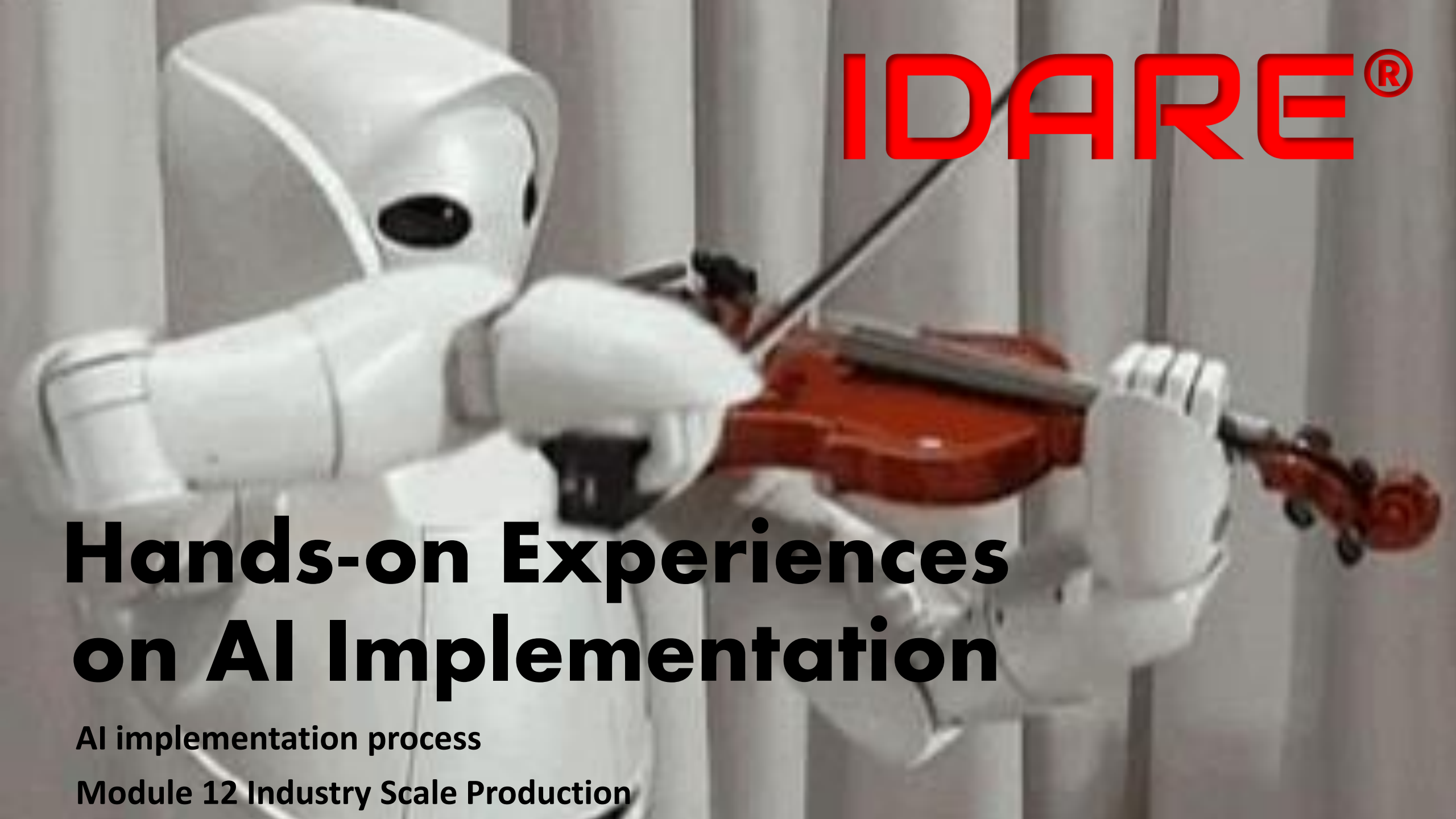

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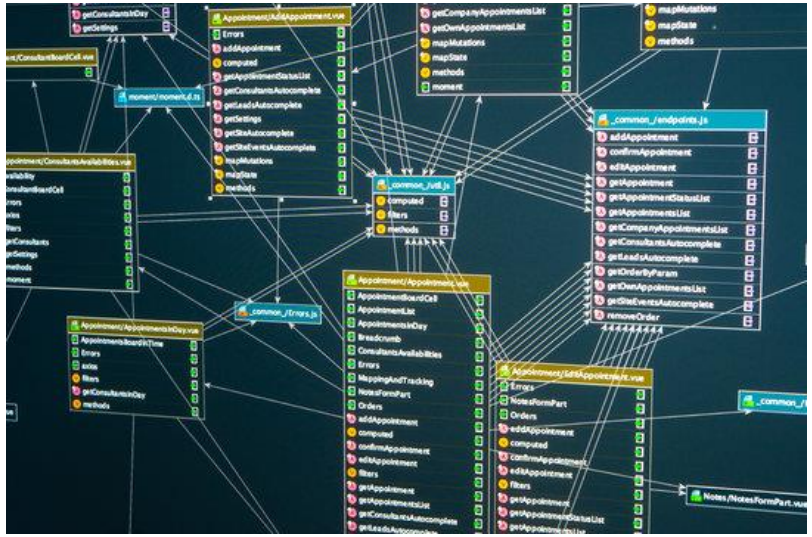
Hands-on Experiences on AI Implementation

AI implementation process

Module 12 Industry Scale Production

Simple one time research (not production Level) Development Requirement



Data Management Code
Connect, Store Process & Send
~30%

```
#Modeling :

#Using sklearn package to model data :

from sklearn import linear_model
regr = linear_model.LinearRegression()

train_x = np.array(train[["ENGINESIZE"]])
train_y = np.array(train[["CO2EMISSIONS"]])

regr.fit(train_x,train_y)


#The coefficients :
print ("coefficients : ",regr.coef_)                    #Slope
print ("Intercept : ",regr.intercept_)                   #Intercept
```

```
coefficients :  [[38.79512384]]
Intercept :  [127.16989951]
```

Data Analytics Code
For AI Solution
~70%

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Production Requirement for Single Solution

Production Scale Solution:

- Minimal human intervention
- Automatic data management and connectivity between databases and servers
- Capable of running repeatedly
- Auto-scalable for different data sizes
- Visualization Dashboard for Decision Making
- Administration Capability
- Fast code deploy system
- All of the above inside an fully packaged application either
  - Desktop based or
  - Cloud Based

Development Requirements for Production Scale

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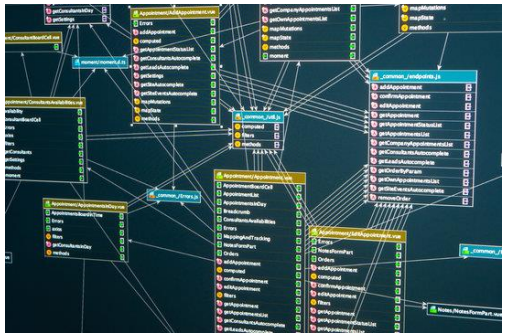

Data Management Code
Connect, Store & Send (~20%)

```
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Intercept :  [127.16989951]
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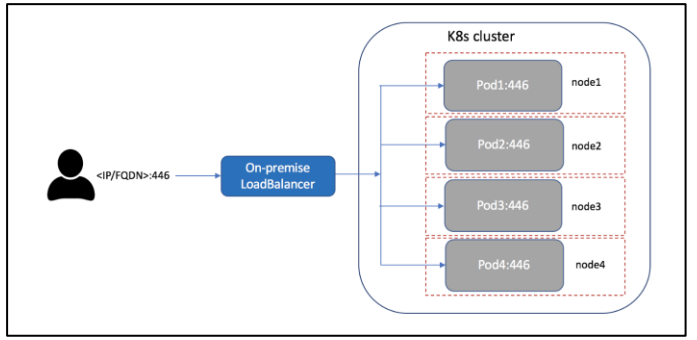
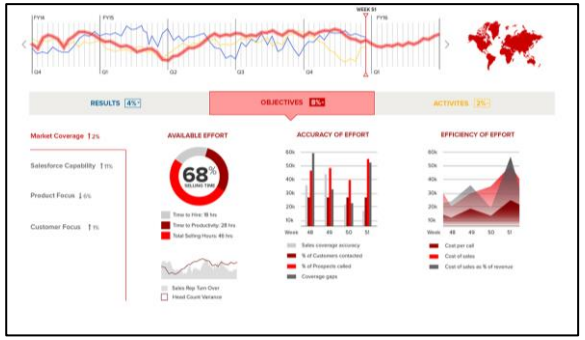
Data Analytics Code
For AI Solution (~40%)

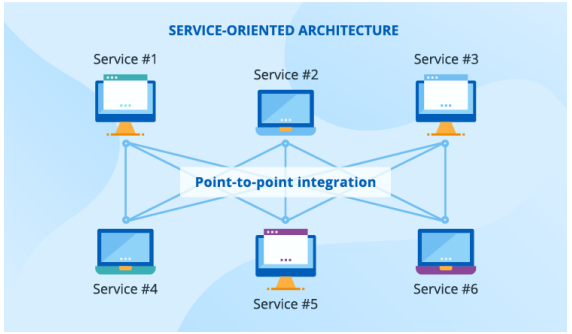


Load Balancing Application
For Scalability (~10%)

Admin Application
To manage solution 5%



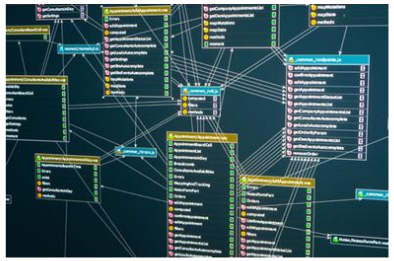
Visualization Application
for Decision Make ~15%



Application Integration Code
To integrate all 5 applications~10%

Development Requirements for Production Scale for Cloud based

Cloud Modification



Data Management Code
Connect, Store & Send (~20%)

Cloud Modification

```
#Modeling :

#Using sklearn package to model data :

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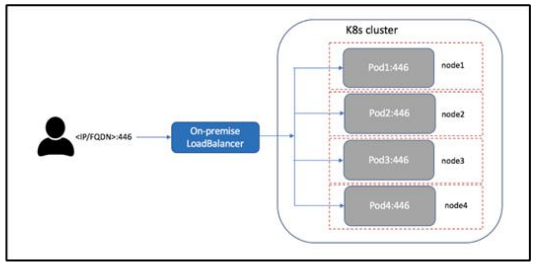
Intercept :  [127.16989951]
```

Data Analytics Code
For AI Solution (~40%)

Cloud Modification



Load Balancing Application
For Scalability (~10%)

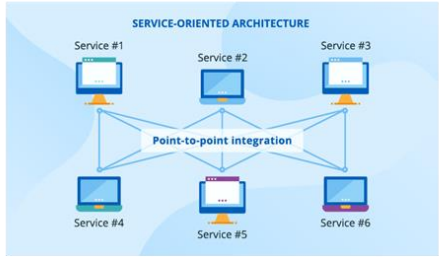
Cloud Application
(~10%)

Admin Application
To manage solution 5%

Cloud Modification

Visualization Application for Decision
Make ~15%

Cloud Modification



Application Integration Code
To integrate all 5 applications~10%

Cloud Modification

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