

# CHALLENGES WHEN DELIVERING DATA ANALYTICS SOFTWARE

Maria Graetsch, Dr Hourieh Khalajzadeh,  
Associate Professor Rashina Hoda,  
Mojtaba Shahin and Professor John Grundy

## At a glance



### Goal

Build an understanding of the key challenges experienced by practitioners who develop data analytics software.



### Strategies

- Connect with professionals from diverse organisations that deliver data analytics solutions.
- Interview executives, managers and subject matter experts to capture a range of perspectives.
- Analyse and consolidate perspectives about challenges, causes, impacts and solutions.

## Key outcomes



### Identified challenges

We discovered that the key challenges were data related, such as access and quality issues. There is also a lack of accepted, integrated methods to help teams address them.



### Strategic solutions

Based on our findings, we suggested implementing data strategies and governance, and emerging software tools that support data quality and data analytics software modelling.



### Future improvements

There is a pressing need for more strategies, tools and techniques that address team requirements holistically and focus on their data challenges.

## More information



Key data challenges that teams spend a lot of time resolving are not new and continue to lack attention in terms of support. They include gaining access to data, understanding data, aligning data and resolving data quality issues.



Read our full paper:

U. M. Graetsch, H. Khalajzadeh, M. Shahin, R. Hoda and J. Grundy, "[Dealing With Data Challenges When Delivering Data-Intensive Software Solutions](#)" in IEEE Transactions on Software Engineering, doi: 10.1109/TSE.2023.3291003.

## Get involved

We're planning more in-depth observation and interview-based studies with teams to identify, craft and evaluate approaches, methods and tools they use to deal with data challenges. We will also develop new approaches and need teams to help trial them.

If you know of a team that wants to contribute to our research and make an impact for the wider industry, please get in touch.

## Learn more

To discover more about this project, contact [Maria Graetsch](#) or scan the QR code.



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