



Exploring our technology – and what it highlights about being a Solitan

Examining our 2023 survey conducted among our community of data and integration professionals, to reflect on our tech usage, processes and initiatives

SOLITA

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Hi, we're Solita.

With 2000 employees situated across Europe, we specialise in technology projects and consultancy. To deliver on this, we have expert teams in development, data operations, connectivity and integration, artificial intelligence and beyond.

But our work isn't the only thing that we're proud of. There has always been a focus on how we do this work, as an open, value-driven organization.

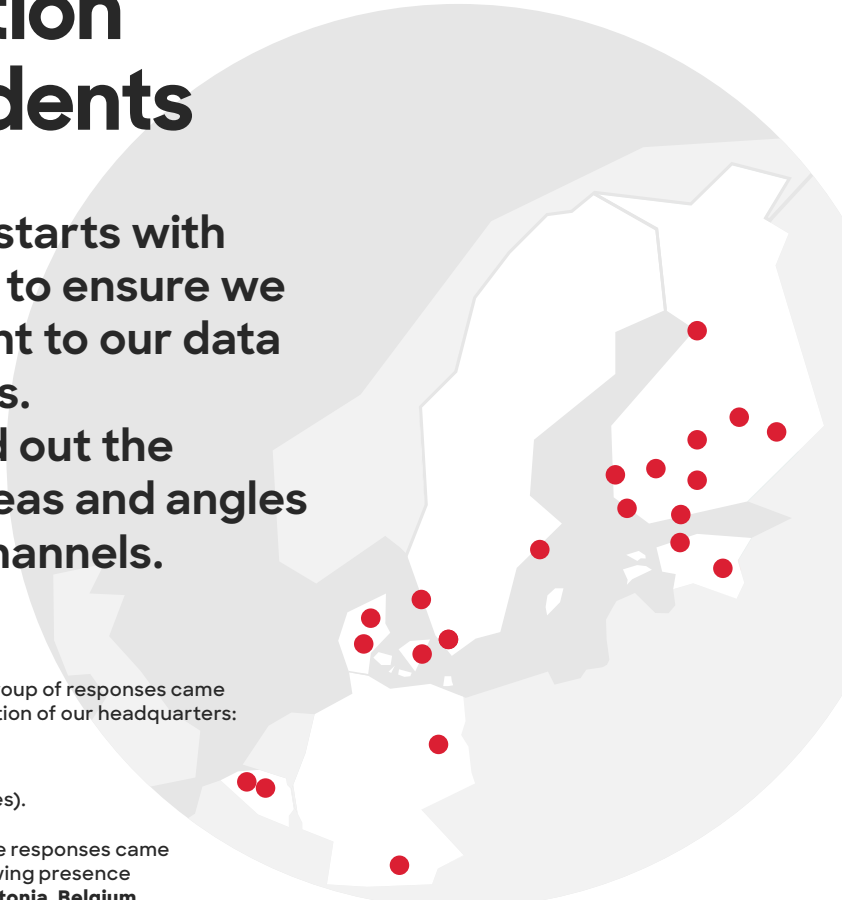
Ensuring we prioritize understanding and flexibility with our colleagues has become a cornerstone of our culture. That flexibility has led us to our bi-annual, team-specific surveys. Starting 7 years ago with our Development team, we've extended this practice to Data experts, and this year, to our Connected Data team (encompassing our integration pros too).

We wanted a way to explore the technology our people are using, the strategies and methodologies they prefer, and how they learn and grow at Solita.

Our latest Connected Data survey showcases our technical results – and what it shows about working at Solita.

Collective creation and our respondents

Our collaborative approach starts with the survey itself; we wanted to ensure we captured what was important to our data and integration professionals. We worked together to build out the questions, collecting new ideas and angles through our internal Slack channels.



We then sent out the questions to our team, generating

184 responses

a substantial sample size to get that ground-level insight we needed.

The largest group of responses came from the location of our headquarters:

Finland
(150 responses).

The rest of the responses came from our growing presence in **Sweden, Estonia, Belgium, Germany and Denmark.**

Looking more closely at the specialist areas worked in, the majority of our respondents answered with

Data Engineering

followed by **System Integration and API management, Data Architecture, Data Analytics, and Data Science.**

63%

of respondents worked within a project team located in the same country, but spread across several different cities.

Combined with

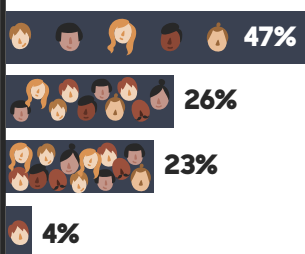
27%

of our team members working in teams based across different countries, this highlighted our cross-European scope and finding talent wherever it resides.

The remaining

10%

of our Connected Data survey respondents operated out of the same offices as the rest of their team.



Continuing with our examination of team makeup, **almost half** said that they worked in **small teams of 2-5 people**, followed by **6-10 people teams (26%)**, **10+ (23%)** and just **4% worked as the sole operator** on their projects at the time of the survey.

We also saw a strong variance when we asked about experience in data and integration projects.



This kind of balance was pleasing to see, as our best work and most successful projects come from diversity in seniority. Both experienced leaders and eager new professionals give our work a vital balance in outlook.

The total Connected Data survey ran to



fantastic for in-depth understanding, but an enormous basis for an engaging piece exploring Solita. So we've picked out the most interesting questions and responses (that cover the good, the improvable, and the surprising), to dive deeper into our tech use.

Let's go. →

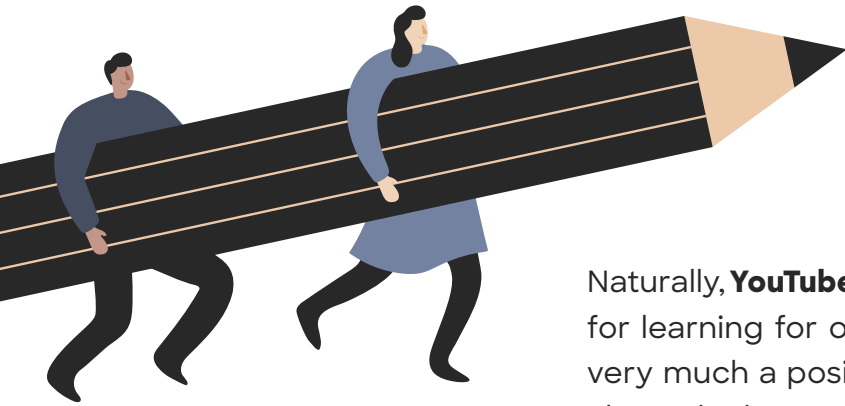


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Competence development

At Solita, experience is just one factor we consider when building teams. Rather, we've found our best work comes from a mixture of seniority and those eager to gain experience and learn. As a result, competence development is foundational for us, and we asked about it in our questions at length.

So what constitutes development time? 77% of our respondents said that they gained competence working on live projects, which reflects well on our working environment as somewhere to learn while you deliver. The two other top methods to learn were 'independently studying and doing hand-on practice' and 'using learning platforms'.



77%

OF OUR RESPONDENTS SAID
THAT THEY GAINED COMPETENCE
WORKING ON LIVE PROJECTS

Naturally, **YouTube** came out as the most common resource for learning for our professionals. And in our eyes, that's very much a positive! It's a wealth of resources and we'd always look to encourage our teams to look far and wide in order to upskill and educate themselves.

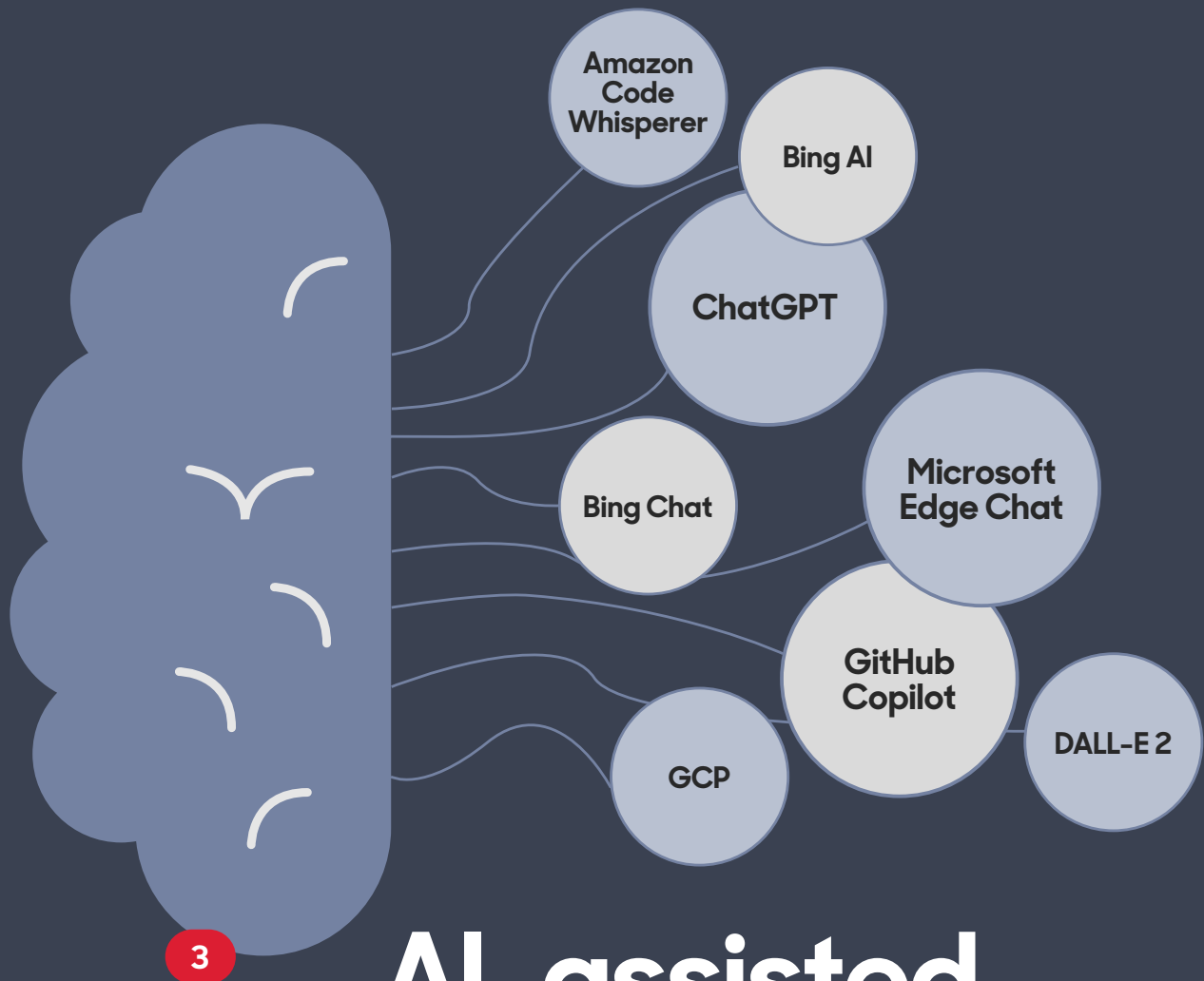
Equally nice to see were two learning platforms we use, **O'Reilly** and **Workday Learning**, coming out as the second and third most commonly used resources. Workday Learning is a platform where we create, update and structure internal and external resources for our teams to use. O'Reilly is an external learning platform with a wide variety of technical content that Solitans can use to further their own development.

Time allocation was the biggest need to support learning; a universal balance most organisations have to contend with. People lead's support and senior guidance were also widely requested. In our approach, we looked at how best we could combine these requests for our technology teams. Allowing our experts the space and the time to grow is hugely important - for them, for our business, and to keep people engaged and feeling a sense of freedom in their progression.

Finally, we assessed the top five roles that our team felt were of most interest in the future. These were:

- Data Architect
- Data Engineer
- Integration Architect
- Enterprise Architect
- Machine Learning Engineer

To see all our available jobs, check out our [careers page](#).



AI-assisted tools

Artificial intelligence - particularly generative methods of using it - are hot property at the moment.

58% of respondents regularly using these tools. **ChatGPT** (the clear favorite), **Microsoft Edge Chat** and **GitHub Copilot** were the top tools that had been tested at least once. But we also saw mentions for **Amazon CodeWhisperer**, **Bing AI**, **Bing Chat**, **DALL-E 2** and **GCP**, so there was a large variety of tools, showcasing AI's potential to help with data summation, quick technology queries, and specific use cases like coding efficiency.

More than the tool themselves, we want to look at the ethical concerns of using AI-assisted tools. Solitans were able to choose multiple answers from these six options:

1 **Privacy concerns related to the collection and use of customer data** (80% agreed)

2 **Privacy concerns related to the collection and use of personal data** (72% agreed)

3 **Lack of transparency or interpretability in the tool's output or decision-making processes** (55% agreed)

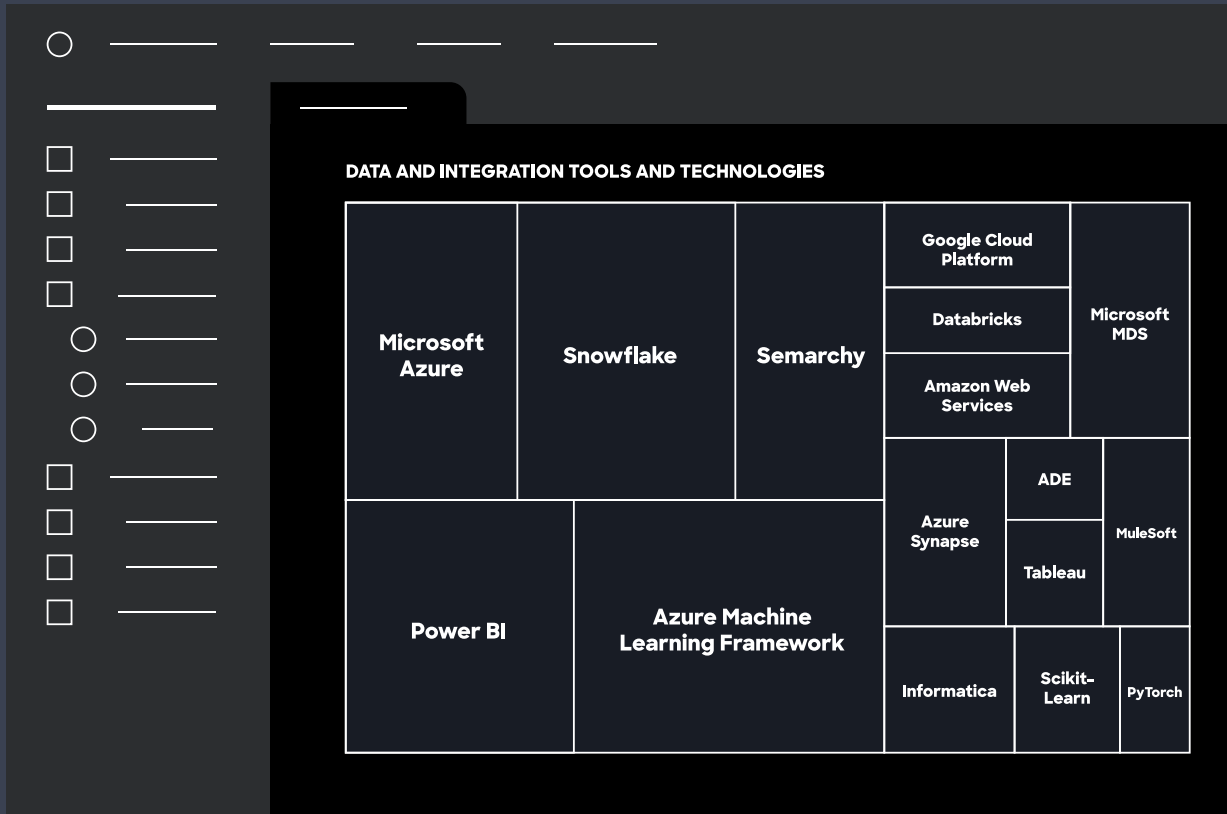
4 **Potential for misuse or unintended consequences of the tool's outputs or decisions** (47% agreed)

5 **Bias or discrimination in the data or algorithms used by the tool** (39% agreed)

6 **Fairness and accountability in decision-making processes aided by the tool** (36% agreed)

Our survey reinforced the fact that Solitans think about and apply generative AI in a careful, structured way. 45% of respondents felt that AI tools increased the speed and efficiency of their work, with the same percentage saying that it had no significant impact on those variables. But with AI tools still being early in their development and uptake, that's a substantial number that are already seeing the benefits of it within their work.

But with such fast-moving technology, and answers to the survey collected in mid-2023, we anticipate that there may already be a shift in responses if we asked again.



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Connected Data tools and technologies

Across multiple categories, we took a temperature check of what technologies and frameworks our Connected Data team were using throughout their projects. We're talking a deep dive into the cloud, data warehousing and visualization, master data management, all things Machine Learning and more.

Let's get into the main findings of our technological investigations:

From a perspective of **cloud systems**, our most used systems (in order) were:

1

Microsoft Azure

91 users

2

Amazon Web Services

28 users

3

Google Cloud Platform

13 users

But when we looked at the preferences for future use, the top three remained the same but in a different order:

1

Google Cloud Platform

70 users

2

Microsoft Azure

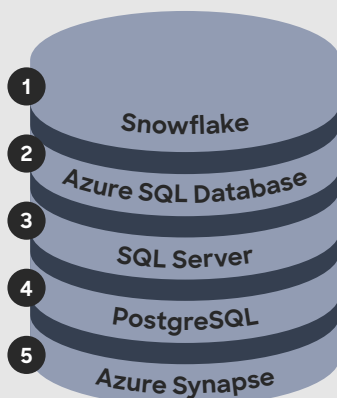
64 users

3

Amazon Web Services

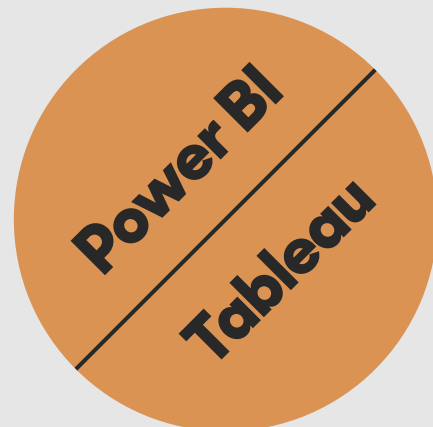
56 users

Taking stock of our **data warehousing systems**, the top five most commonly used systems were:



Snowflake was the most commonly used by a healthy margin, but it was **Databricks** that generated a huge amount of interest as a future technology to explore for data warehousing.

Data visualization was cleanly split between two top picks:



Power BI topped the rankings as both the currently most used tool, and also the one our team wanted to focus on moving forward; **Tableau** held a healthy second in both categories. On a much smaller scale, we also saw interest in **Google Looker** as future technologies worth serious consideration.

Our specialists in **master data management** showed a clear preference for both for their current projects and continuing to use it in the future for:

Semarchy

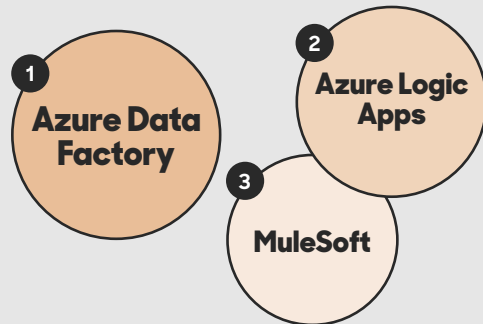
Also in current use (but on a smaller scale) by our data management pros were:

Microsoft MDS

Informatica

Looking towards the future, the data management area is developing fast and many tools and approaches raise interest.

Examining **Integration and API management technologies**, our primary systems, ranked by usage frequency, are



Looking towards future usage, a tie for the most popular choice emerged between

- **Azure Data Factory**
- **Azure Logic Apps**

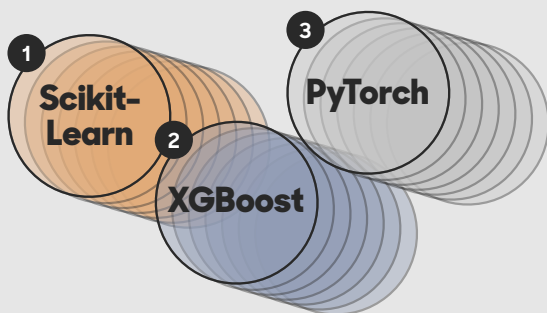
Second favorite for future adoption came

- **Apache Kafka / Confluent**

Closely followed by

- **Azure Event Hubs / IoT Hub**
- **MuleSoft**

Next, we asked the team about their use of **machine learning and deep learning technologies**. Currently, we saw

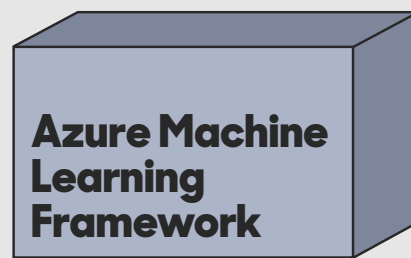


being utilized for the most part, but a wide range of other systems (**TensorFlow, Keras, SparkML, Annif, AutoGluon and DeepSparse**).

Looking into our future preferences, some familiar names resurfaced, with interest split across

- **TensorFlow**
- **Spark ML**
- **PyTorch**
- **Scikit-Learn**

For **machine learning operational tools**, the most popular system in use was



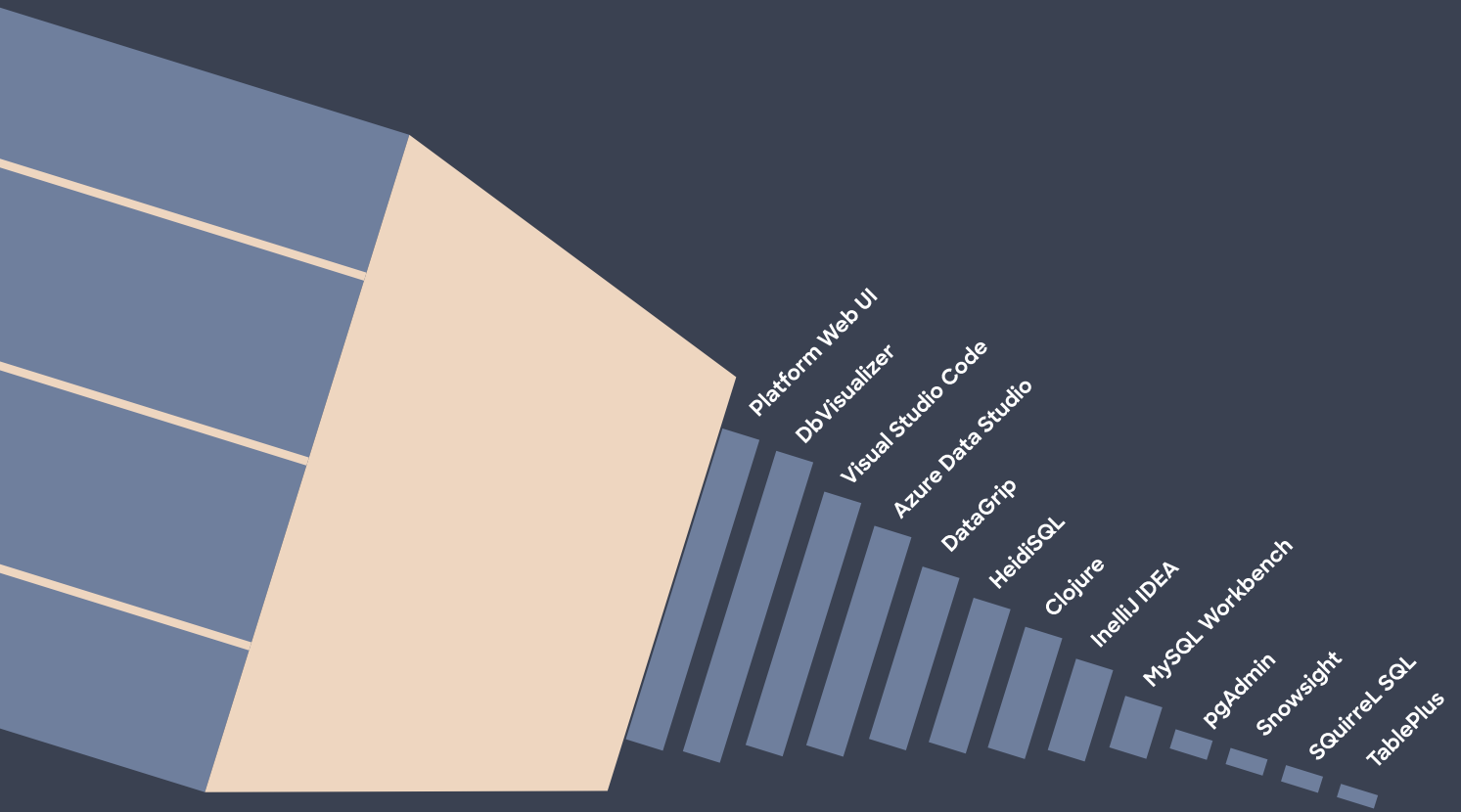
alongside 22 other tools and frameworks used by our Machine Learning specialists.

Looking forward

- **Databricks**

Had the most interest by a significant margin, followed by

- **Azure Machine Learning**
- **Vertex AI**
- **MLflow**
- **Kubeflow**
- **AWS SageMaker**
- **Weights&Biases**
- **H2O**



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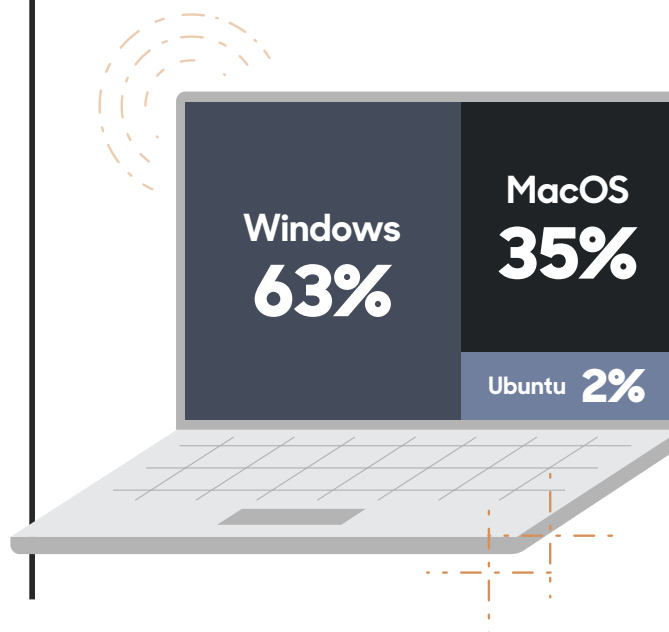
Developer tool preferences

We explored the preferences our experts have for their developer tools.

Interestingly, there was a sizeable split between the top two choices for SQL client/editor of choice, with both **DBeaver** and **SQL Server Management Studio** receiving 30% of our votes as the most used systems.

Outside of these two choices, we saw a lot of variety. **Platform Web UI**, **DbVisualizer**, **Visual Studio Code** and **Azure Data Studio** were also reasonably popular choices, whilst there were outlying usage of **DataGrip**, **HeidiSQL**, **InelliJ IDEA**, **MySQL Workbench**, **pgAdmin**, **Snowsight**, **SQirreL SQL**, and **TablePlus**.

Variance in operating systems:



The clear takeaway from our tool and framework questions felt clear: that Solita is a technology-led company. Rather than an approved set of tools and methodologies, we want to flex and adapt in light of our experts' experiences.

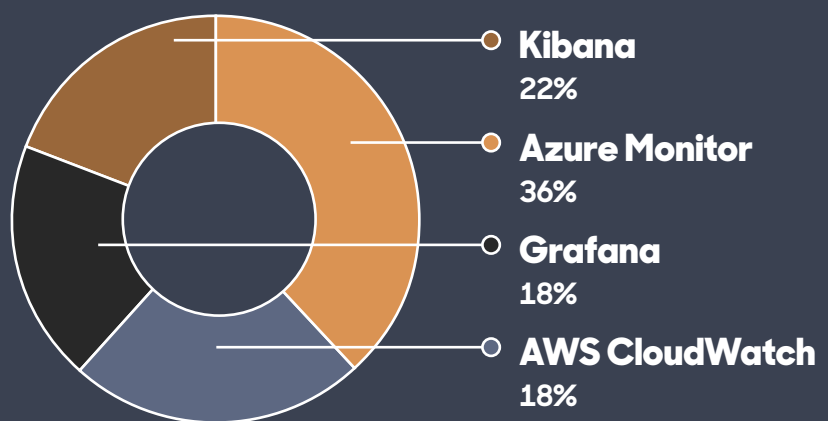


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Monitoring and testing

Finally, we took stock of the logging and monitoring platforms that Data & Integration specialists were using.

The most commonly used tools:



With 14 other tools also in use.

Again, the open variety in the technologies used by our teams was impressive. Slack also got an honorary mention as an important tool for monitoring alerts.



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Culture and action

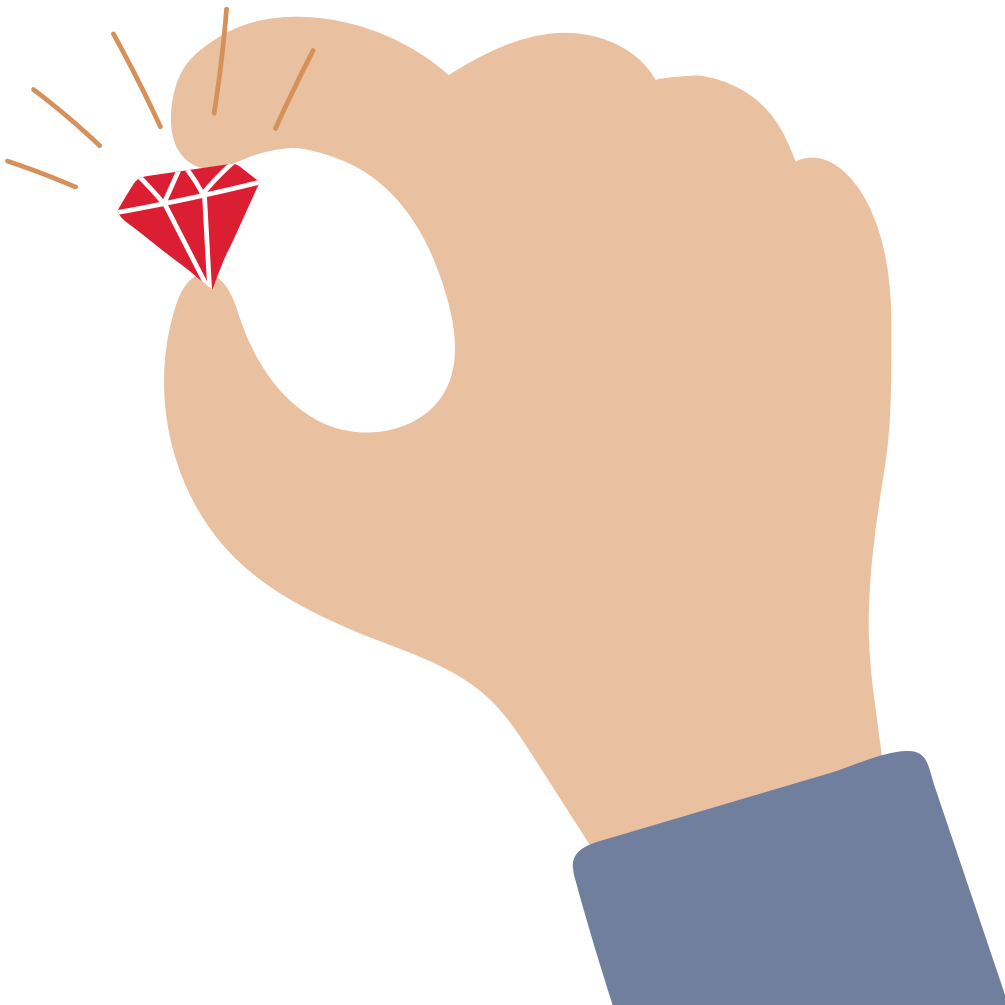
So there you have it, a deep dive into the technology being used and valued by our community of data professionals. The results were fun for us to read internally; it showed a wide scope in the solutions being used, reinforcing our ethos of letting our teams innovate and work with the systems they find most intuitive to deliver for our clients.

Despite the results being received well across the business, we can't stand by when it comes to the fast-paced world of technology.

Therefore we actioned a number of points from the survey with three examples we've detailed below as well as capturing what the results highlighted about Solita as a place to work.

Competence development

- As well as our coffee morning sessions we have reinforced our promotion and encouragement of our mentoring programme, tech-specific competence communities, and senior shadowing initiative to spread the multiple avenues of learning we offer.
- We also promoted our external learning partner platforms and research services, and are in a continuous process of updating and refreshing their content.
- Finally, we've reviewed and bolstered the budget and resources available for training our colleagues. This includes courses, external events and conferences, which were all represented within the responses we gathered.



AI-assisted tools

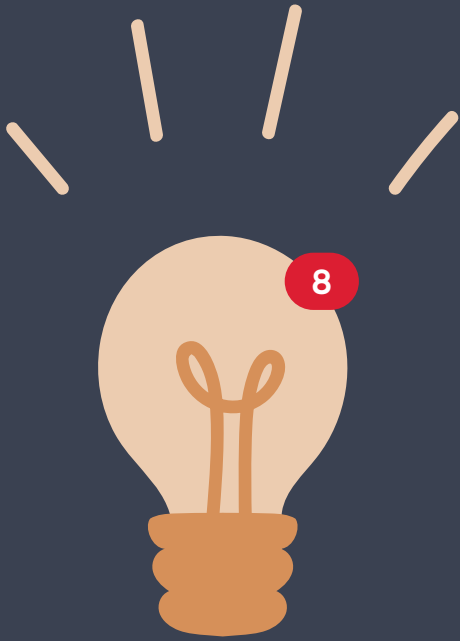
We were pleased to see such engagement and consideration on the ethical concerns of AI-assisted tools; it's something that chimes with our overarching mission for using technology for good.

- To bolster this, we shared our policy for generative AI tools throughout the team, helping those that may be unsure on how we expect them to utilize such a powerful technology.
- We've also had in place this year a GenAI biweekly session, which continues to run. This informal space is very much a discussion; a chance for our colleagues to air, discuss and consider the big questions surrounding new technologies.

Data tools and technologies

It was clear that **Databricks** was on the minds of the Solita team. Across both **MLOps** and **Data warehousing**, it was the most highly sought after technology to explore. We already had a Databricks on our radar and a plan in action, but these survey results reinforced the need to action this:

- We started to pull together a Databricks information session for our Connected Data team, looking to pull from the experience of those that were already using the technology. What could they share with the team about how it was using it in practice?
- Additional information sessions were also planned; we wanted to make sure that if this technology was something to use for pivotal parts of our projects, then we had the space to fully explore and educate around it over and above a single exploration session.



Our final thoughts

We hope that gives a good look at what it's like to work at Solita. We're data geeks at heart, so the technologies being used and the insight this survey provides excites us.

We have a wide variety of expertise and enthusiasm across different systems, combined with a strong focus on personal development. And secondly, because the culture we've built ensures they aren't just a snapshot, frozen in time. Instead, they drive new plans, initiatives, and ensure we can update and evolve where needed.

It's a timely reminder for us and for the wider European tech community, of our values. That at Solita, you can be as specialist as you want to be, safe in the knowledge that you are supported to share with and learn from other experts, backed by time, budget and considered activities that let you grow – together.

We've enjoyed reflecting on our technology specialisms, the impact it has on Solita as a whole, and the cultural foundations that are alive and well as we move forward in the arena of technology.

All that's left to say really, is if this sounds like a community you'd like to be a part of? [Maybe we should talk.](#)



We're Solita - a technology, data and design company employing more than 2000 experts across Europe. We also offer consulting services for cutting-edge AI solutions, including generative AI.

If you're reading this, our exploration of our technology usage, processes and initiatives, gathered from our data and integration specialists, has piqued your interest.

And if the results do the same?
Well, we're hiring. And we'd [love to talk.](#)

SOLITA