

Managing Data Projects

Business Analytics

Data Project & Managing Data Teams

- Why is this important or even different?
- Is good all project management the same?
- Are team dynamics the same in the analytics sector?



Biggest data analytics challenge: Tying results to business actions

Of all with or planning analytics programs, we asked: What do you expect to be your biggest analytics-related challenges in 2011? (Choose three.)
N=114



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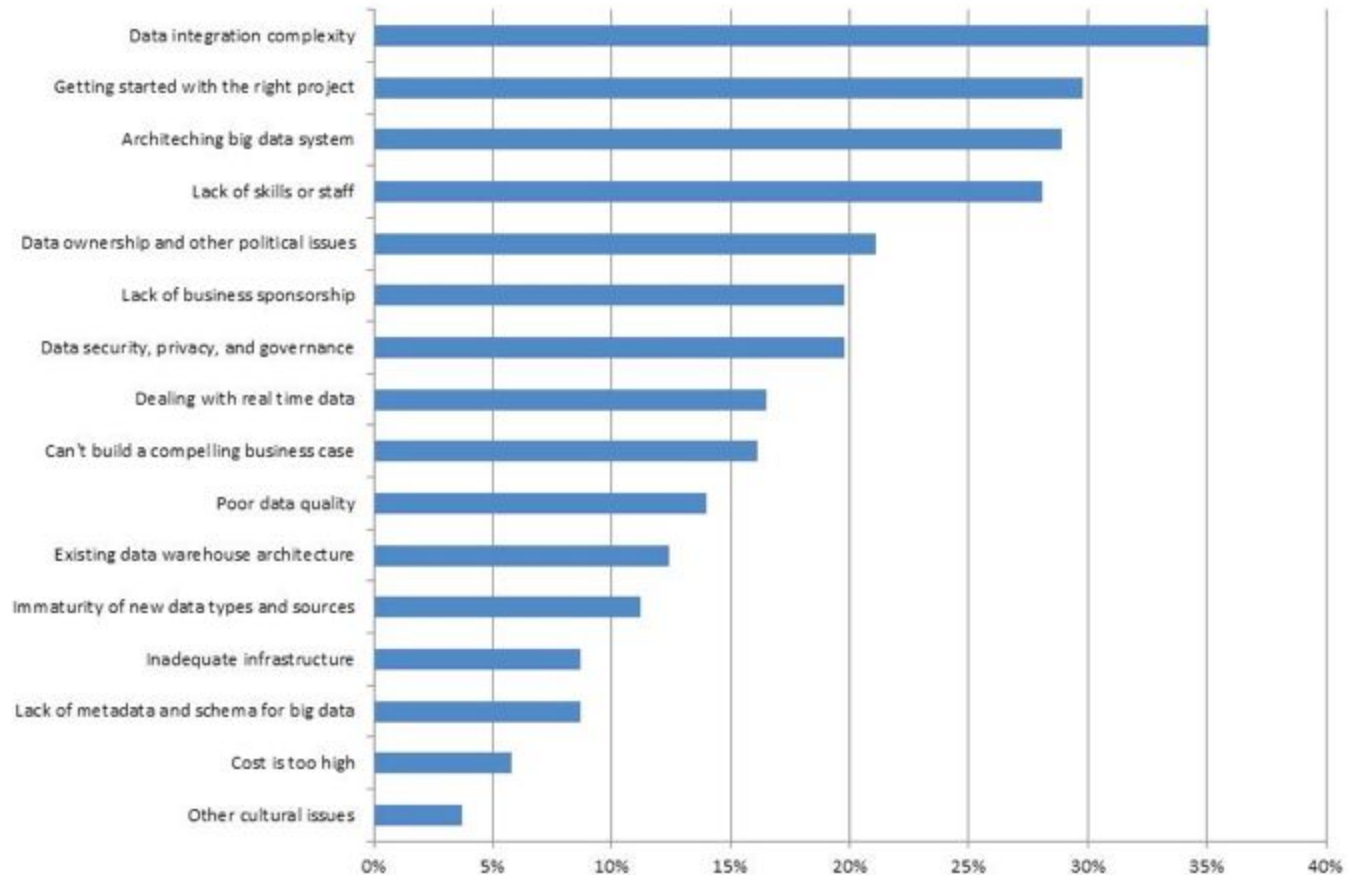


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Big Data Challenges

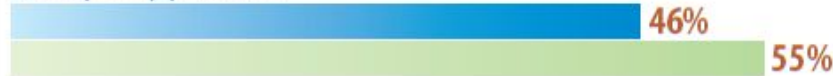
(source: TDWI Predictive Analytics Study, 2013)



Barriers to Enterprisewide BI/Analytics Adoption

What are the barriers to adopting BI/analytics products enterprisewide?

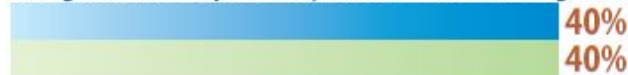
Data quality problems



Ease-of-use challenges with complex software/less-technically savvy employees



Integration/compatibility issues with existing/multiple platforms



Challenges scaling the technology across the entire organization



Challenges getting constituents to agree on standardized product(s)



Source: InformationWeek Business Intelligence, Analytics and Information Management Survey of Business technology professionals, October 2011



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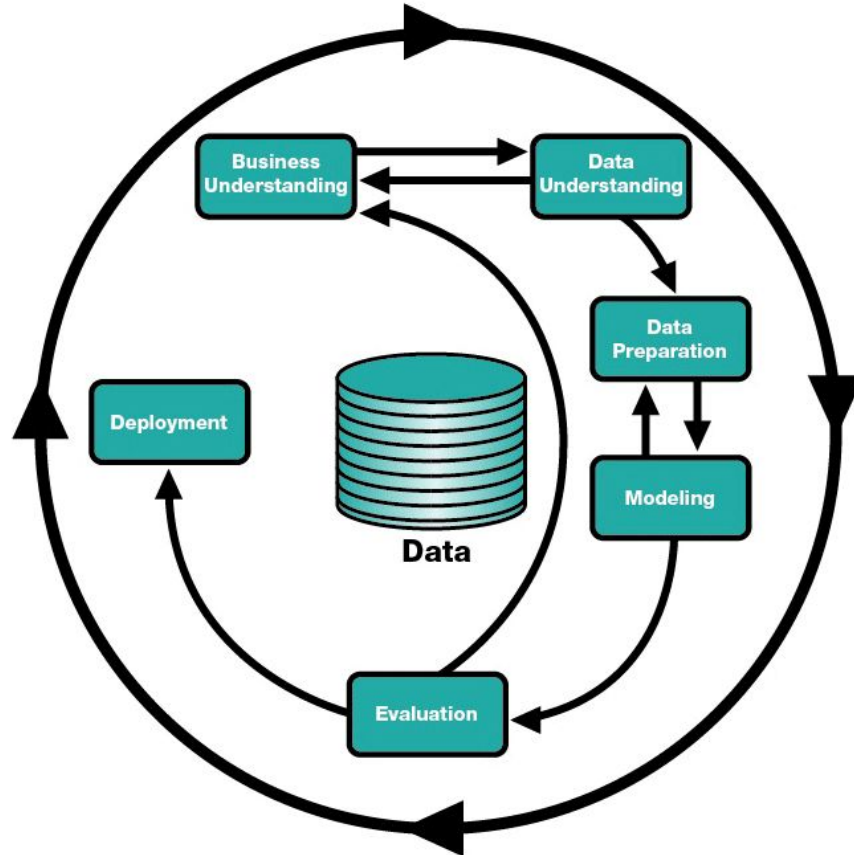
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Data Project & Managing Data Teams

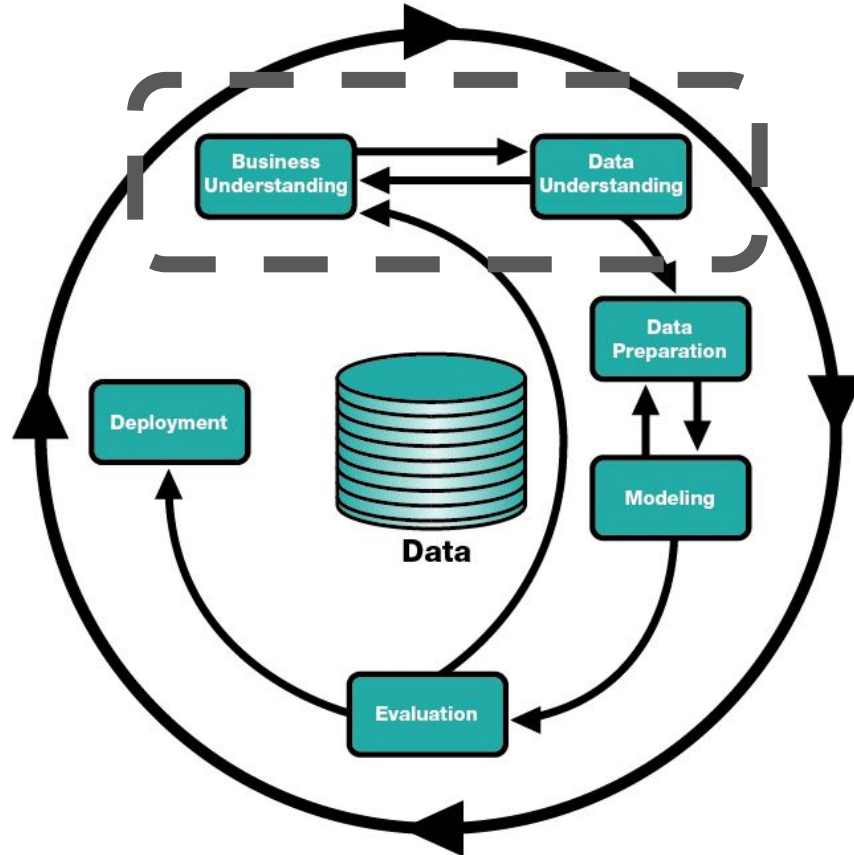
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Cross Industry Standard Process for Data Mining (CRISP-DM)



Cross Industry Standard Process for Data Mining (CRISP-DM)



What Comes First?



PROBLEM
DISCOVERY



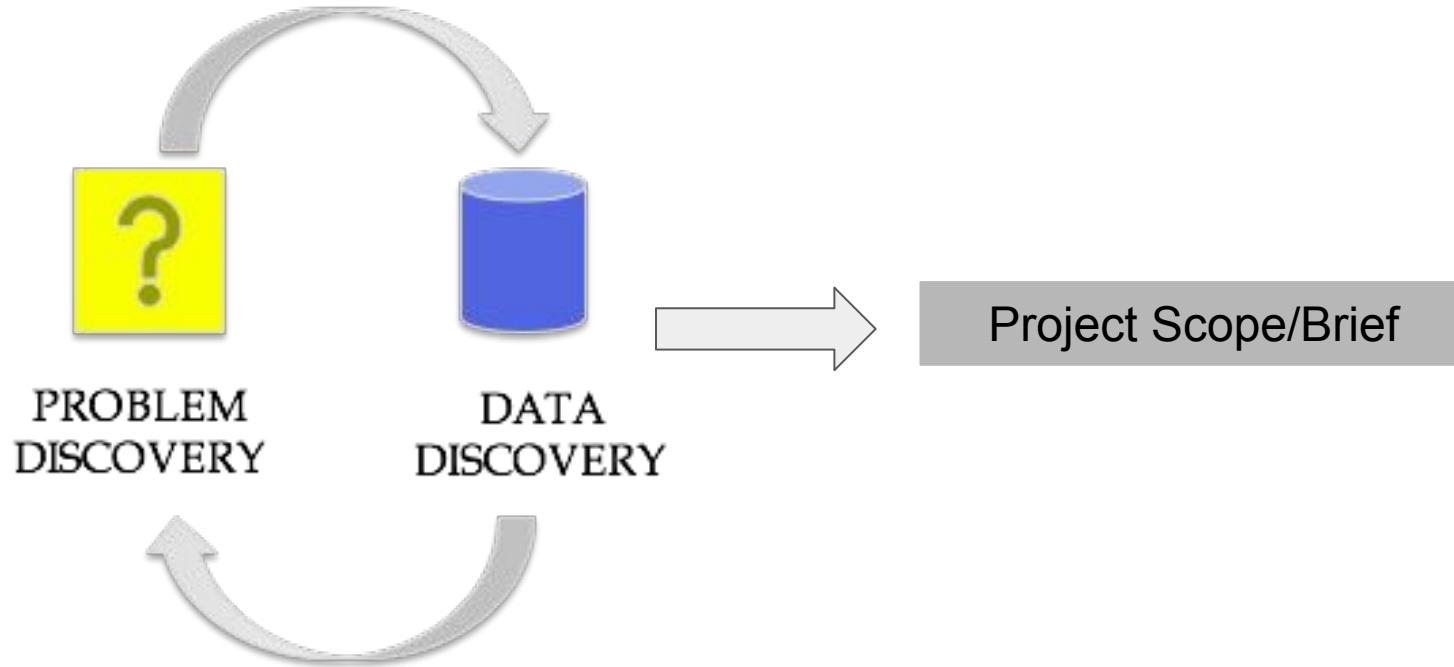
DATA
DISCOVERY



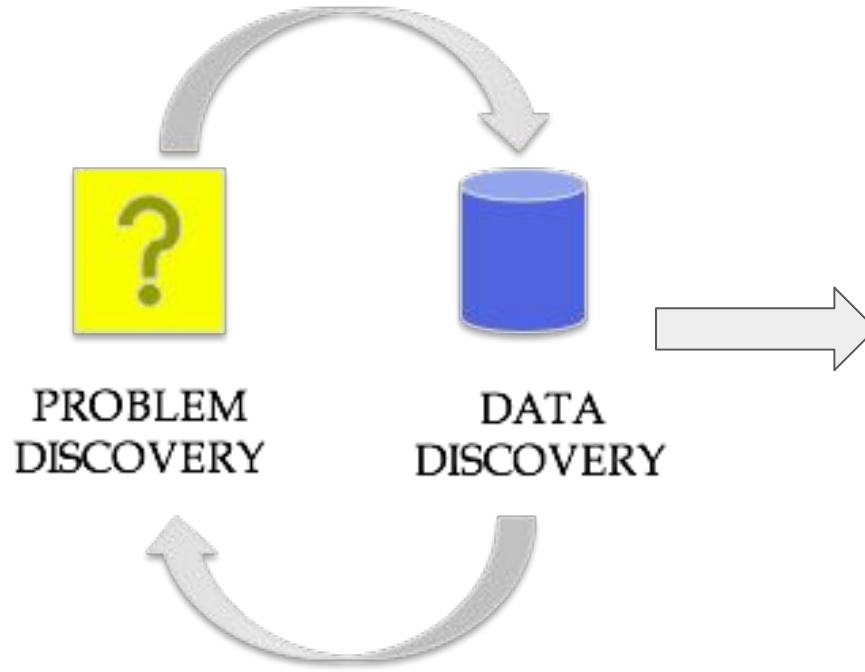
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Problem + Data Discovery



Problem + Data Discovery



Project Scope/Brief

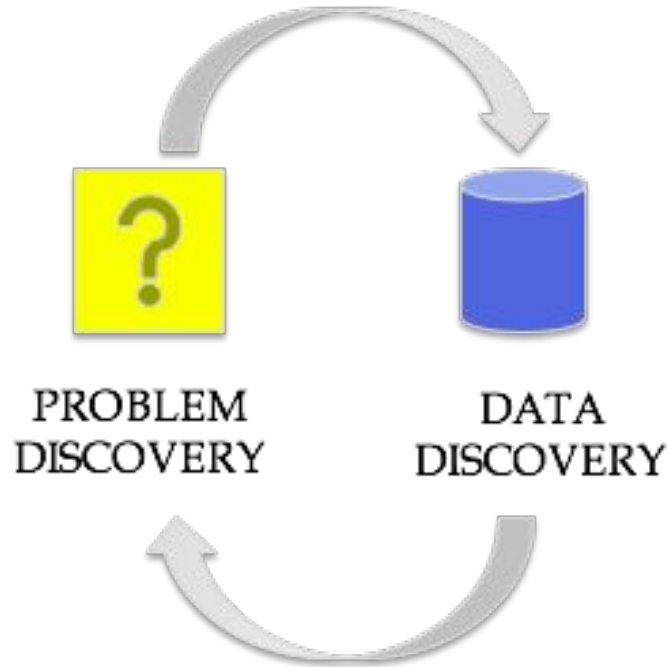
- Project Summary
- Overview of Needs
- Project Deliverables
- Data Summary
- Proposed Methodology
- User Stories
- Project Plan & Milestones
- Project Roles & Team



Project brief samples

- [Template](#) for class

Problem + Data Discovery

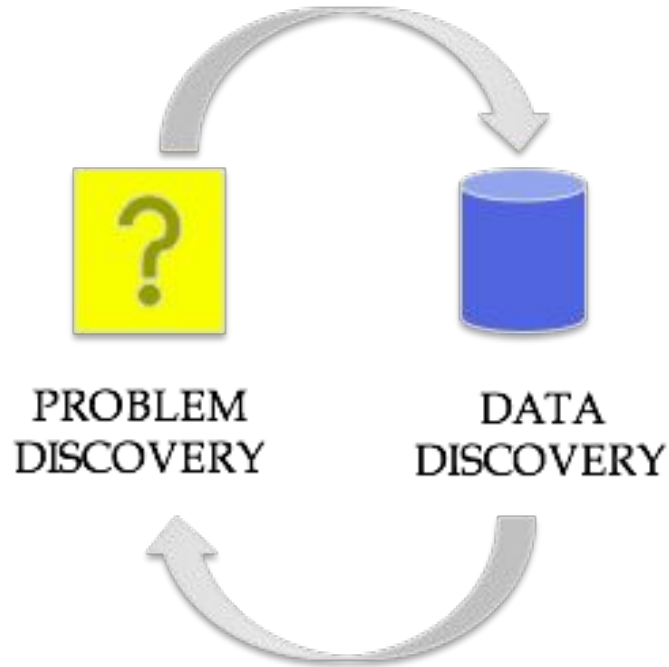


Techniques for Exploration

CoNVO

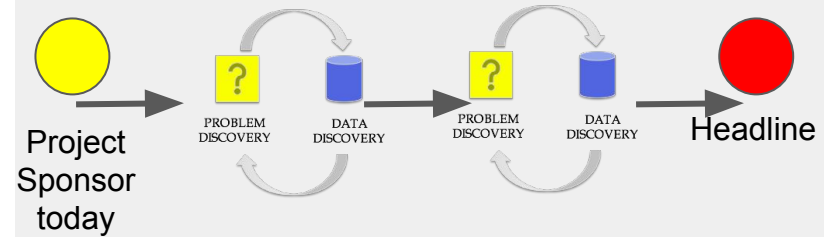
- **Context** = Who is interested in the results of this project? What work is the project going to be furthering?
- **Need** = Not a model/analysis/solution but a knowledge gap. What knowledge is missing?
- **Vision** = Glimpse of what a successful solution looks like.
- **Outcomes** = What is the impact at the organizational level

Problem + Data Discovery

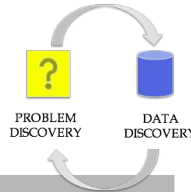


Techniques for Exploration

Newspaper headline of success



In Class Problem Discovery



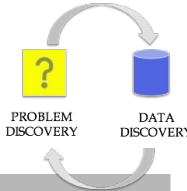
The MOT program wants to serve better food for participants in Saturday's courses.

- What is the 1st question we should ask?
- What is the next questions we should ask?
- What type of business problem is this?
- Should we take this project?

Project Scope/Brief

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In Class Problem Discovery



The YMCA Headquarters needs to understand the overall programming (how much basketball, soccer, yoga, etc) they are delivering. Programming is managed at the local YMCA and they don't have a uniform way to report into Headquarters.

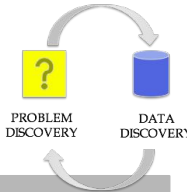
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In Class Problem Discovery



Organize is an NGO that has access to extensive data around organ donation in the USA. They claim that 21 americans on a daily basis waiting for organs. They have a sophisticated technology (social media platforms) to target potential donors. They want to hire you to build a predictive model.

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Components of a problem statement

Need → Data → Method → Change → Impact

1. Context: Explain as a **need**
2. Problem Statement: “I want to use (**data**) to do (**methods**) so that (**organizational change**) so that (**impact/benefit**)”