

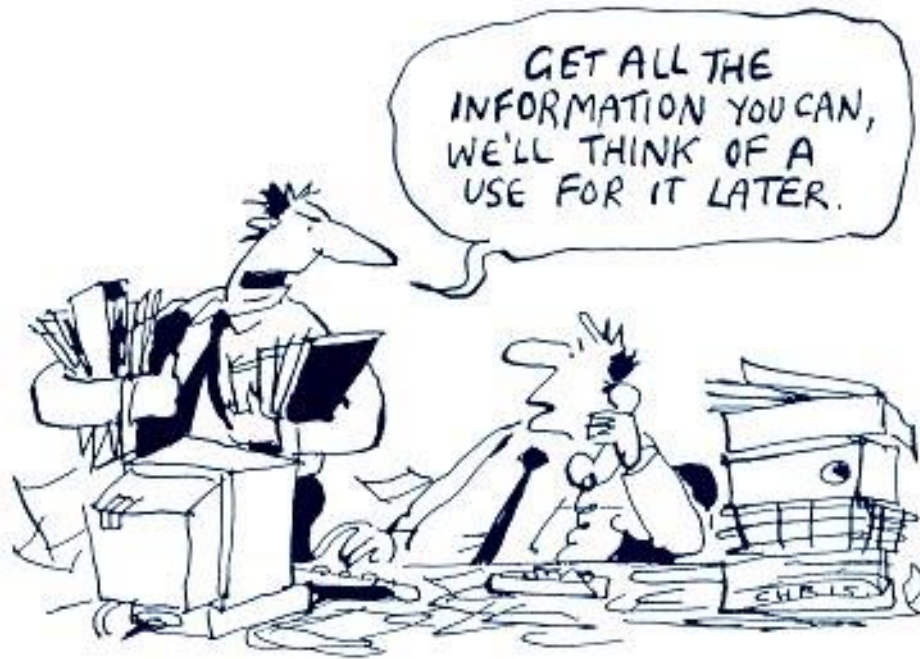


BIG  
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# Data Analysis Steps for Success with the IMSL® Numerical Libraries

Jennifer Locke

SOS17 Conference March 27<sup>th</sup>, 2013



# Where Do You Start?

# Step 1 What is the problem you want to solve?



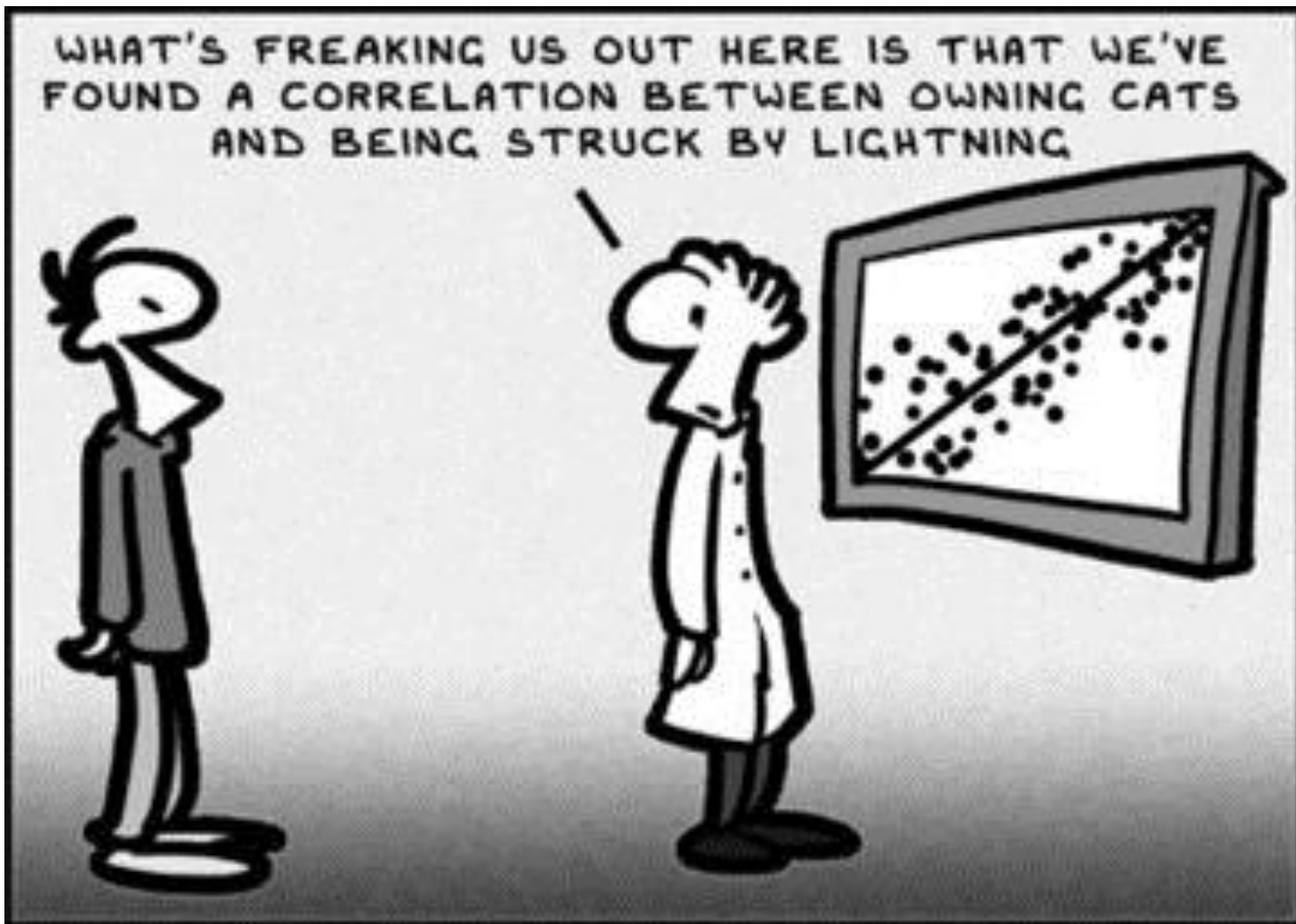
# Problem Context

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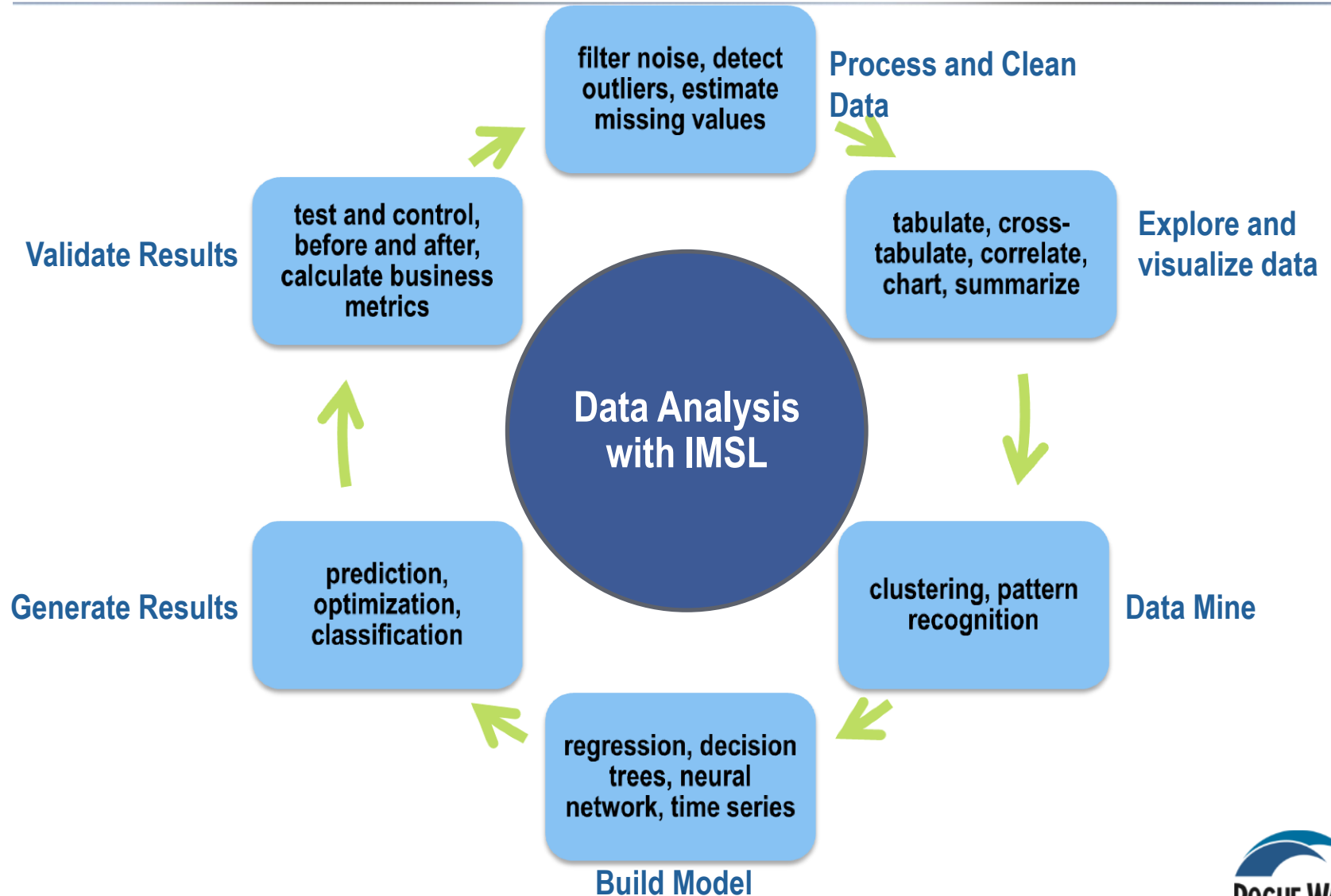
- **Improve cyber security**
- **Improve emergency response**
- **Minimize risk**
- **Prevent improper payment & improve recovery**
- **Detect fraud**
- **Improve patient outcome while reducing spending**
- **Optimize workforce/human capital**

Step 2

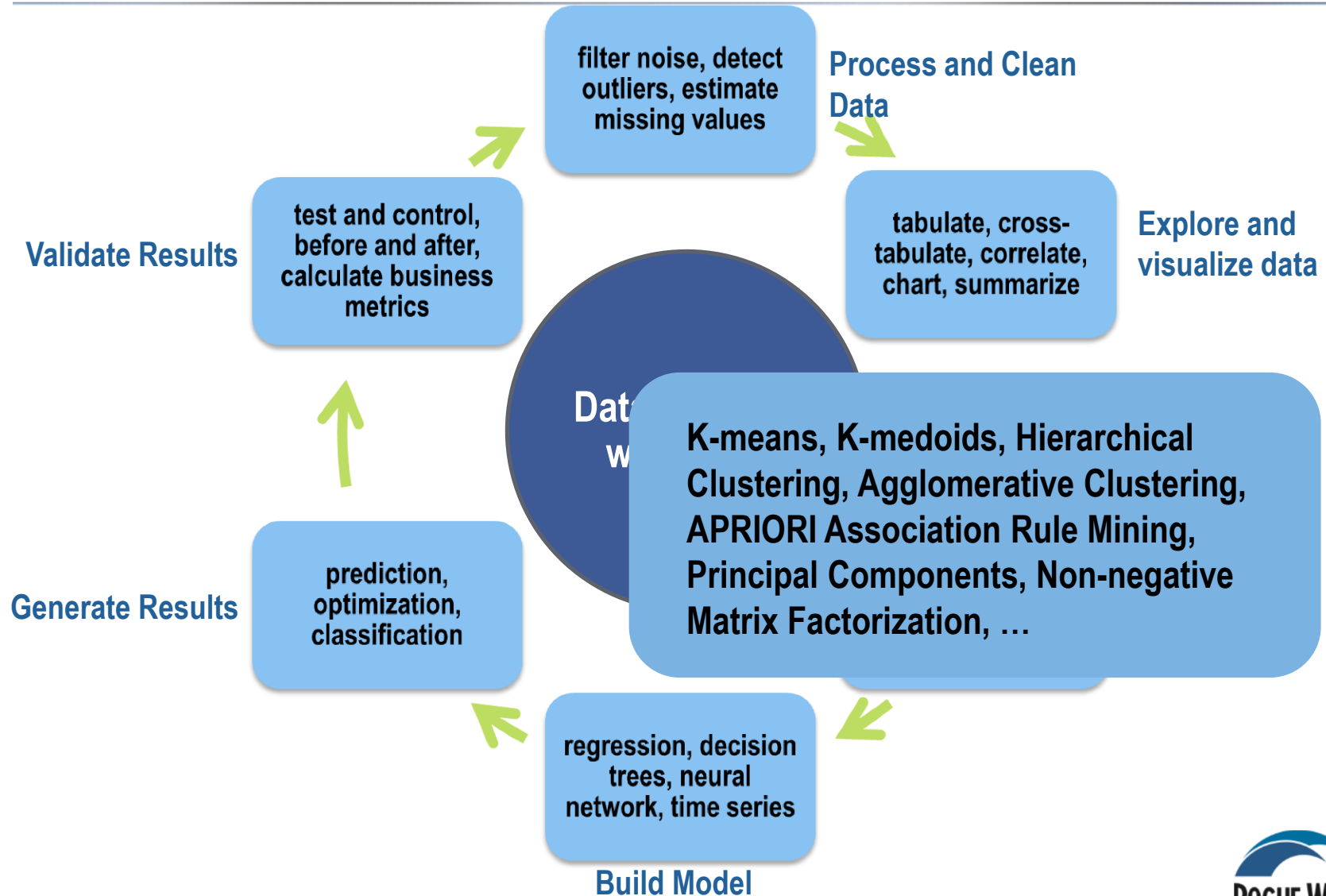
# Define & Understand Your Data



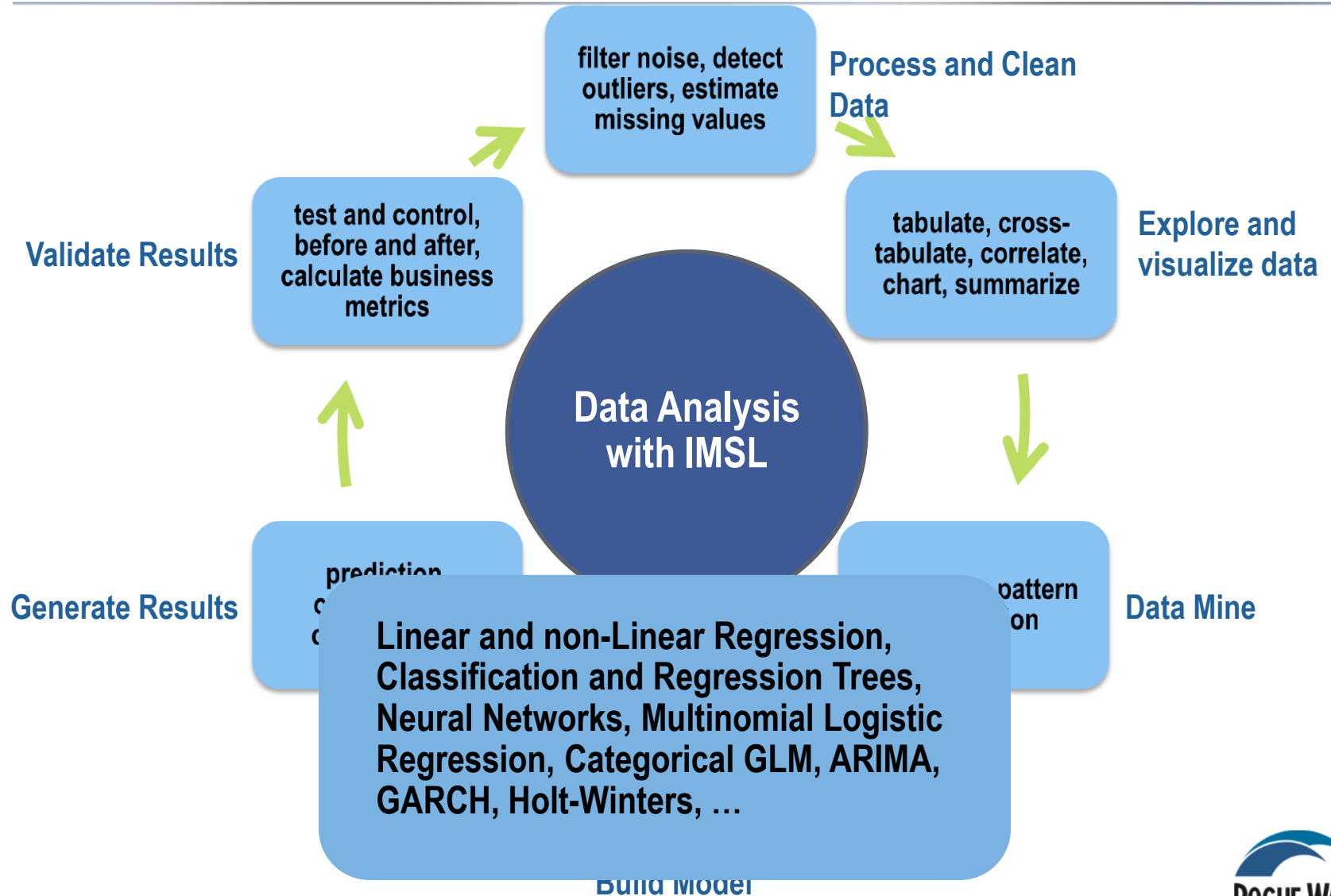
# Data Analysis Steps



# Data Analysis Steps



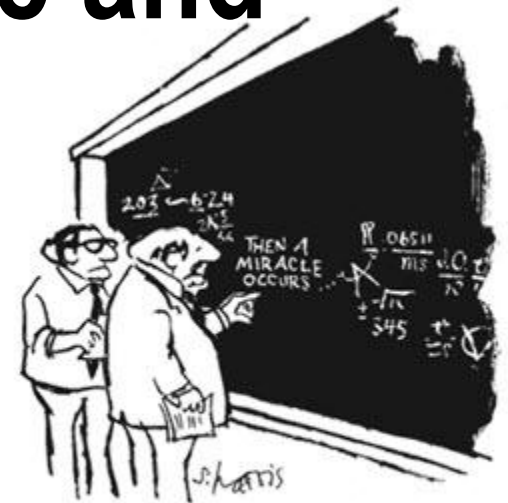
# Data Analysis Steps





Remember

**Determine your goals,  
Define your data,  
then  
Mine, Model, Validate and  
Repeat**



"I THINK YOU SHOULD BE MORE  
EXPLICIT HERE IN STEP TWO."

# 2013 Product Roadmap: IMSL C Numerical Libraries

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- **Decision Trees**
- **Apriori Analysis**
- **Support Vector Machines**
- **Kohonen Self Organizing Maps**
- **Vector Auto-Regression**
- **Vector Error Correction Model**
- **Additional data input streaming capability**
- **Data aggregation for data sets larger than physical memory**





# Thank You

Contact us at:

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