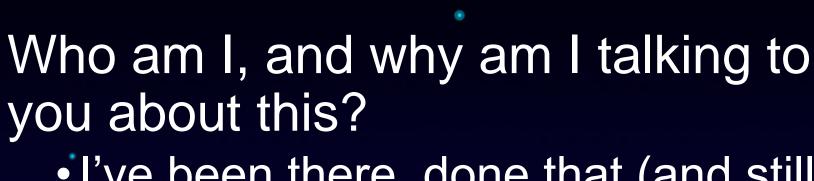


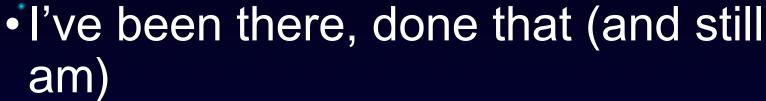


Arynn Crow

Sr. Manager, User Authentication AWS







 IAM's talent supply/demand means we should all be helping to build the bench







The 1,000 foot view of IAM Hiring

~3-5MM

Global cybersecurity workforce today

~250-300K

Roles may be IAM-related

40-60K

Open IAM roles

*This slide contains educated guesses



YoY market growth for 5-8 years

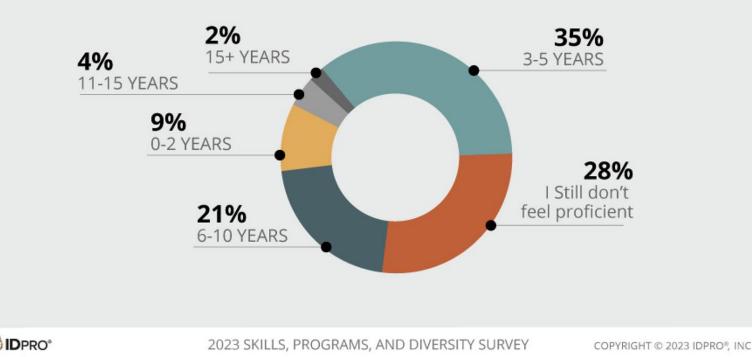


#identiverse

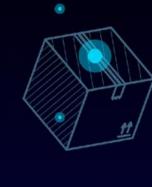


Why that's a problem: proficiency is a long game.

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









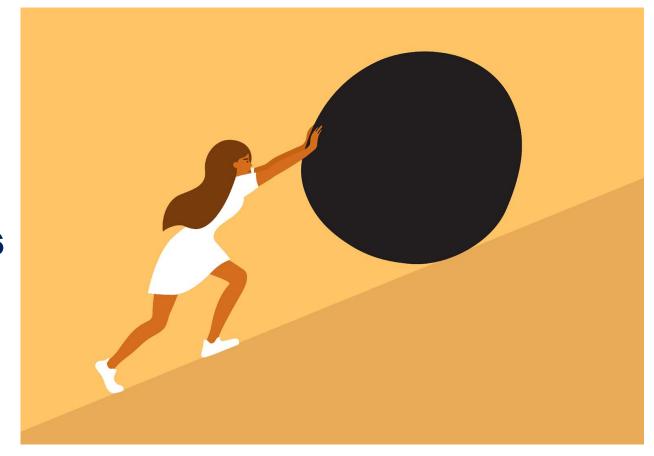


Making tradeoffs in hiring doesn't have to be painful – and it helps us all to build the bench.



#identiverse

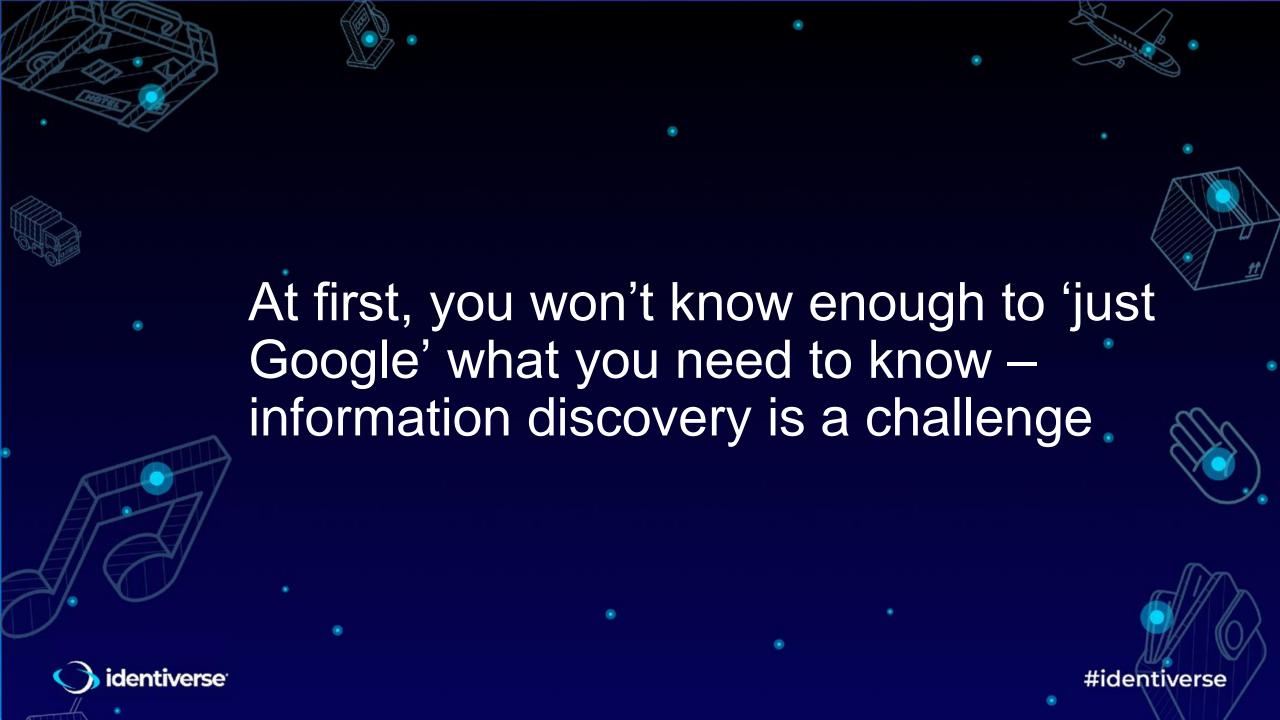
I've observed three most common obstacles to overcome in training



1 – So much \$#%* information!

Or, "getting to know what you don't know"







#identiverse



#identiverse

identiverse^{*}

2 – Identity is broad; few concepts are cleanly compartmentalized

You may start with only one small piece, but...

Puzzle pieces only make sense in the context of other pieces – being effective early means developing systems-based thinking





3 – High-order judgment is a hard-won skill



#identiverse

A Growing Body of Learning Materials

- IDPro's Body of Knowledge (and Slack)
- NIST frameworks and articles
- Common standards, specs, etc.
- Vendor-driven blogs, podcasts, and books



— Introduction to Envacy for consumers (vo) — Clare Nelson − Originally published 2020-06-18; updated 2022-12-16

Workforce IAM

- ✓ An Overview of the Digital Identity Lifecycle (v2) Andrew Cameron and Olaf Grewe Originally published 2020-10-31; updated 2022-02-28
- ✓ User Provisioning in the Enterprise Ian Glazer, Lori Robinson, Mat Hamlin 2022-06-03

Standards, Regulations, and Laws

- Impact of GDPR on Identity and Access Management Andrew Hindle 2020-03-31
- An Introduction to GDPR (v3) Andrew Cormack Originally published 2020-03-31; updated 2021-06-30, 2022-09-30
- Laws Governing Identity Systems Thomas J. Smedinghoff Originally published 2020-03-31; updated 2021-06-30
- Review ISO/IEC 24760-1:2019 Corey Scholefield 2020-03-31
- Review ISO/IEC 24760-3:2016 Espen Bago 2021-06-17
- ✓ Review ISO/IEC 24760-2:2015 George B. Dobbs 2020 -06-18

IAM Architecture and Solutions

- Delegated Authentication Using a SAML Web Browser SSO Profile (v2) George B. Dobbs Originally published 2021-09-30; updated 2022-12-16
- ✓ Designing MFA for Humans Nishant Kaushik 2020-10-31
- Federation in the Enterprise Patrick Lunney Originally published 2021-04-19; updated 2022-06-03
- ✓ IAM Reference Architecture (v3) George B. Dobbs Originally published 2021-09-30; updated 2022-12-16
- ✓ Introduction to IAM Architecture (v2) Andrew Cameron and Graham Williamson Originally published 2020-06-18; updated 2021-09-30
- Multi-factor Authentication Khaled Zaky and Dean H. Saxe 2022-12-16



All good things – but not enough.

Effective IAM learning needs connective tissue

- Onboard (and Beyond) Intentionally

- Think 1-2 years ahead
- You don't have to turn over every stone for them – but you should know roughly how deep the canyon is



Expose them to breadth and risk early

- Initial priority selection is important when flexible look for areas that cross multiple systems and stakeholders
- Find ways to expose them to risk evaluation within the first ~3 months (and to people who are great at it)
 - Support with guardrails, but give them room to discover and build confidence

Support information discovery and processing

- Develop annotated, ordered 'brain banks' of educational resources
- Example inclusions: common standards (and how/why they are applied in your environment, versus customizations), relevant regulatory statutes, etc.





Developing internal learning networks

- Establish a dedicated mentor early no point is "too early"
- Organic connections can be harder for new remote employees
 - support this network intentionally
- Ensure mentoring helps mentors, too developing others develops us



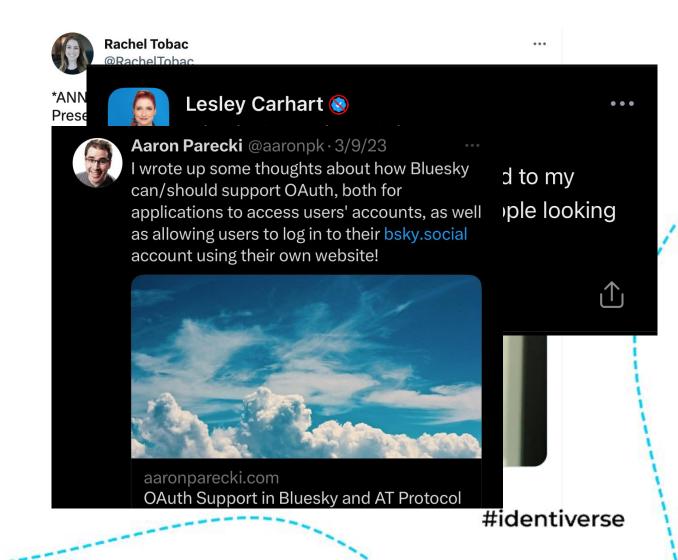
Scaling the Helpers

- This isn't just for big companies!
- When you don't have enough tenured folks to support rapid hiring, scaling their time becomes mission-critical
- Guided study groups contextualize industry resources for more people with fewer mentors
- Record everything interactive learning is best, but not always practical



Plant seeds for the external network

- Conferences (hey, Identiverse!), standards bodies, meetups
- Nearly-free double-whammy mechanisms for networking and learning
 - IDPro Slack
 - curated Twitter/ Mastodon/ BlueSky, etc. follow lists





Recap

- Common obstacles will be 1.) processing sheer volume of information, 2.) contextualizing it in the 'bigger picture', and 3.) applying learnings to inform independent judgment
- Creating curated learning materials (annotated guides, study groups, etc.) is up-front work, but provides scalable value
- The 'human element' is critical help them establish internal as well as external networks for deeper learning



THANK YOU!

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