Applied Data Science

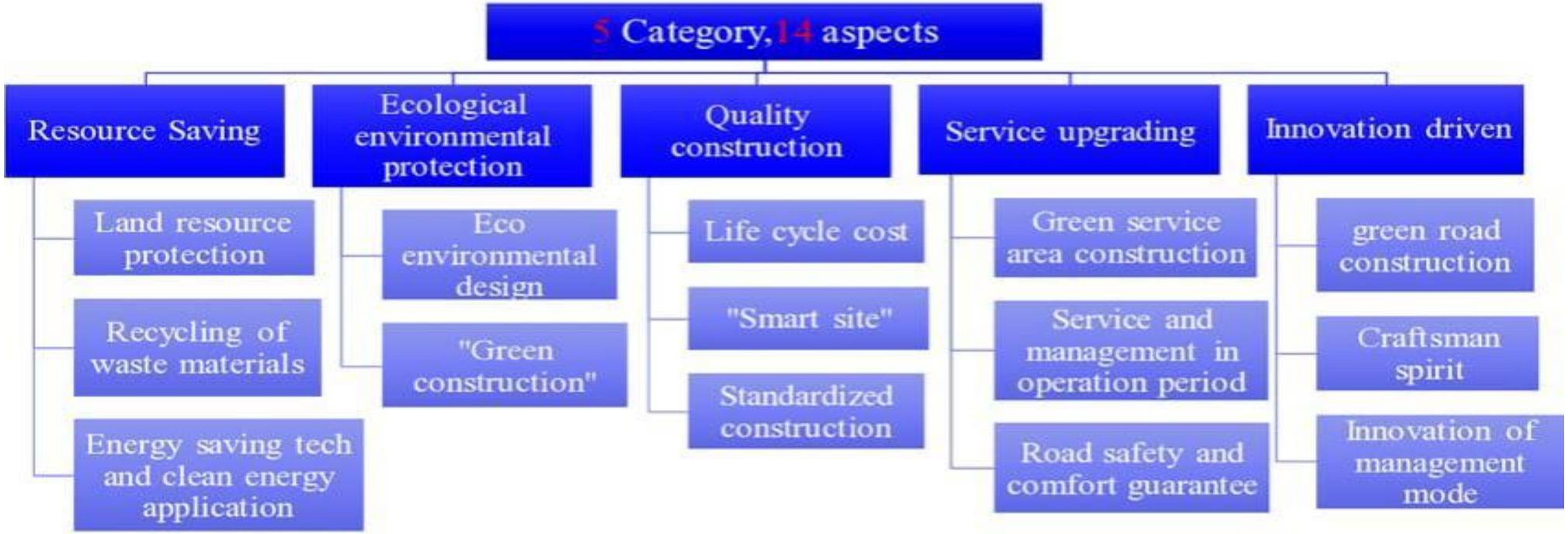
Project demonstration and Documentation

Group 4

Project Demonstration:

- A demonstration project is a means of promoting innovations and capturing and disseminating best practice through the development and analysis of a live project. This can help build an evidence base to test and support industry improvements

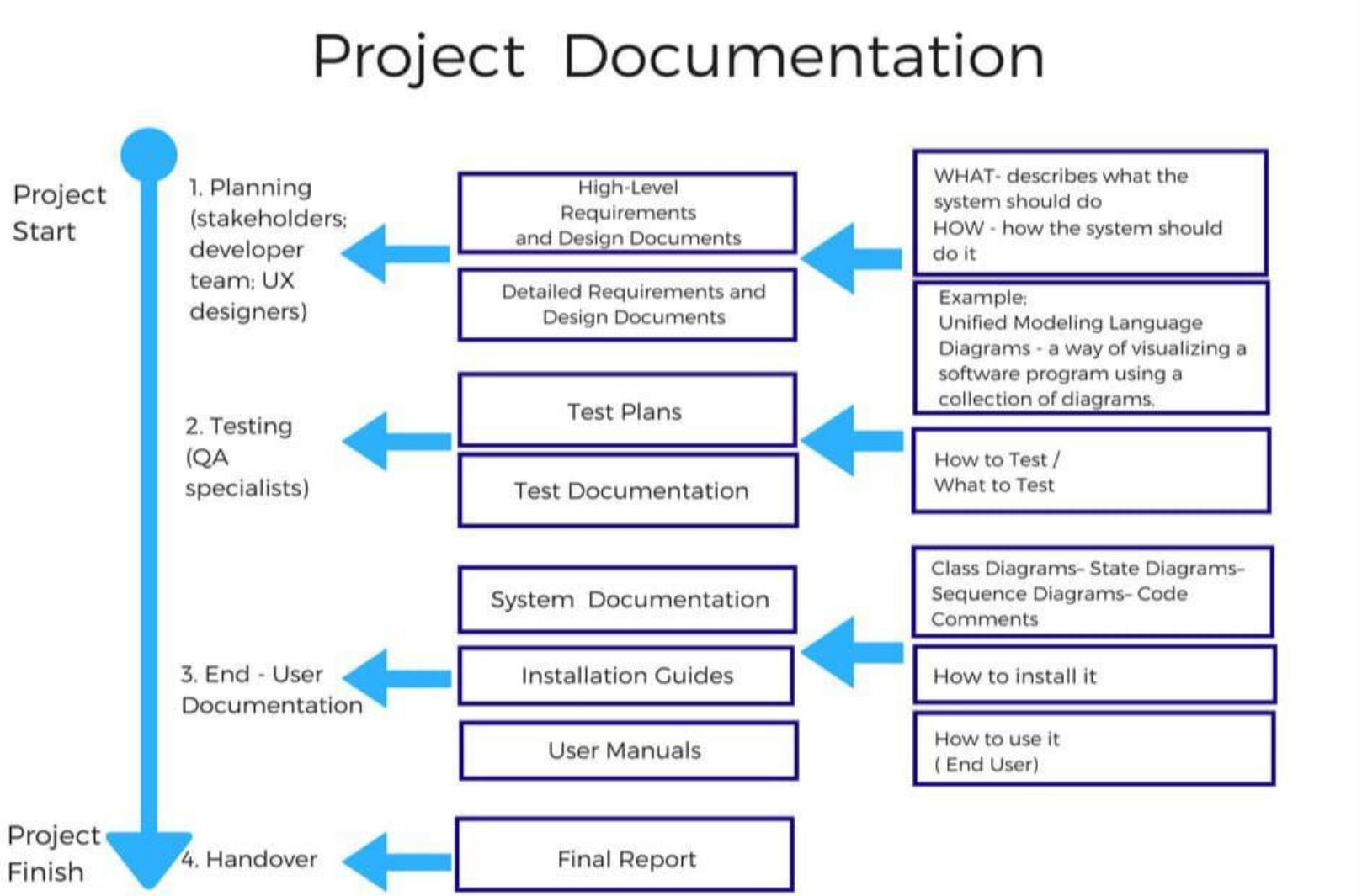
Demonstration:



Project Documentation:

- Project documentation consists of a collection of documents that the project manager creates during the project's development process. The project team is expected to follow certain procedures, specifications, and guidelines for such documents, including a project plan, schedule, and budget.

Documentation:



Project End To End Solution:

- End-to-end describes a process that takes a system or service from beginning to end and delivers a complete functional solution, usually without needing to obtain anything from a third party.

Input:

- def load_img_steering(datadir, df):
- image_path = [] steering = [] for i in range(len(data)):
- indexed_data = data.iloc[i] center, left, right = indexed_data[0], indexed_data[1], indexed_data[2] image_path.append(os.path.join(datadir, center.strip()))
- steering.append(float(indexed_data[3])) *# left image append* image_path.append(os.path.join(datadir,left.strip())) steering.append(float(indexed_data[3])+0.15)
- *# right image append*
- image_path.append(os.path.join(datadir,right.strip())) steering.append(float(indexed_data[3])-0.15)
- image_paths = np.asarray(image_path)
- steerings = np.asarray(steering) return image_paths, steerings image_paths, steerings = load_img_steering(datadir + '../input/udacity-self-driving-car-behavioural-cloning/self_driving_car_dataset_make/IMG', data)

Output:

```
"cells": [],
"metadata": {
  "language_info": {
   "name": "none",
    "version": "0" },
"kernelspec": {
      "display_name": "Python 3",
      "language": "python",
      "name": "python3"
} },
 "nbformat": 4, "nbformat_minor": 4
}
```

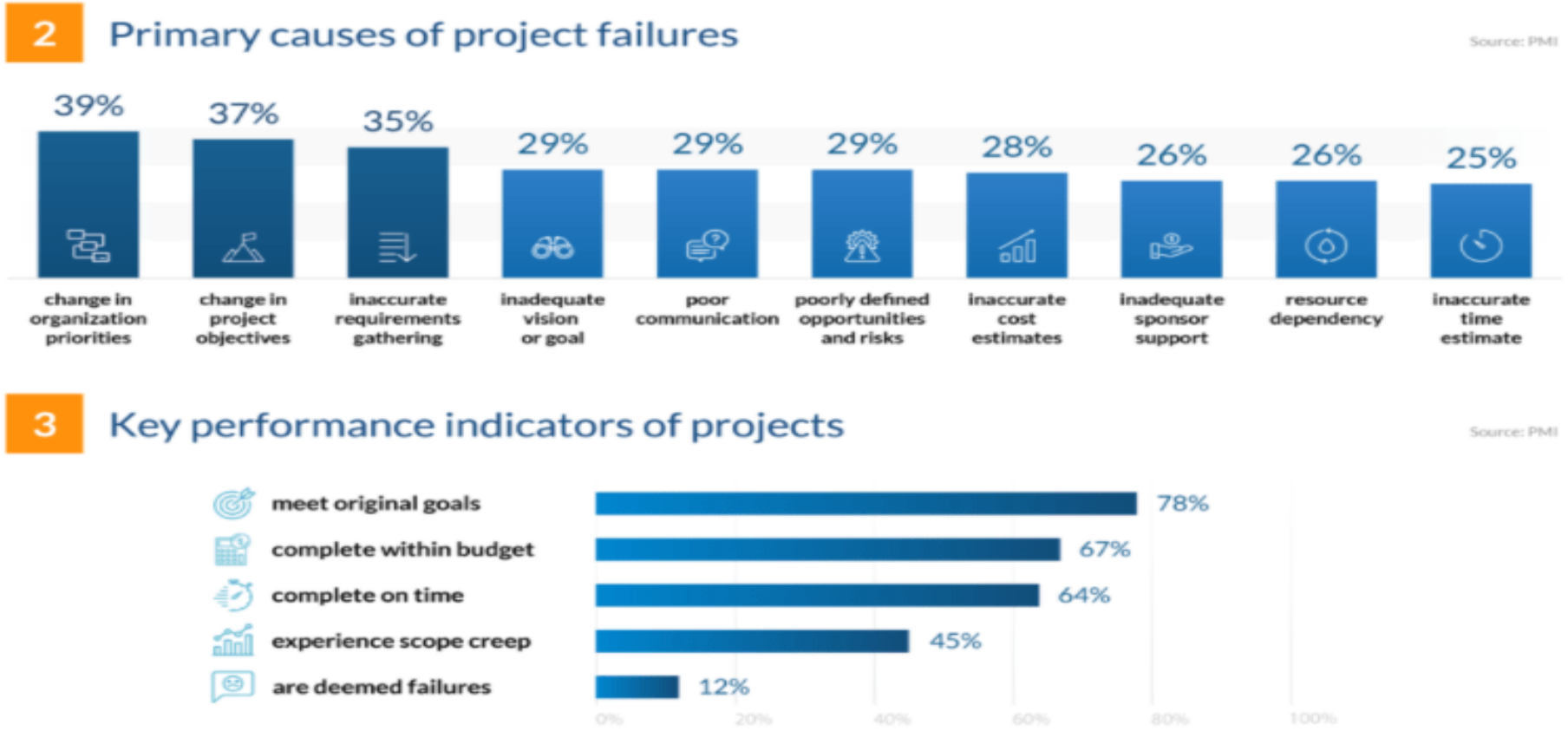
Project Documentation Step Bye project Development Procedure:

- Step 1: Bring all Scattered Documents in One Place. .
- Step 2: Take it Stage by Stage.
- Step 3: Structure the Document & Make it Easy to Search.
- Step 4: Let Your Team Review the Document Before Sharing.
- Step 5: Maintain the Document's Relevance

Project Development Process:

- Planning Studies: The first step of project development is the comprehensive evaluation.
- Environmental Study: We put the Planning Study through the permitting process in an environmental study.
- Funding Process
- Final Design
- Implementation

Project Causes:

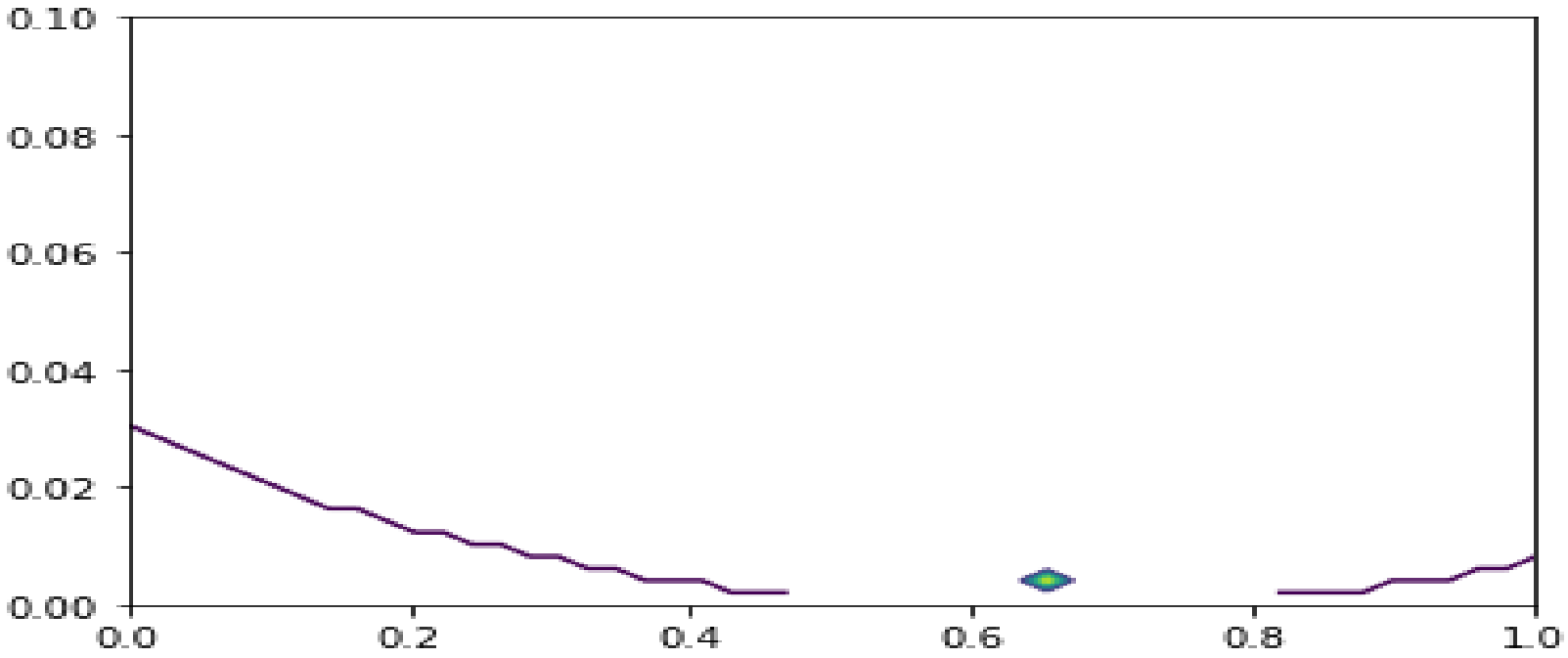


Project Development procedure :

Input:

- class0 = result_dataframes[0].copy()
- mu_x = np.mean(class0['Kuiper_dist’])
- var_x = np.var(class0['Kuiper_dist’])
- v_x = (mu_x*(1-mu_x)/var_x)-1
- alpha_x = mu_x*v_x beta_x = (1-mu_x)*v_x gamma_y = np.mean(class0['Accuracy']) nu_y = var_x/v_x x = np.linspace(0, 1)
- y = np.linspace(0, 0.1) X, Y = np.meshgrid(x, y)
- plt.contour(X, Y, dnig(X, Y, 0.65, 101, 50.5, 0.2)) plt.show()

Output:



Input:

```
# Demonstrating dnig
x = np.linspace(-3, 3)
y = np.linspace(-0.5, 11)
X, Y = np.meshgrid(x, y)
 plt.contour(X, Y, dnig(X, Y, 0, 1, 1/2, 1/2))
 plt.show()
```

Output: