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In [1]: #Interface Management Risk Calculation for depreciation of critical communication
#Meaning a loss of effectiveness of communication resulting in an increase of project costs
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import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
from sklearn.model_selection import train_test_split
from sklearn.tree import DecisionTreeClassifier
```

```
In [2]: # Instalation critical path package
# schedule delay is per day, includes equipment, and labour.
package_value = [2500000]
change_cost = [120000]
schedule_delay_cost = [14000]
```

```
In [3]: #Communication Pathways
direct = 5
contractor_level = [3]
sub_contractor_level = [12]
#This is probably high for no controls in place
communication_effectiveness = [.4]
```

```
In [10]: #Lead time in weeks
materials = [12]
labour = [1]
equipment_delay = [2]
```

```
In [11]: #Create data frame of variables
df = pd.DataFrame({'package_value':package_value, 'change_cost':change_cost,
                  'schedule_delay_cost':schedule_delay_cost,
                  'direct':direct,
                  'contractor_level':contractor_level,
                  'sub_contractor_level':sub_contractor_level,
                  'communication_effectiveness':communication_effectiveness,
                  'materials':materials,
                  'labour':labour,
                  'equipment_delay':equipment_delay})
```

```
In [12]: # show data frame it can also be exported as csv, excel file ets.
df
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Out[12]:
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	package_value	change_cost	schedule_delay_cost	direct	contractor_level	sub_contractor_level	communica
0	2500000	120000	14000	5	3	12	

```
In [13]: #Create a csv file to export data
df.to_csv('Interface_Communication_Risk.csv', index=False)
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In [ ]:
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