Business Problem Addressed: one of services has been provided to internal users is shared sites which providing saving and sharing files between specific groups, to access these shared sites, there is access and level of permission should be granted to each user based on his related department and work. The problem is when some users transfer to another department or their authority changed, their access to shared site should be changed but as it’s manual process, a lot of issues is happening and breaking user/ department privacy which is against cyber security policies.

- Role of data science in addressing the business problem: Studying current staff hierarchy and shared site authority, apply correct matching and apply a certain roll to provide correct permissions based on staff position and department. In future for any changing in employee hierarchy, the roll should be recommending the correct permission.

- Targeted business objective(s):

1- Increase user’s privacy.

2- Monitor & control the confidential documents.

3- protect user/department’s data and files.

**2. Data Science Classification**

- Approach: Prescriptive: using descriptive approach while analyzing the current staff info and his given permissions and predict his new permissions based on correct classification.

- Type of Model: using supervised learning to classify each employee and assign him to the correct permission’s group, and we can go deep and use Recommender system to exploit similarities between permissions/departments cases to recommend the correct permission on shared site based on what was preferred by those most similar to the case in hand.

**3. Data needed for project and sources for that data**

We need staff hierarchy from ERP (HR), list of shared sites and employee permissions and list of available permissions from (shared site system).

**4. Magnitude of opportunity (with justification)**

Medium, yes a lot of solutions in market has been applied same concept to classify given data but there is no same scenario has been apply on staff permissions with Microsoft solution (shared sites).

**5. Cost and complexity of development and implementation**

low cost with high complexity specially with required integration between ERP and Microsoft (shared sites).

**6. Likelihood of value capture (Low/Medium/High) with justification**

High, as we are facing a lot of cases every day.

**7. Key Business Stakeholders**

1. Cybersecurity.
2. IT developers.
3. IT operations.

HR.