

Joys and pitfalls of AI projects

(aka CRISP Augmented)





About Objectivity

Objectivity Ltd. is an international IT company with British roots. We have been guiding our clients through digital transformation since 1991. We are here to help organisations create a genuine business advantage that leverages the newest technologies and innovative thinking.

For the last four years, we have been given the prestigious “Great Place to Work” award. We were runners-up in 2015, 2016 and 2018, while in 2017 we took the gold medal! This proves that we attract the best of the best in order to maximise the value we bring to end users.

At Objectivity, we do more than just developing software. We help our clients solve their business challenges through digital transformation. We provide a wide range of digital transformation solutions: web and desktop applications IoT, RPA, Big Data, Machine Learning, proactive maintenance and support.

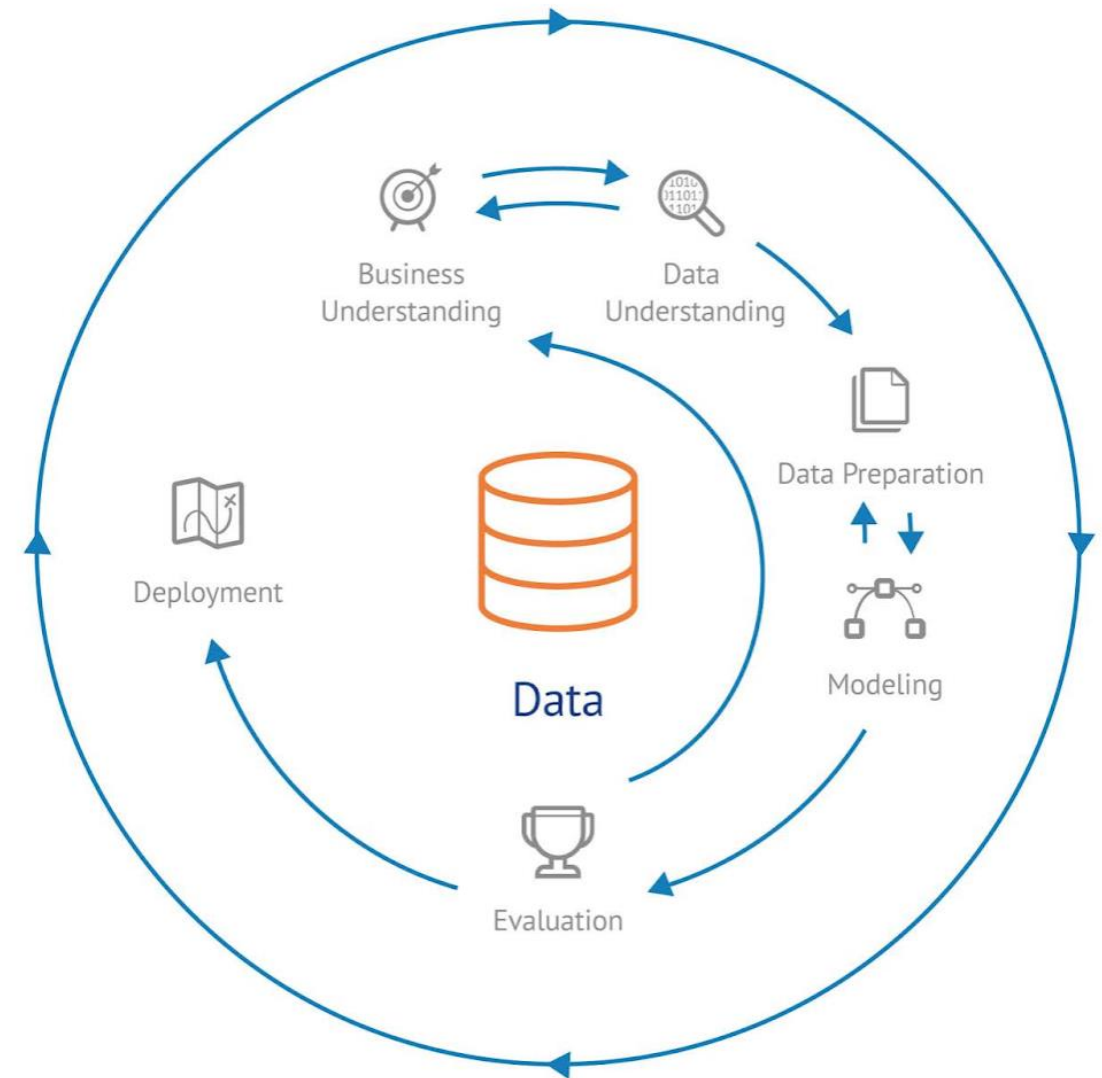
We design solutions in close cooperation with our clients. In order to meet their needs and expectations, dedicated teams and tribes are formed. They are tightly aligned to the Client’s business.

We’re a team of over 600 people that continues to grow. The people who make up Objectivity love their work, and we never miss an opportunity to share knowledge and experience. Best of all, we even have fun doing it.

We are a values-driven organisation. We achieve our goals thanks to five key values deeply rooted in our company DNA: Win-Win, People, Integrity, Excellence, Agility.

CRISP-DM – the classic approach

- Cross-Industry Standard Process for Data Mining (1999)
- European Community funded effort
- The most appreciated approach
- Still, ...



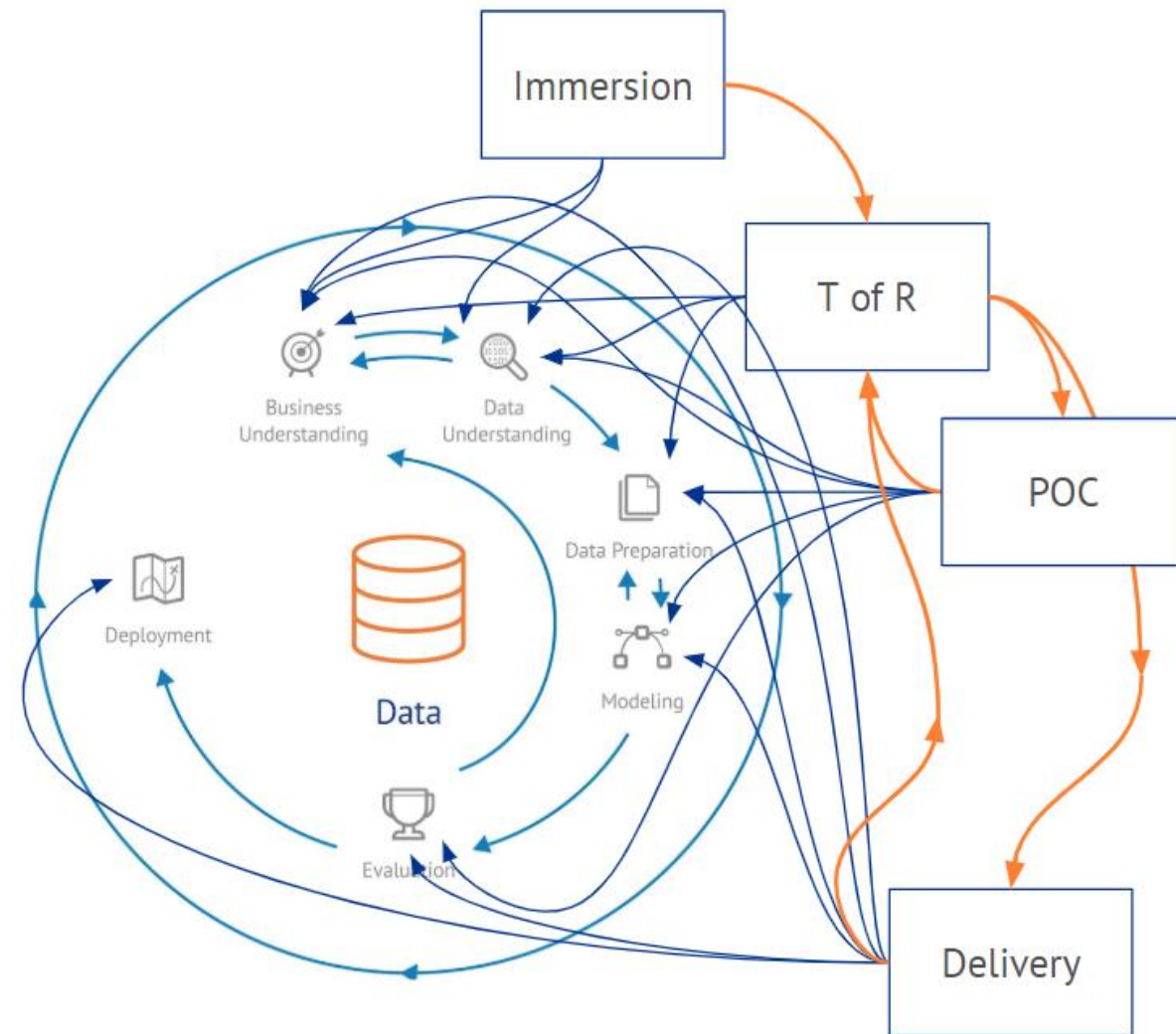


Top reasons why AI projects fail

- Trying to solve a wrong problem
- No clear business result
- Wrong data
- Wrong model
- Wrong people
- Lack of communication
- ...

CRISP Augmented

- Our simplified approach to AI projects





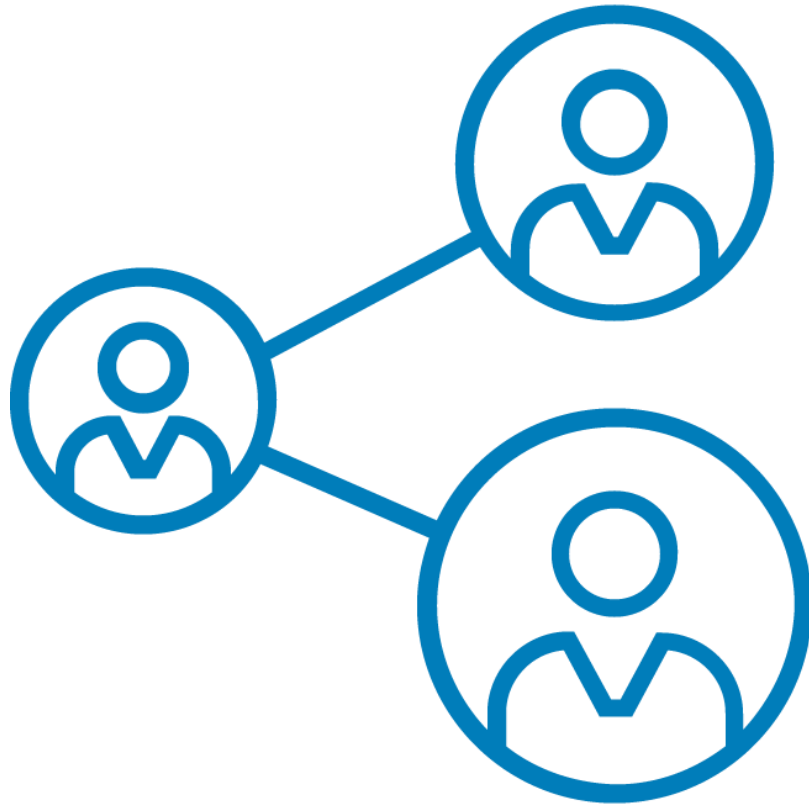
Choose the problem to solve

- 60% of organisations are testing AI
- Often non-business critical areas
- Work with business people
- Start with decisions
- Look for repetitive, tedious tasks
- Mind what you can really change

Challenge the vision

- Cost? Revenue? Margin?
- Other ways to solve the problem?
- Does ROI cover the risk?





Gather the right team

- PO from the business
- Data owner
- Delivery roles
- Diversity
- Stability
- Collaboration

Understand the data

- Explore data sources – with business people
- Verify quality, reliability and quantity
- Define data needs
- Access to data takes time





Terms of Reference

- Define the solution
- Estimate and define the plan
- Agree collaboration and governance
- Agree the success criteria

PoC to address risks

- Major risk around data
- Other risks needed verification
- Keep it to the minimum
- Go / No-Go



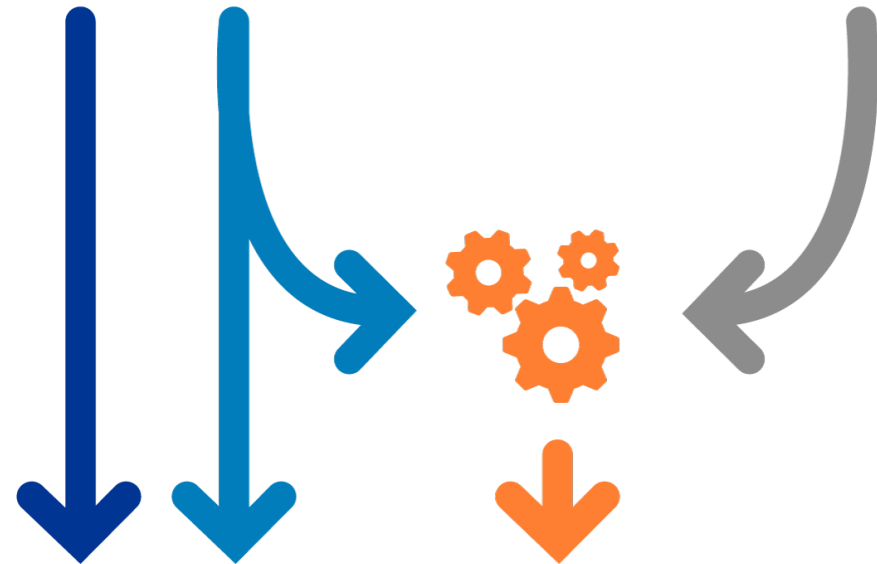


Clean the data

- Consumes significant effort (even 80%)
- Iterative
- Requires close collaboration with business people
- Verify bias
- Consider using ML techniques
- Visualise!
- Patience vs ideal data

Extract (new) features

- This is where the true art lays
- Use external data sources
- Requires close collaboration with business people





Create and test models

- Finally!
- First approach is seldom the right one
- Visualise and explain results to business people – statistical fit measures may deceive
- Design business related measures
- Mind the law of diminishing results

Deploy

- May be a project of its own, requires different skills
- The most tricky part is to change the business process
- Successful deployment requires trust; think of results justification
- Teach the users how to benefit from the solution





Assess and iterate

- Evaluate the success criteria
- Validate and amend the approach when necessary
- Be ready to iterate

Don't forget about the support

- Model efficiency monitoring
- Data flow for model retraining
- Reaction to changes in the business
- Metrics of usage and user feedback
- Help to the users





Keep calm and...

- ... solve the right problem
- ... spend enough time on initialisation
- ... involve business people early and extensively
- ... communicate frequently and clearly
- ... deliver value!

Thank you!



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