IRI 2025

INNOVATING THE FUTURE

Facilitated Session: How to Build a Workforce of the Future

Seif Hagag, Enterprise Accounts Leader
Uncountable Inc.

Session Outline

- Introduction to Uncountable: 3min

- Introducing the topic - Trends in workforce: 5min

- Uncountable experience in R&D AI-enablement: 10min

- Breakout Discussions: 20min

- Bring back & share: 5min
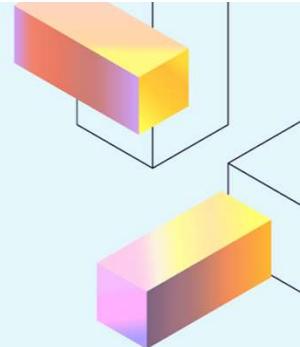
About Uncountable

We are built for the enterprise environment and global teams.
Our mission is to accelerate R&D and to do that we need to help flatten the adoption curve.

With Uncountable

Collaborative Innovation
Develop the future of
lab software together

Smarter Data Management
Organize, connect, and
future-proof your R&D data

Scalable AI Solutions
Start small, scale fast pilot,
integrate, and grow AI-driven
workflows today

We created the Uncountable platform

to centralize, connect, and structure all types of R&D data

Centralize, Connect, and Structure All Your Formulation & Measurement Data

ELN / Reports

LIMS

Visualizations & Analysis

Structured Recipe / Property Database

Predictive Tools

Our Expertise in R&D Digitalization

Uncountable's team brings scientific, technical, and digital transformation experience across industries

🌎 **65+ delivery professionals** across **4 global offices**, combining deep R&D and digital transformation experience.

🎓 **90% of our team holds advanced degrees (Masters or PhD)** in scientific or engineering disciplines.

🧪 **Average 5+ years of experience** spanning laboratory research, process development, and software implementation.

🔬 Expertise across **Chemical Engineering, Materials Science, Bioengineering, Chemistry and Computer Science** (among others).

⚙️ **30+ Scientific Implementation experts** supported by **dedicated Account Management and Implementations Engineering teams** ensure continuity from rollout to adoption.

🚀 Proven record leading **enterprise-scale LIMS and ELN transformations** across global R&D organizations.

London
Munich
New York
San Francisco
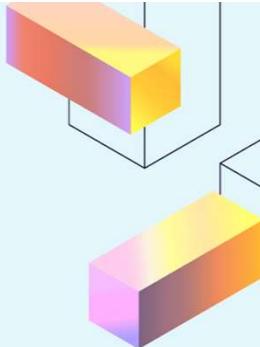
Trends in Creating a "Workforce of the Future"

- *Upskilling teams to make better use of AI?*
  - *Ongoing Six-Sigma training initiatives or one-time course?*

- *Wider skills to look for during hiring process?*
  - *Scientists with a data background?*

- *Use of VR/AR tools in the workplace*

- *Digital twins and remote collaboration*
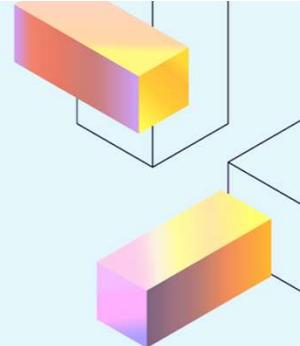
How can you prepare for AI enabled labs?
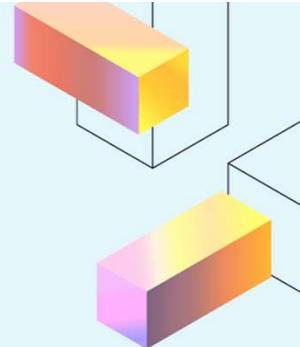
Accelerate Adoption cycles

Cloud
Retire legacy desktop tools (e.g. Excel), move from site-specific to global systems

Mobile
Enable last-mile data capture with tablets and phones

Democratize Access

› Make LLM tools available to all scientists and technicians, not just admins or data teams

› Keep experiment context stored with results

Centralize & Standardize Data

› Adopt a connected ELN, LIMS, and analytics platform

› Break down silos so AI can see the full picture

What is a scientist's role going to be?

Today

Scientists execute workflows

- Reconciling notes and transcribing data
- Searching across systems to find past work
- Managing compliance paperwork
- Repeating analysis routines
- Writing reports

Tomorrow

Scientists orchestrate and direct

- Pointing LLMs to content to synthesize & structure
- Ordering reports to be auto-generated & validated
- Overseeing compliance logs and audit trails
- Designing experiment strategy & innovation at scale
- Approving and managing experiment plans

Driving Successful Change Together
Digitizing Across All Levels of Your Organization
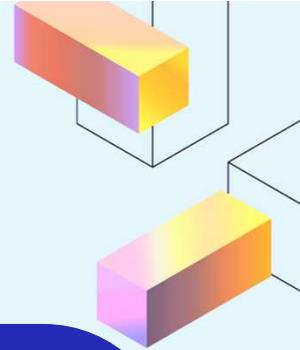
End-Users
Embrace new tools and data-driven ways of working.

Managers
Reinforce best practices and support their teams through transition.

+

IT & Digitalization Teams
Enable integrations, data migration, and system readiness.

Senior Leadership
Provide visible sponsorship and link change to strategic goals.

Change happens at every level — from scientists adopting new workflows to executives reinforcing the strategic vision.

Each stakeholder group plays a critical role

Partner's Role: Guide, train, and support your teams through each stage of change — from design to full adoption.

Your Role: Champion the transformation internally — aligning people, processes, and priorities for long-term success.

People: Driving Adoption and Mindset Shift
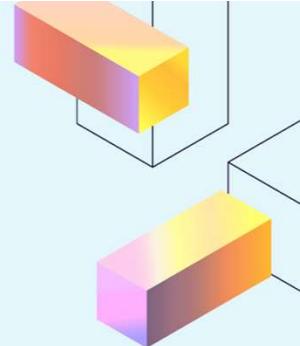
| Build champions	Tailored training	Encourage adoption	Empower teams
Identify internal technical and business advocates to lead the change.	Deliver role-specific onboarding for scientists, formulators, technicians and managers.	Address skepticism around replacing Excel, legacy LIMS/ELN, or custom tools.	Reinforce how Uncountable enables faster experimentation and smarter collaboration.

EXAMPLE IMPLEMENTATION PROJECT ORGANIZATION
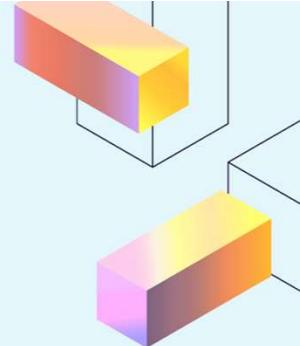
Executive Project sponsor

Data Stewards

Data Stewards - *defining and creating 80% best practice templates*

| BU 1 | BU 2 | BU 3 | BU 4 | BU 5 |

Power Users - *take on last 20% of implementation*

Power Users by Lab

| Lab | Lab | Lab | Lab | Lab | Lab | Lab | Lab | Lab | Lab | Lab | Lab |

Breakout Discussion 20min
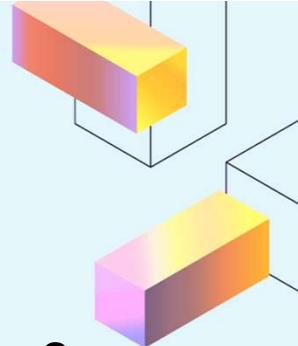
- How have you tried upskilling teams to prepare them for AI adoption?
    - *Data science courses*
    - *Enforcing data standardization/best practices*
    - *Reducing organizational silos/encouraging collaboration*
- What changes have you made to hiring strategies?
    - *Data-driven backgrounds*
    - *Requiring a pro AI adoption mentality*
    - *Proactive approach during onboarding*
- How have you leveraged AI, to not just improve existing workflows but to generally transform how your teams work in their day-to-day?

Breakout Session Takeaways
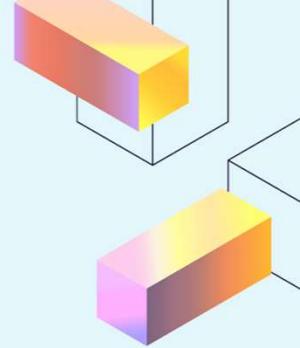
- Let's have a few tables share the important points discussed amongst each other
- What were a few challenges/barriers to enabling a workforce of the future?
- What are some foreseeable and actionable changes to be made in the next 3 years?
- Workbook assignment:
  - **What will I do the day after I get back?**
  - **What initiative will I start in the first month of next year?**
  - **What do I want to have accomplished by this event next year?**