

Stakeholder & Team Management in Data Science: Principles and Practical Tips

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TALK SUMMARY

Myntra Data Science (MDS) is one of the largest Machine learning teams in India. Myntra has been an early adopter of ML solutions and hence our work is deeply embedded across (1) In-app recommendations at all stages of the customer journey (2) Inbound supply chain-inventory allocation, route optimization, transit time forecasting etc. Because we are an applied ML team we work very closely with stakeholders like Product and Business teams to deliver on the Annual Operating Plan (AOP) that's broken down into quarterly initiatives. Therefore managers in MDS not only need people manager skills to enable their direct reports to succeed but also need skills required to collaborate effectively with Engineering, Product and Business.

In the talk we propose to discuss (a) General principles of what it takes to be a good ML people manager (b) Principles of how to effectively collaborate with Business and Product stakeholders. (c) Real-life challenging scenarios we faced in our careers and how we had to leverage these general principles to tackle those situations. Here is a sample list of issues we plan to cover in our talk:

(1) How to prioritise initiatives?

While Tech innovation and publications are very important to Data Scientists innovation, *per se*, is of no value to Product or Business stakeholders unless it leads to an impact on Customer Experience or business metrics like GMV. How to prioritise so that scientists' motivation is kept high while meeting business goals is a challenge.

(2) "Playing well" with other stakeholders

DS can get into conflict with other teams because DS is a scientific discipline while business runs on quick approximations. Eg: DS managers have to deal with unique cases where due to business constraints randomized trials (AB tests) are not possible. Frameworks like post-pre double difference quite commonly used in business are not accurate. This can create a logjam unless DS is able to come up with a good approximate measurement that satisfies all stakeholders.

(3) Appraisals: A balancing act

Data Scientists & Managers are expected to 1) deliver business impact 2) have deep technical contributions through papers 3) work well with other stakeholders and be team players. Managers have to coach employees on how to achieve a balance across these dimensions.

(4) Soft-skills training

Scientists are hired¹ from academic institutions largely

based on the strength of their technical contributions like publications, ML techniques etc. However when they start working in companies they also have to be taught how to navigate inter-team conflicts and other such soft-skills to be successful in their careers.

(5) Managing & planning timelines

Unlike a Software Development Engineer (SDE) who's mostly implementing business logic, an ML scientist can't say by how much the output metric will change before starting the modeling work. Due to the inherently iterative nature of the ML workflow, it's also tricky to provide accurate estimates of the completion time for model development. In spite of these challenges we discuss how it's possible to successfully partner with Engineering & Program Management teams that work in sprints and expect concrete outputs at a regular cadence.

We hope that through anecdotes and stories we will be able to provide practical insights to DS managers while providing a framework of principles that could be leveraged when they face similar situations in their career.

SHORT BIO OF PRIMARY SPEAKER

Hrishikesh V. Ganu leads the Data Science team at Myntra. He has 17 years' work experience in the areas of ML, Operations Research and Statistics. Prior to Myntra, he has played managerial roles in ML/DS teams at Intuit, Amazon among other companies. He has a Master's from Indian Institute of Science (IISc) and a full time MBA from Indian Institute of Management (IIM), Kozhikode. He's several publications in ML conferences like SIGIR, NAACL, Informs Conference on Business Analytics etc. He likes to learn as well as coach people on the intricacies of building successful DS teams.

ABOUT THE COMPANY

Myntra² is one of India's leading destinations for fashion, beauty and lifestyle and a pioneer in m-commerce play. An integral part of the Flipkart Group, Myntra brings together technology and fashion to create the best experience in the fashion and lifestyle space in India. The company has partnered with over 7000+ leading fashion and lifestyle brands such as H&M, Levis, U.S. Polo Assn., Tommy Hilfiger, Louis Philippe, Jack & Jones, MANGO, Forever 21, Urbanic, Marks & Spencer, W, Biba, Nike, Puma, Crocs, M.A.C, and Fossil and many more, to offer a wide range in latest branded fashion and lifestyle wear. Myntra services over 27,000 pin codes across the country.

¹Data Science Hiring Process At Myntra: <https://analyticsindiamag.com/data-science-hiring-process-at-myntra/>

²<https://www.myntra.com/>