

Distil Data

How to implement Data Science, Machine Learning and A.I. in Fundraising

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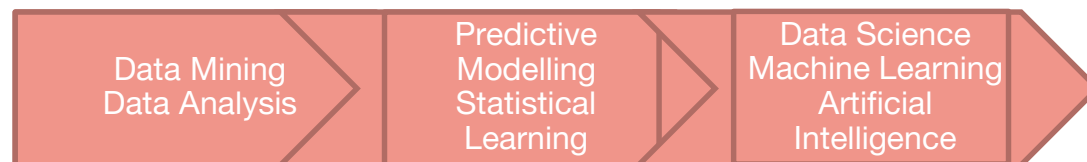
What is data science, machine learning and A.I?



Where did data science, machine learning and A.I. come from?

Many key data science concepts are built on techniques that have existed for some time.

In fact, the first predictive model was built around 1805, it aimed to predict the height of children with tall parents.



The inception of data science is hotly debated. A critical turning point was the landmark HBR article in 2012.

So, it is a relatively young, rapidly evolving field, with a long long history!



Why is it important to fundraisers now?

Breakthroughs in methods and improved accuracy in an uncertain world.

New methods coming out of academia and the big tech companies mean we can now predict events with ever increasing accuracy.

Increasing power of open-source tools like R and Python reduces barriers to entry.

In the past the tools were expensive and difficult to operate but that is quickly changing. Along with the open source movement we have Auto ML which will speed up data science and A.I. workflows even more.

Availability of data.

We have all heard about big data, the reality is now. Even your fridge is probably creating data.



Why is it important to fundraisers now?

Potential return on investment through data science is now huge.

Those organisations not leveraging the power for data science
will be left behind.

What can be achieved with these methods in Fundraising?

- Data science, machine learning and A.I. can help us understand:
 - Who to target?
 - When to target them?
 - What to target them with?
 - How much to ask for?
 - How to target?
 - Who will leave and when?
 - Who is worth retaining?



What can be done in the Fundraising space?



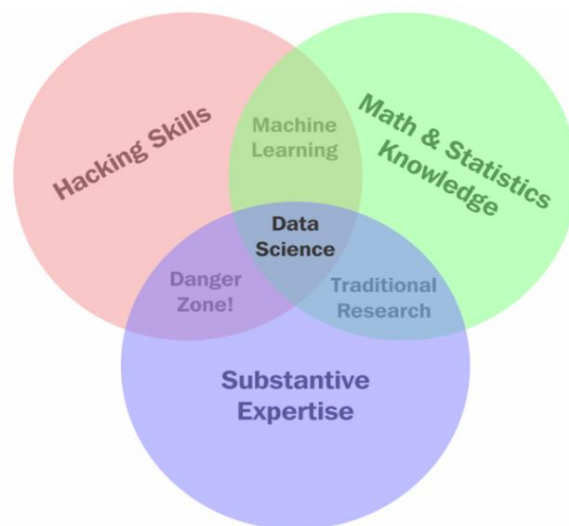
- Data Science can also answer more the complex and strategic needs of a fundraising organisation like:
 - What causes attrition?
 - How would changing my marketing spend impact revenue or margin?
 - How can I more accurately forecast my income for the next year?
 - How can I monitor the content people are engaging with and why?
 - How can I segment my audiences to effectively communicate?



Practical tips on how to implement data science, machine learning and A.I.



Upskill your team



The trusty Venn diagram is a bit outdated, it's from the early days of data science. However, it effectively illustrates some of the core skills required to implement data science techniques.

Are there people in your organisation who have some of the right skills already? There are plenty of pathways to learning data science today via online courses like [Coursera](#). As well as classroom-based courses like [General Assembly](#) and [AlphaZetta](#) or even a [Masters Degree](#). However data science is complex! Don't expect an employee to return from a two-day course as an expert. It takes many years to learn the craft.

Is there a role for experienced consultancy?

Data science is the “[most in-demand skill](#)”, but what does that mean for organisations?

It means difficulty hiring the right talent, high salaries and often short tenure. We are seeing this play out in the Australian market right now.

External resources can bring the right skills and experience at the time to deliver real value quickly and prove that data science is awesome! [Ask me how...](#)

LinkedIn's Most Promising Jobs of 2019

Kumarezh Pattabireman · January 10, 2019

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The most promising jobs of 2019

LinkedIn

Every January, millions of people start the new year searching for the next chapter in their professional journey, whether that means learning a new skill or finding a new job.

To help, we unveiled the [most in-demand skills of the year](#) last week, and this week we're back to share the year's Most Promising Jobs. Based on LinkedIn data, these positions come with high salaries, a significant number of job openings and year-over-year growth, and are more likely to lead to a promotion.

Whether you're interested in sales, design, or marketing, the perfect job for you might just be one of this year's Most Promising Jobs. Keep reading to learn more about the roles you'll want to keep an eye on, the most in-demand skills and the courses you need to learn them.

2019's Most Promising Jobs in the U.S.

- 1. Data Scientist**

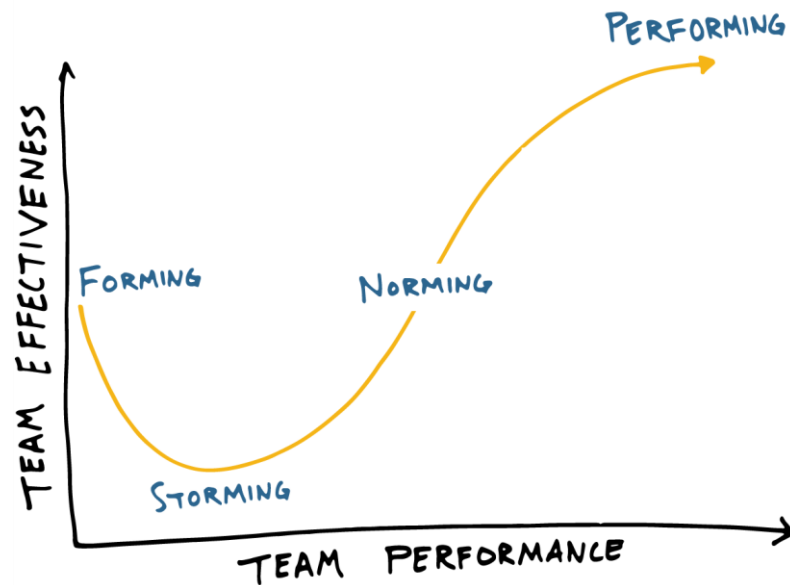
Median Base Salary: \$130,000

Job Openings (YoY Growth): 4,000+ (56%)

Career Advancement Score (out of 10): 9



Be mindful of change management



Be sure to bring everyone along for the journey.

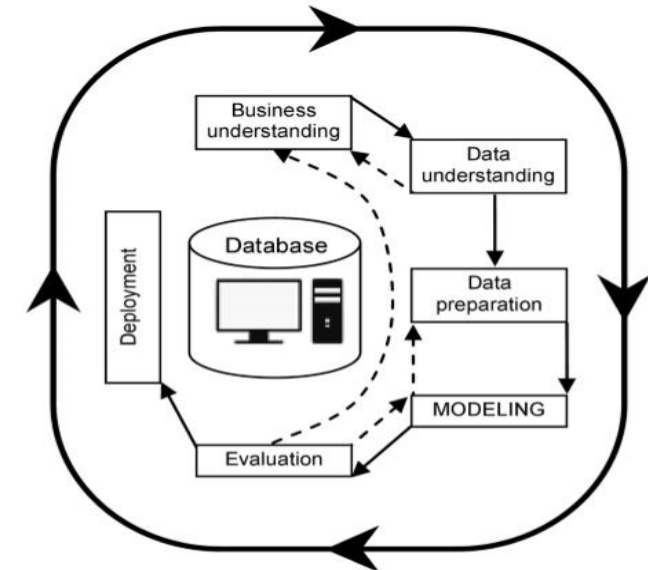
Data science, machine learning and A.I. will need the input from many teams within your organisation, ensuring diverse teams and individuals are involved and aligned will improve outcomes and enable success.

Foster great communication and collaboration between the Data Scientists and Fundraisers.

The [crisp-DM methodology](#) is a classic (right).

The most important part of any project is the unwavering focus on “Business understanding” or in your case “Fundraising understanding”. Without this focus data science projects fail.

Make sure your teams are constantly talking to each other to ensure your data science projects are focused on the needs of your organisation.

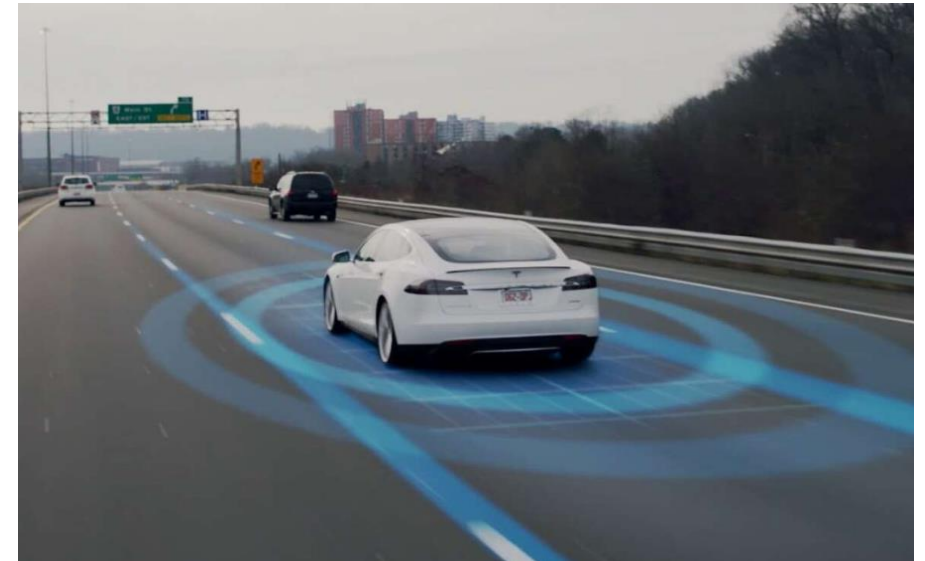


Have realistic expectations

Autonomous vehicles are an extremely advanced data science and A.I. implementation, but even they are not perfect. The question we should be asking is are they better than the existing way of doing things?

The same applies in fundraising.

Do not expect perfection from your first model, expect better than your current methods and a measurable outcome that delivers more fundraising dollars. Manage expectations and do not oversell the power of data science, machine learning and A.I.



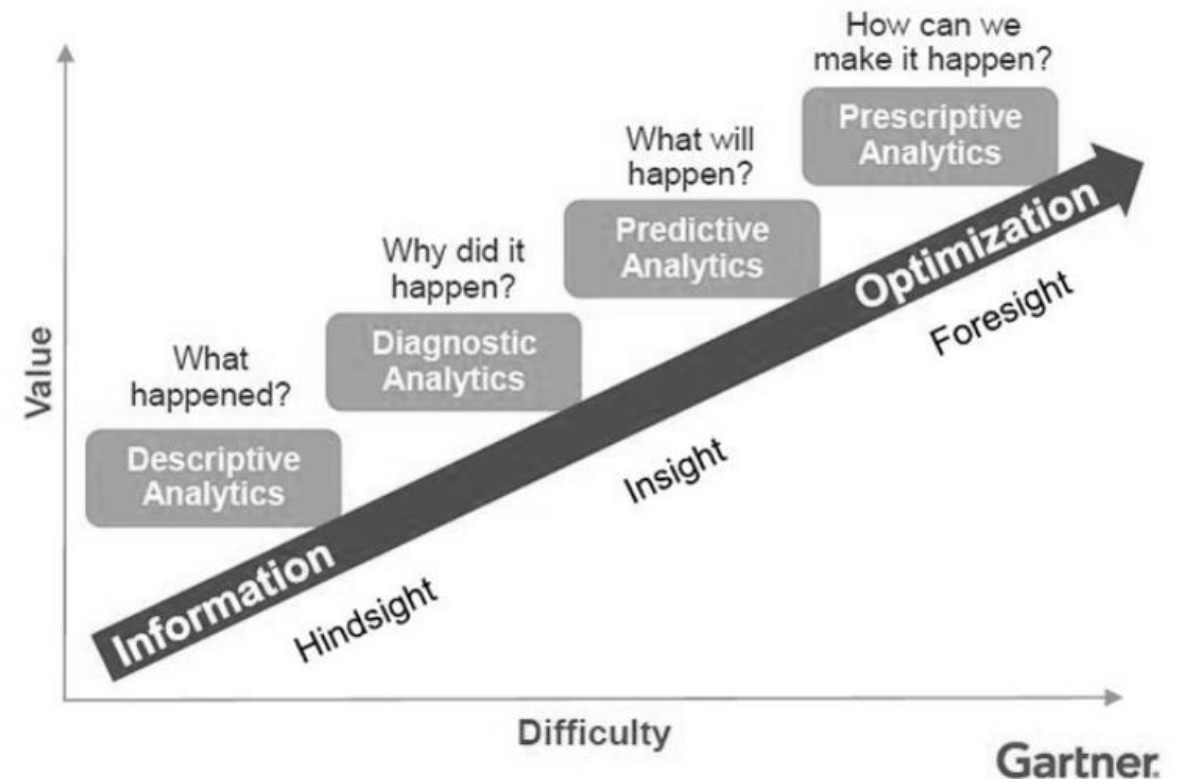
Start small but with big buy-in

Work out where your organisation on the analytics maturity graph on the right and then pick a small quick project to start with where the outcomes are easily measurable.

Share these results widely across your organisation.

Build confidence and engagement as you roll out to the more complex or long-term projects.

Work your way incrementally to “Foresight”



Top tips!

- Start with the end in mind
- Have a clear goal, or problem to be solved
- Expect data science to be challenging, but worth the effort.
- Have fun!





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Need help? Get in touch



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