

Team Data Science Process:

Roles and tasks

Structure of data science teams in Redback Operations

Data science functions in enterprises may often be organized in the following hierarchy:

1. **Data Science Team**
2. **Project Teams (within Data Science Team)**

In such a structure is a team lead and possibly multiple project leads. Typically, a data science project is done by a data science team, which may be composed of project leads (for project management and governance tasks) and data scientists or engineers (individual contributors / technical personnel) who will execute the data science and data engineering parts of the project. Prior to execution, the setup and governance is done by the group, team or project leads.

Definition of four TDSP roles

With the above assumption, we have specified four distinct roles for our team personnel:

1. **Team Lead** Group Manager is the manager of the entire data science unit in an enterprise. A data science unit might have multiple teams, each of which is working on multiple data science projects in distinct business verticals. A Group Manager might delegate their tasks to a surrogate, but the tasks associated with the role do not change.
2. **Project Lead**. A team lead is managing a team in the data science unit of an enterprise. A team consists of multiple data scientists. For data science unit with only a small number of data scientists, the Group Manager and the Team Lead might be the same person.
3. **Project Individual Contributor**. Data Scientist, Business Analyst, Data Engineer, Architect, etc. A project individual contributor executes a data science project.

Tasks to be completed by Personnel

The following is a guideline for the type of tasks that the roles mentioned above ought to undertake

Team Lead Tasks:

- The Team lead oversees all projects within the Data Science team. They should keep in contact with Project leads and be able to manage expectations and outputs.
- The team lead needs to provide a general story and goal orientation for the Data Science team
- The Team lead needs to understand the needs of the project leads and provide for accordingly

- The team lead leads to provide a set of standardised documentation that all project teams need to follow.
- Team Leads must ensure – to the best of their ability – those projects are delivered on time, and that project leads are kept up to date with company changes in direction, or company issues.
- The team lead needs to ensure that the projects are working effectively, ethically and making sure outputs are in line with the goals of Redback Operations
- The team lead is in charge of sprint planning and execution.
- Come up with process improvement plans
- Enforce process standards

Project Lead Tasks:

- Project leads are in charge of each individual project that is run within the Data Science and Analytics team
- Project leads are in charge of the documentation provided to them by the Team Lead
- Project leads must ensure – to the best of their ability – those individual contributors are kept up to date with any change of direction, problems with output etc.
- Project leads are in charge of assigning particular projects to individual contributors
- Project Lead should create project repositories using GitHub or Teams – where all documentation is stored.
- Ensure all records are up to date, and available
- Archive and store all documents.

Individual Contributor Tasks:

- Individual contributor's tasks need to ensure that they keep in contact with the project lead about their availability, how their projects are progressing, problems associated with the projects, and how the project will benefit Redback Operations
- Individual contributors need to ensure that they provide necessary documentation regarding data, methodology, exploratory data analysis, tools, analytical and statistical techniques. As well as provide justifications for all of this.
- Should have a clone of the project repository set up by the Project lead.
- Organise material and write process documents
- Edit, Standardise, and make changes to your own documentation during the project
- Prepare any necessary charts, graphs, diagrams or descriptions for Project lead and Team Lead
- Ensure all technical ideas are conveyed in simple to understand language