

# **The Package-Based Development Process in the Flight Dynamics Division**

**A. Parra<sup>1</sup>**

**C. Seaman<sup>2</sup> V. Basili<sup>2</sup> S. Kraft<sup>3</sup>**

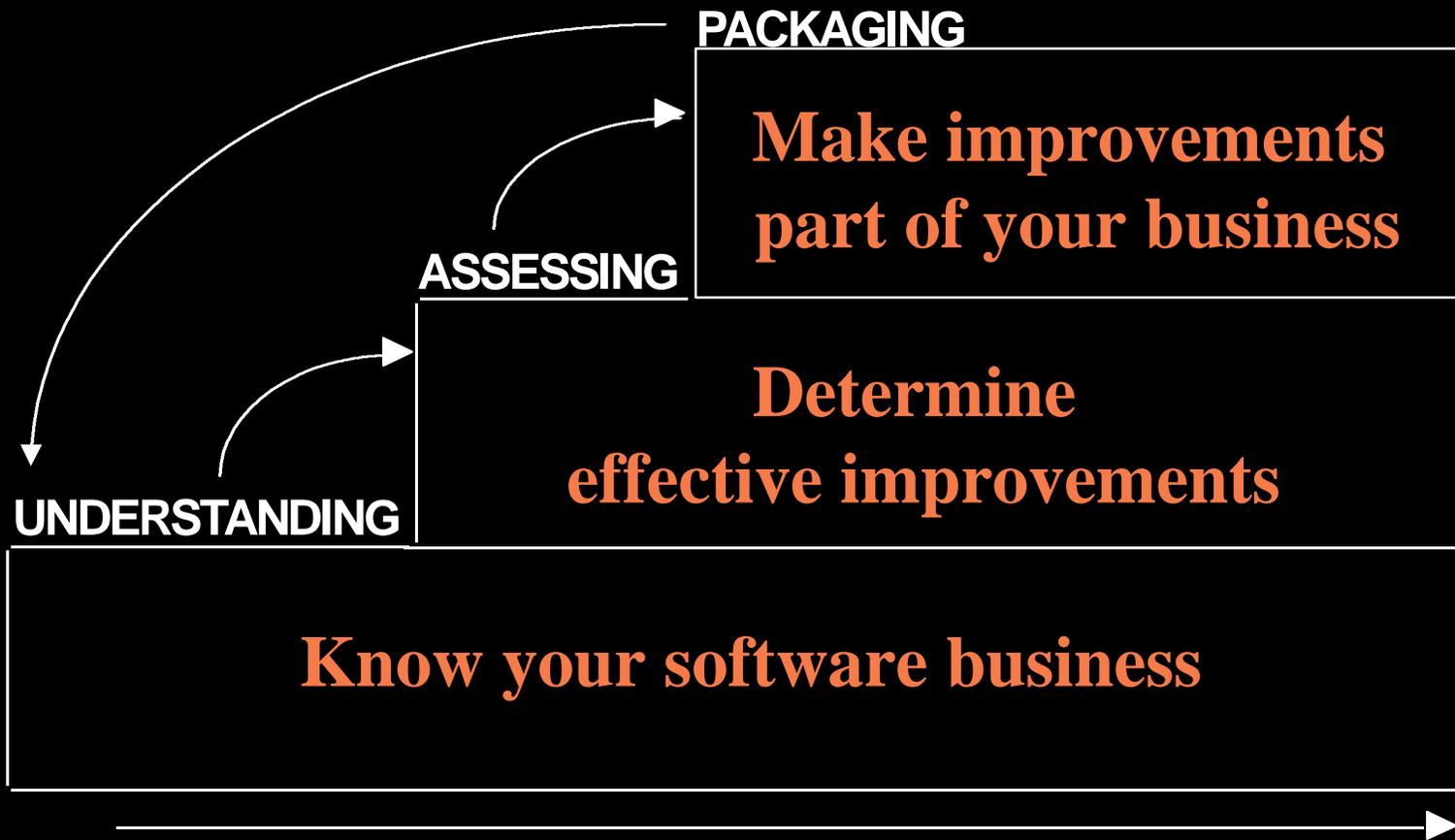
**S. Condon<sup>1</sup> S. Burke<sup>1</sup> D. Yakimovich<sup>2</sup>**

**<sup>1</sup> CSC    <sup>2</sup> University of MD    <sup>3</sup> GSFC**

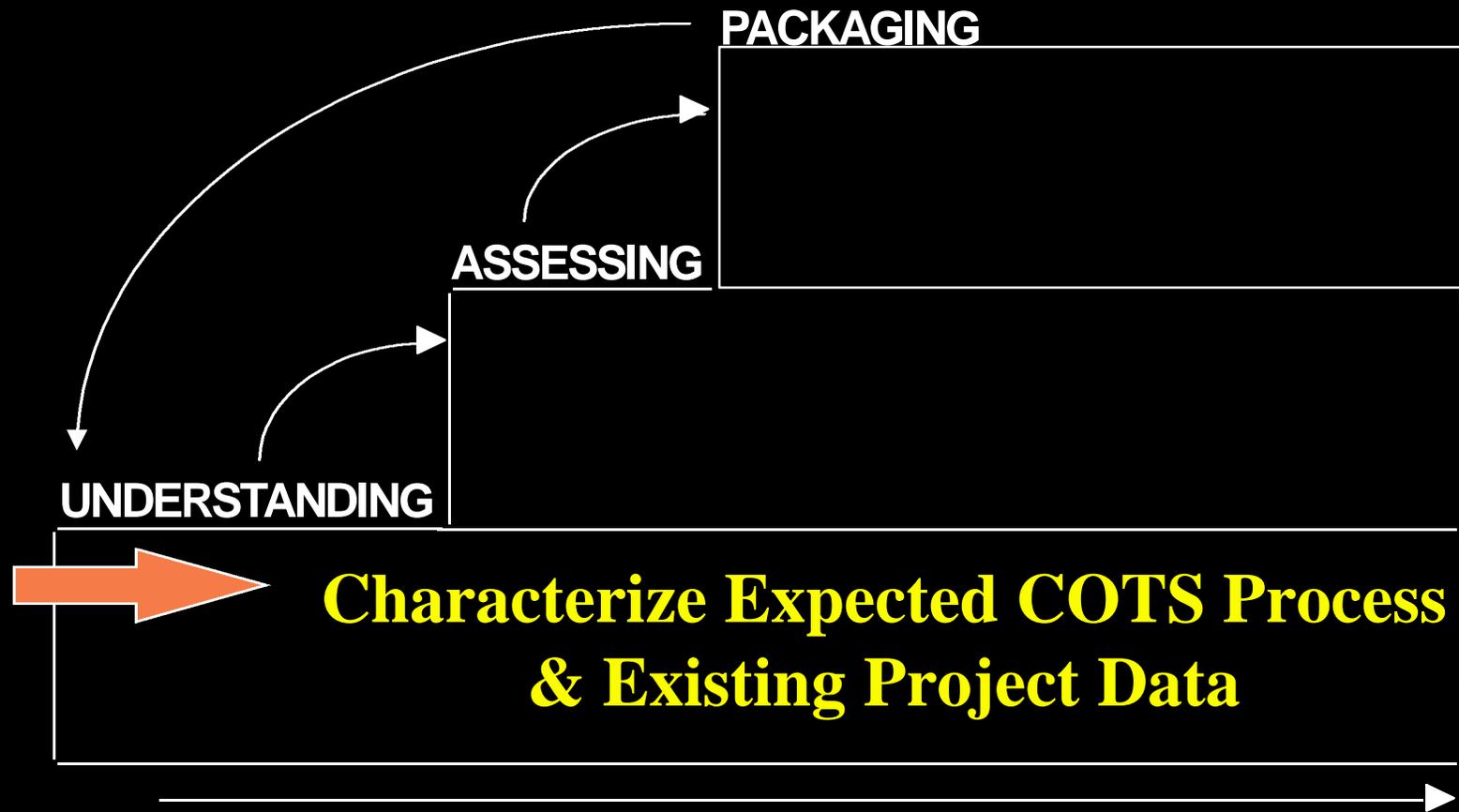
# Background

- FDD projects move to package-based
- Formation of COTS Study - Fall 1996
- Improvement Paradigm

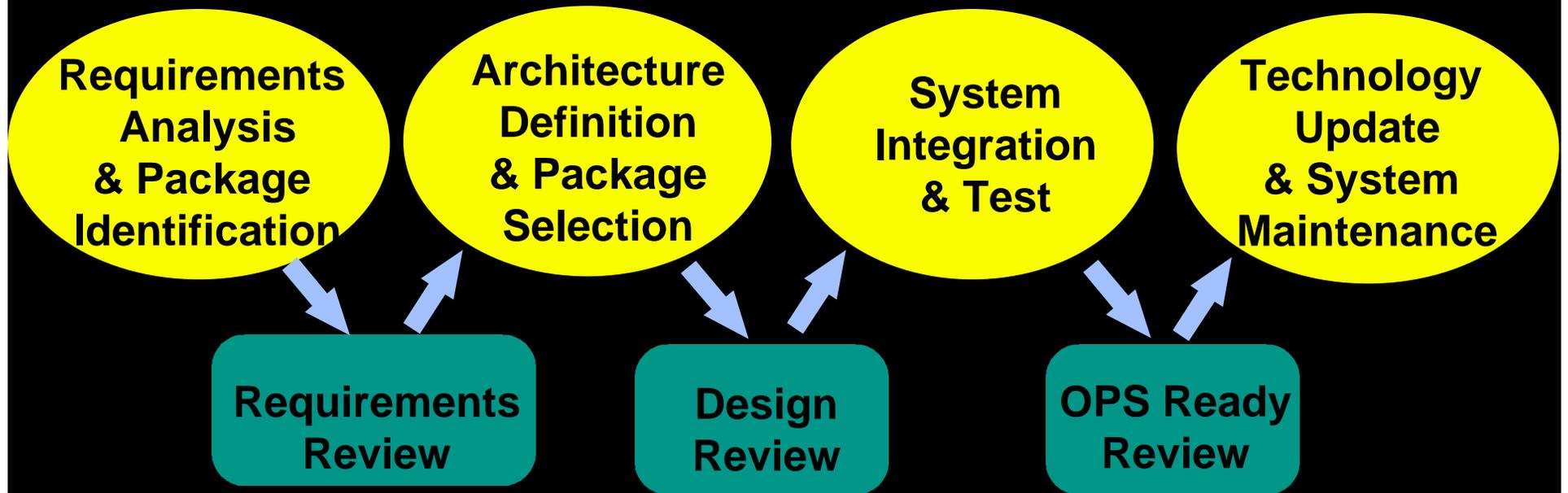
# Improvement Paradigm



# SEL COTS Study Improvement Paradigm



# Expected COTS Process



*Legend*



Process Flow

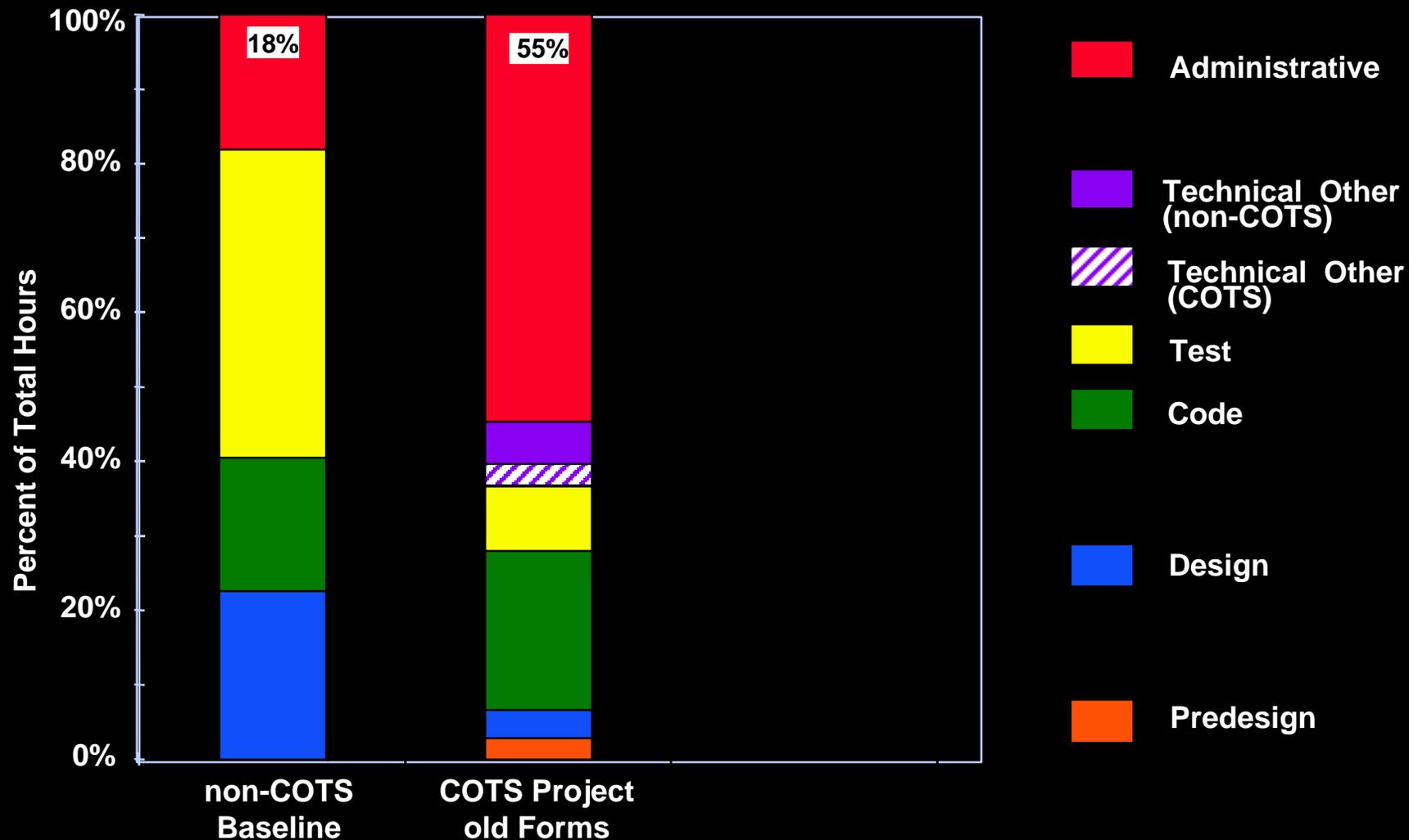


Process  
(COTS)



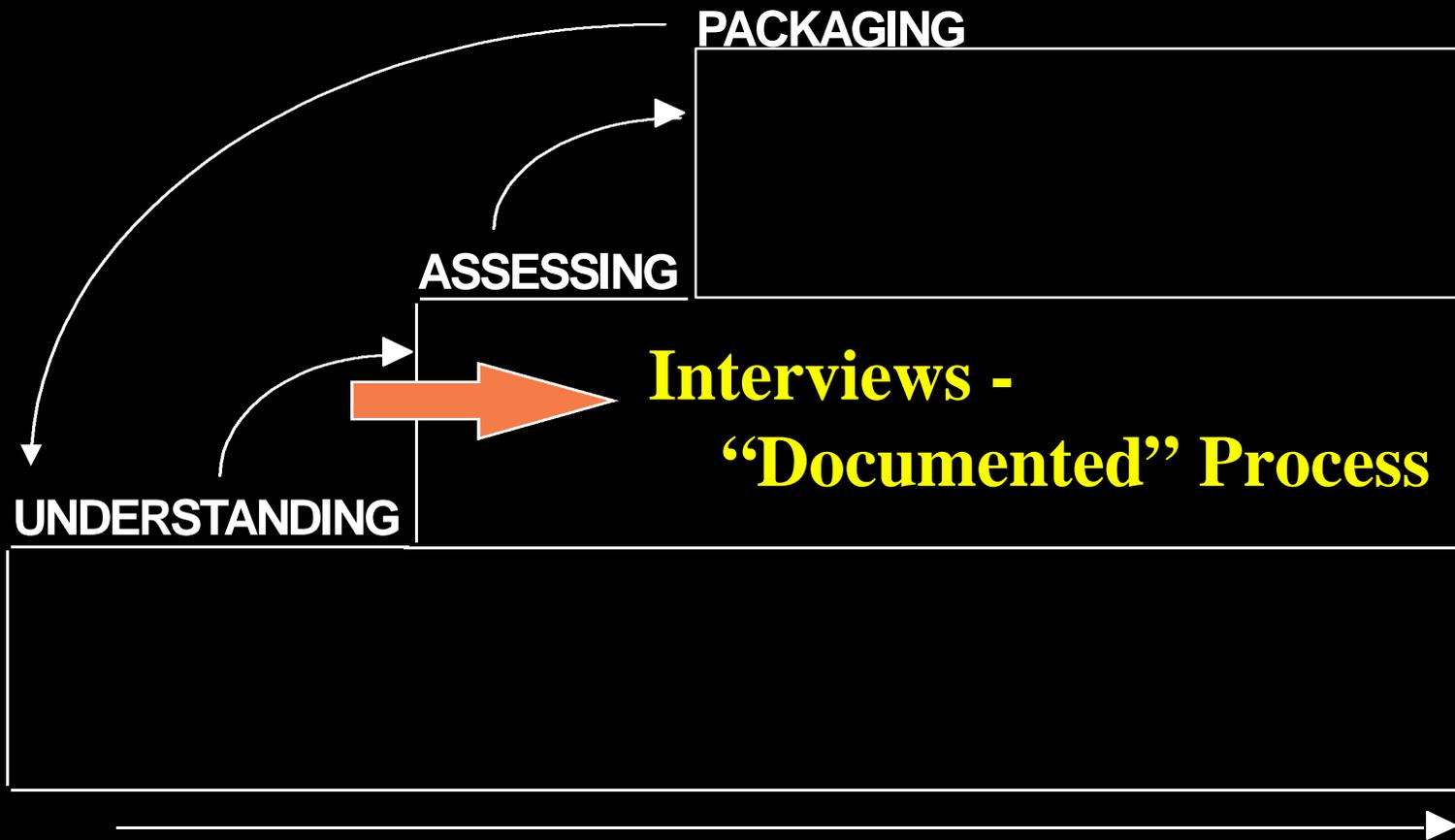
Process  
Review

# Existing Project Data

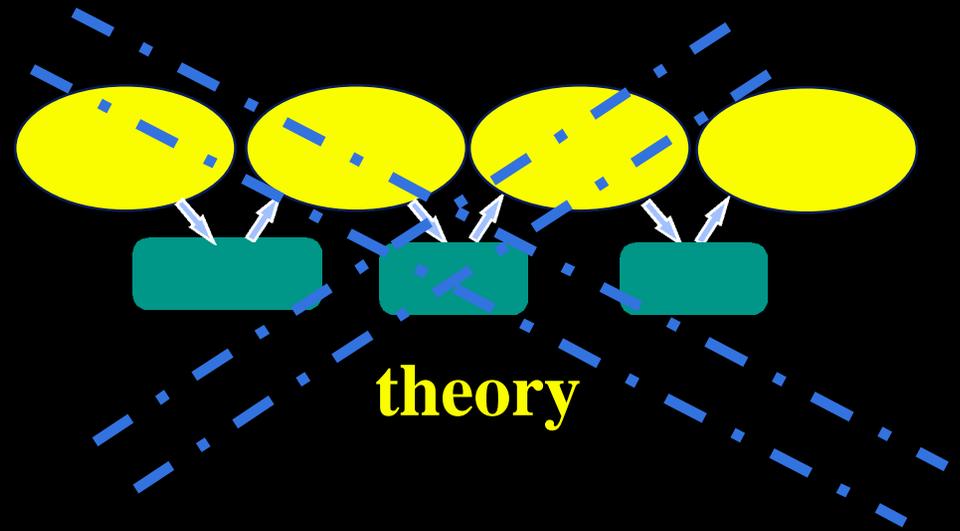


**Data Insufficient for COTS Projects**

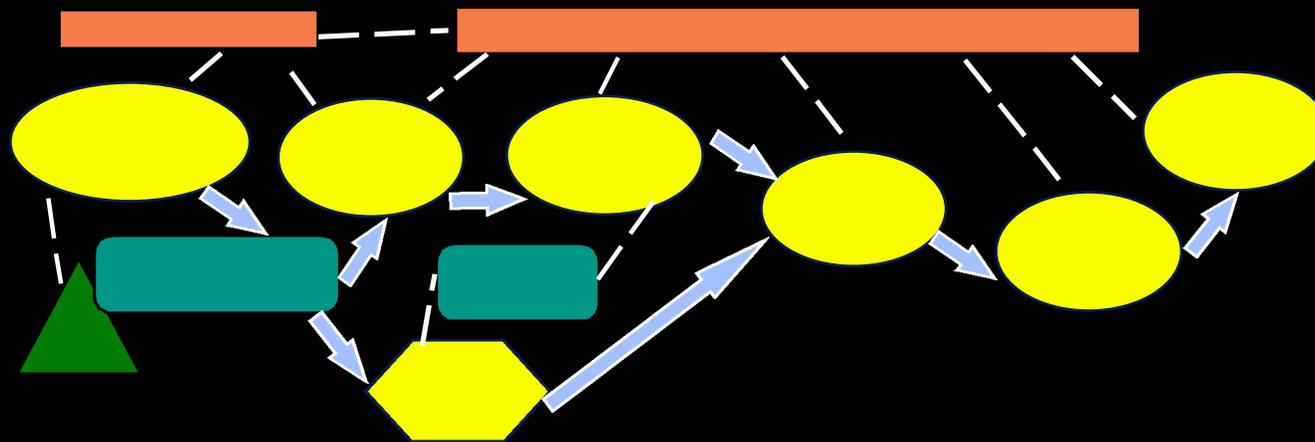
# SEL COTS Study Improvement Paradigm



# COTS Process Comparison



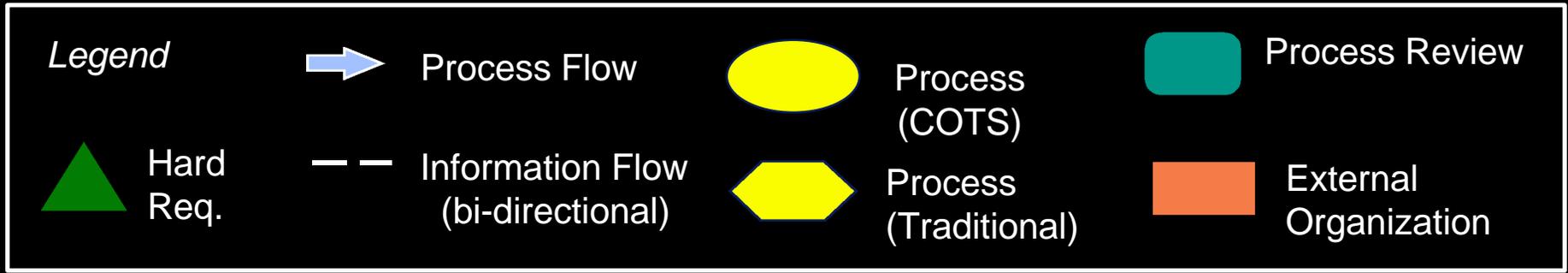
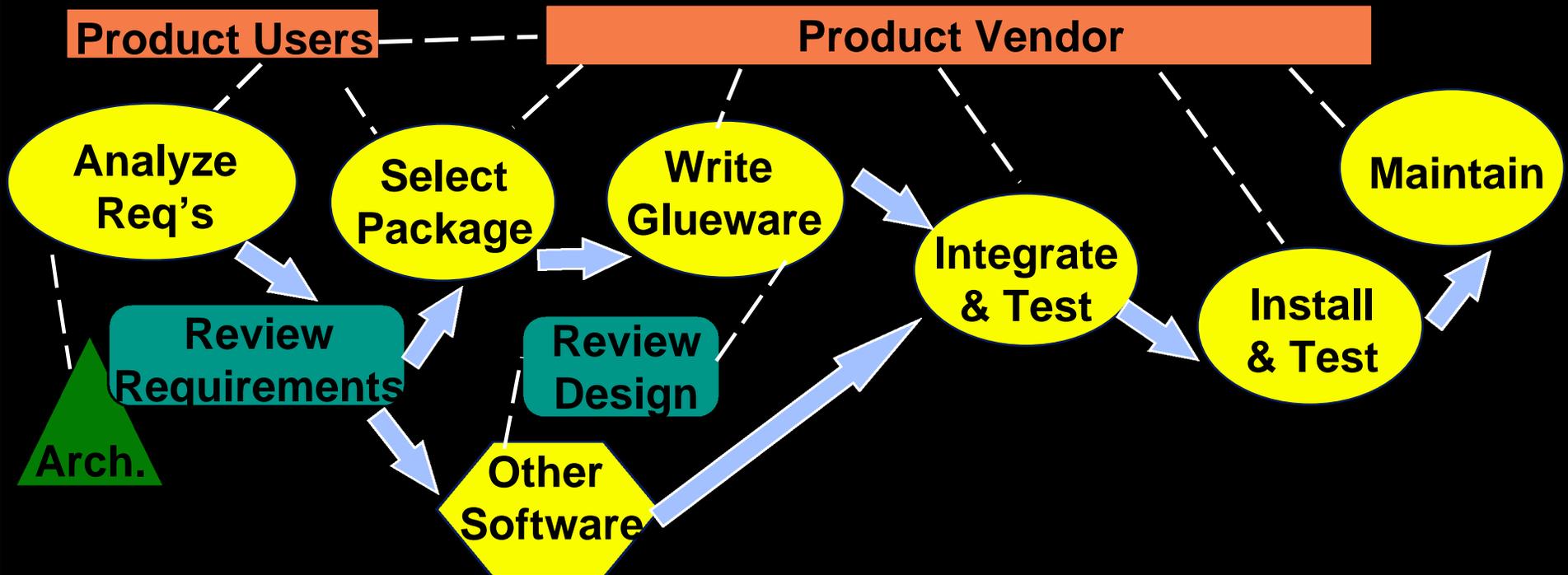
## current FDD practice



<i>Legend</i>	Process Flow	Process (COTS)	Process Review
Hard Req.	Information Flow (bi-directional)	Process (Traditional)	External Organization

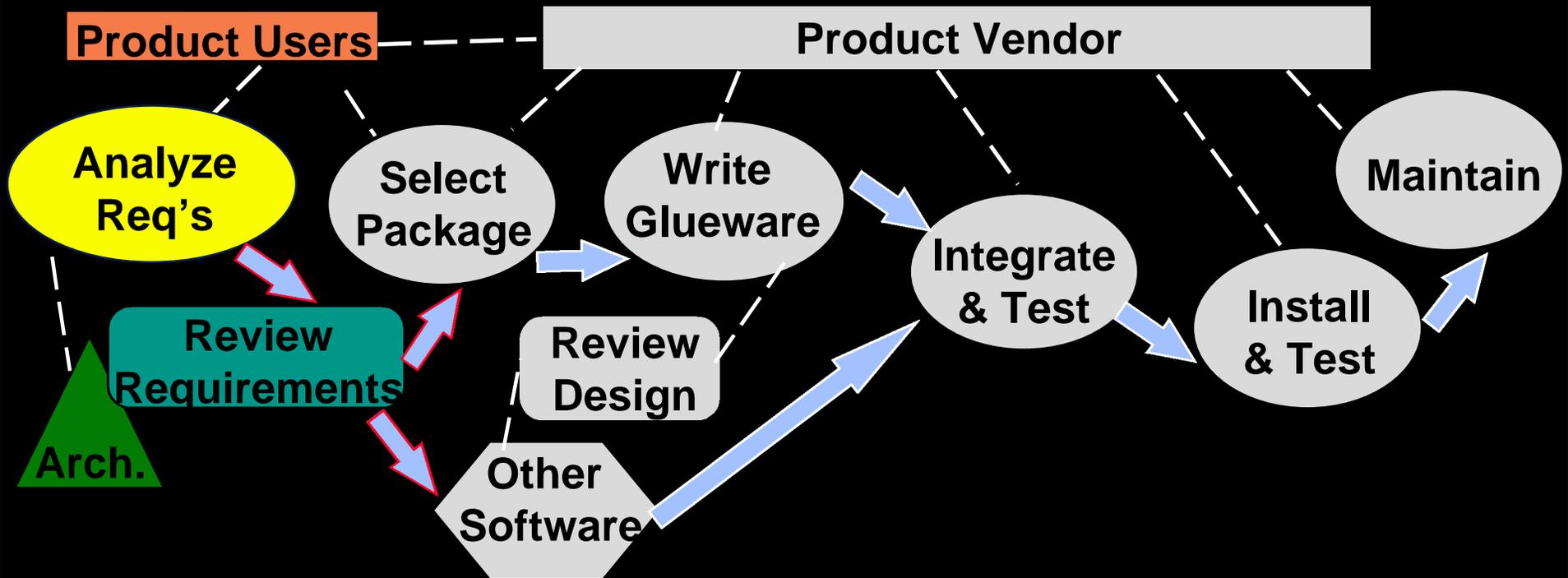
# COTS Process

## Current FDD Practice



# COTS Process

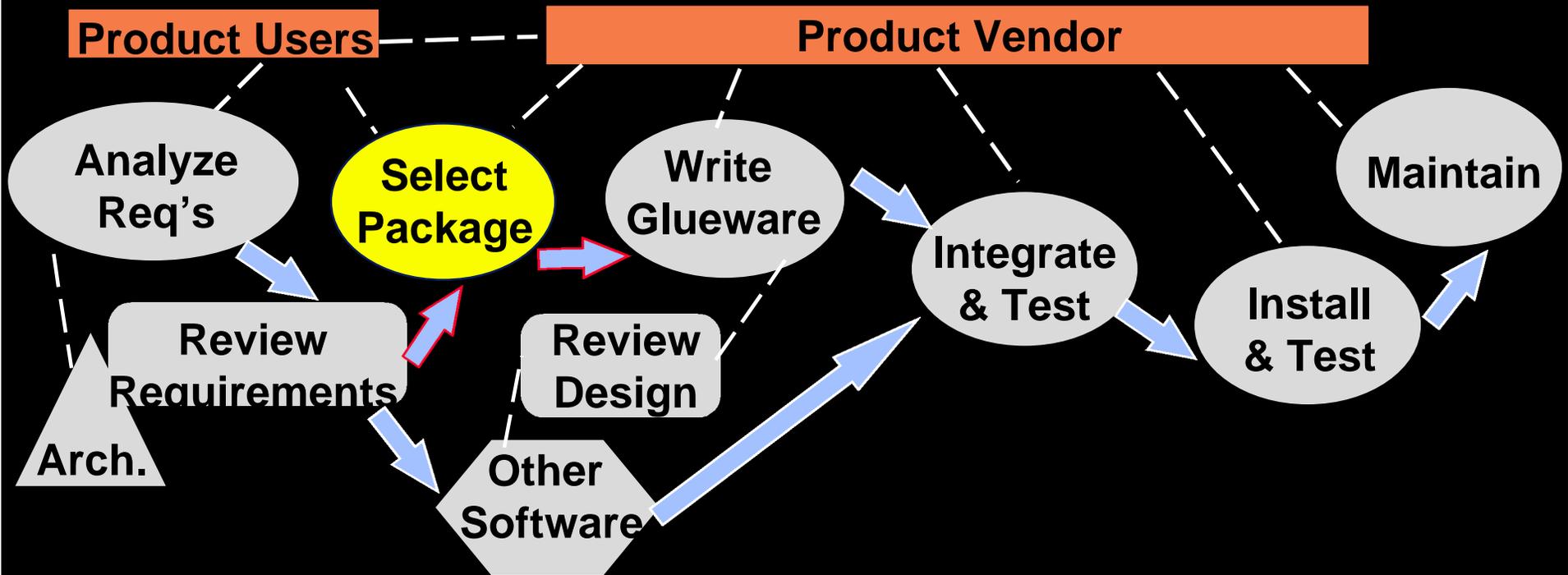
## Current FDD Practice



**Gather External Information**

# COTS Process

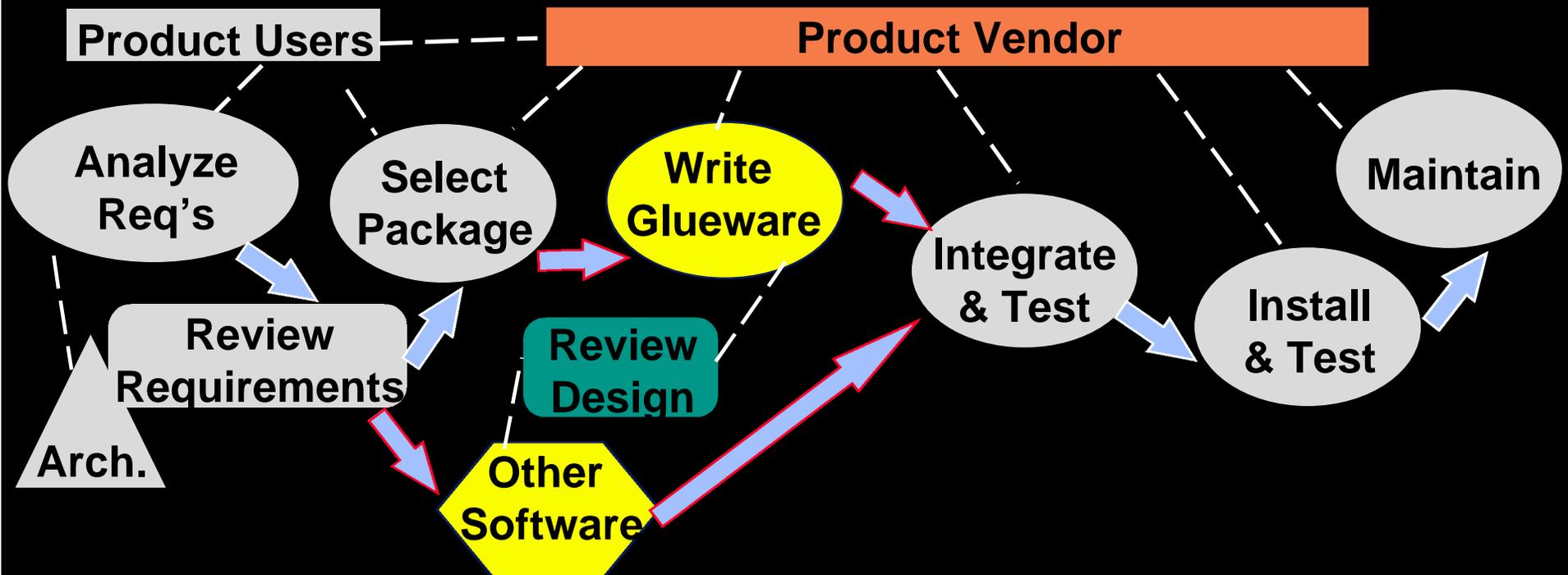
## Current FDD Practice



**New Skills Needed: Evaluation & Procurement**

# COTS Process

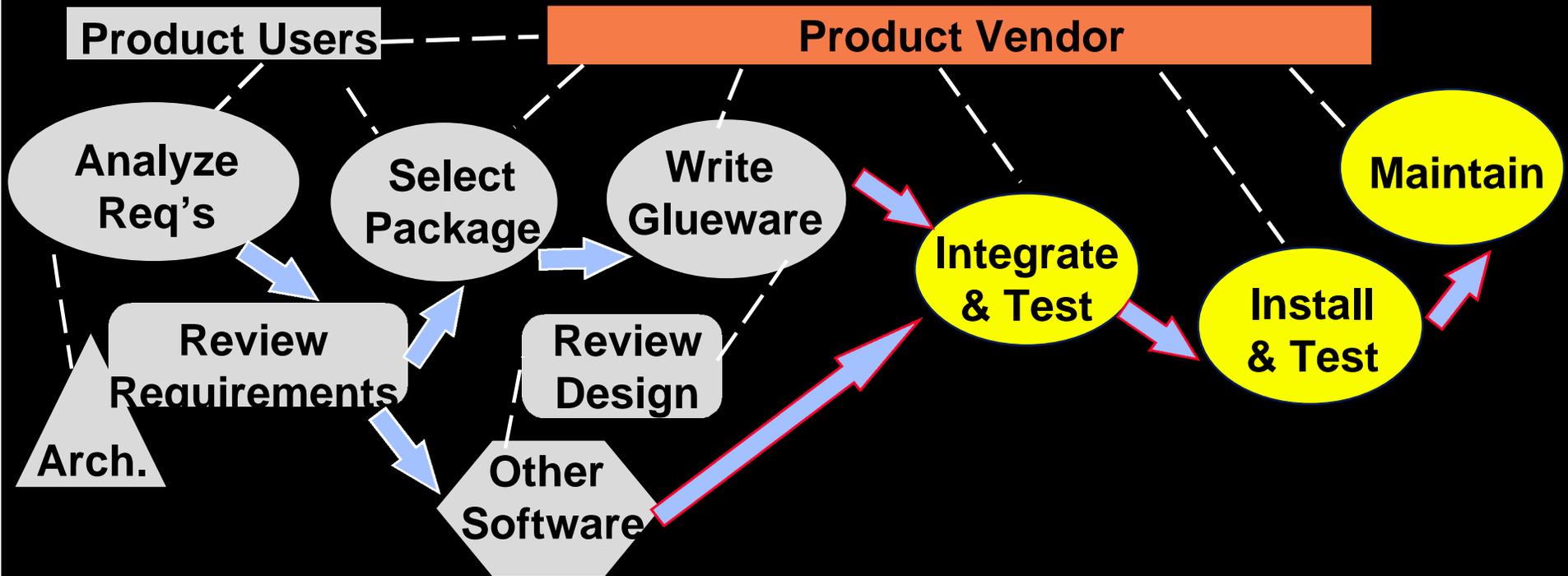
## Current FDD Practice



Merge COTS and Non-COTS Parts of the System

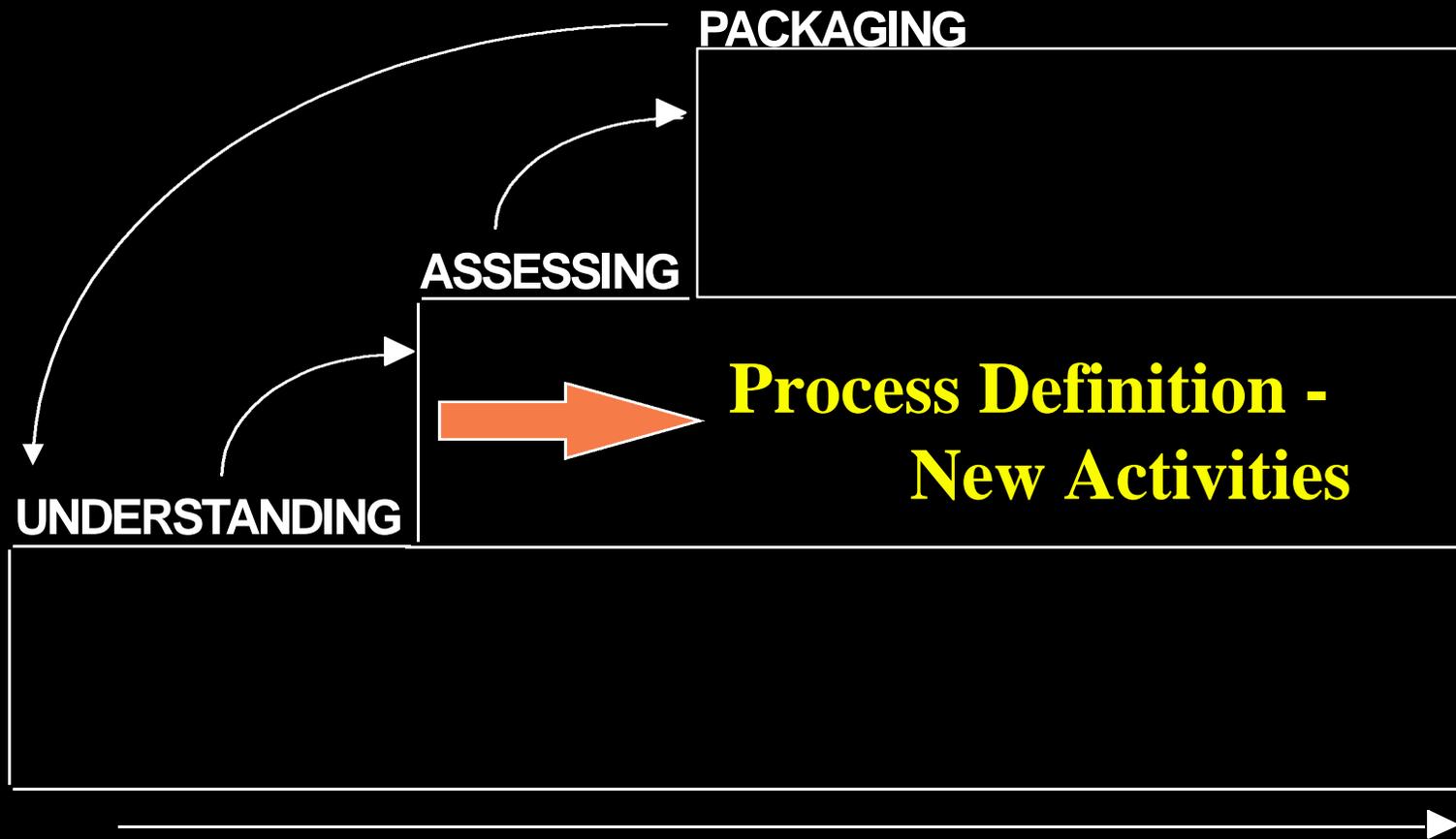
# COTS Process

## Current FDD Practice



**Integration Process Varies (COTS dependent)  
& Still Interacting with Vendor**

# SEL COTS Study Improvement Paradigm



# **COTS/GOTS Activities**

Evaluation of COTS Packages

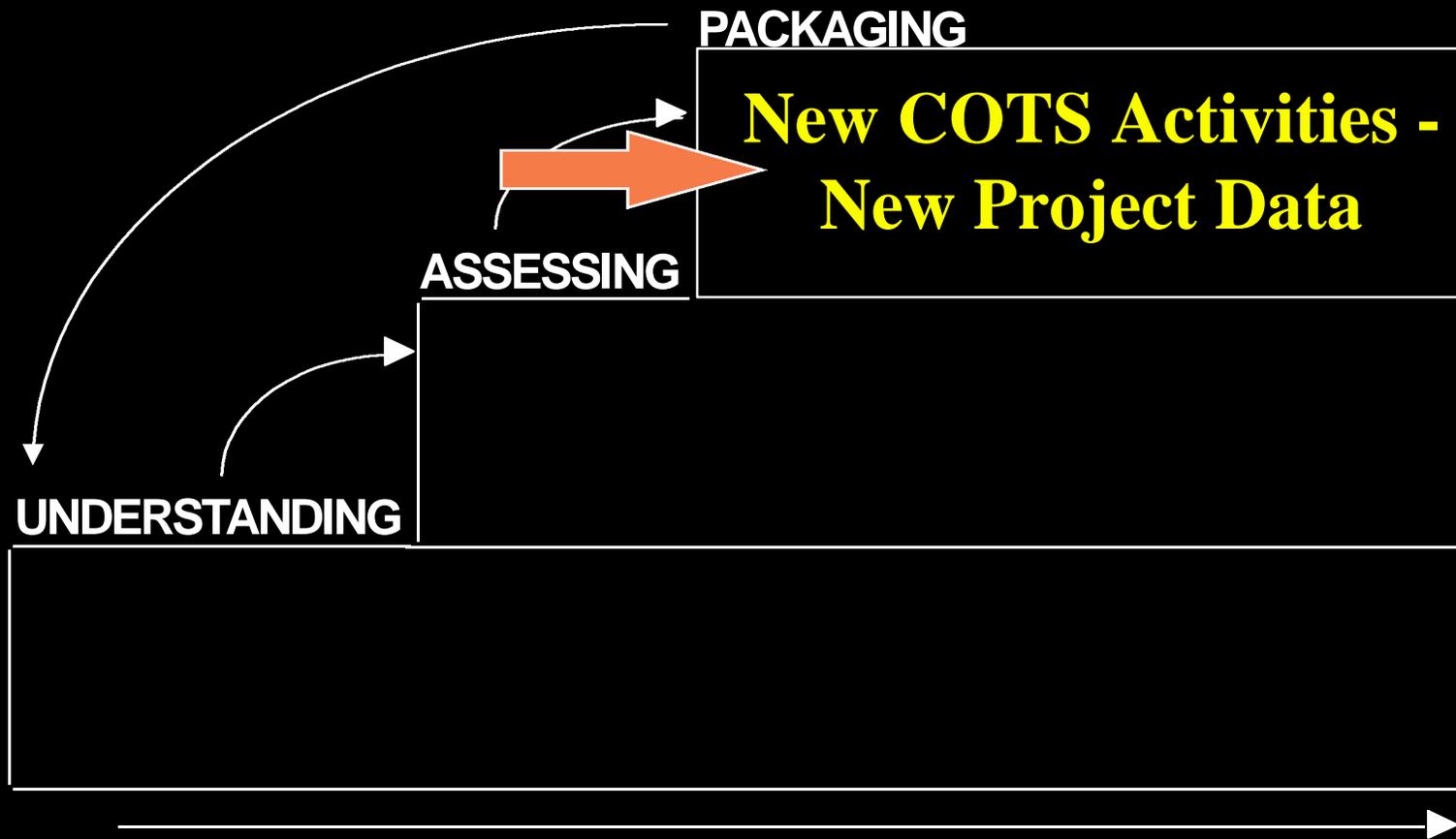
Integration of COTS Packages with Traditional S/W

COTS Package Familiarization

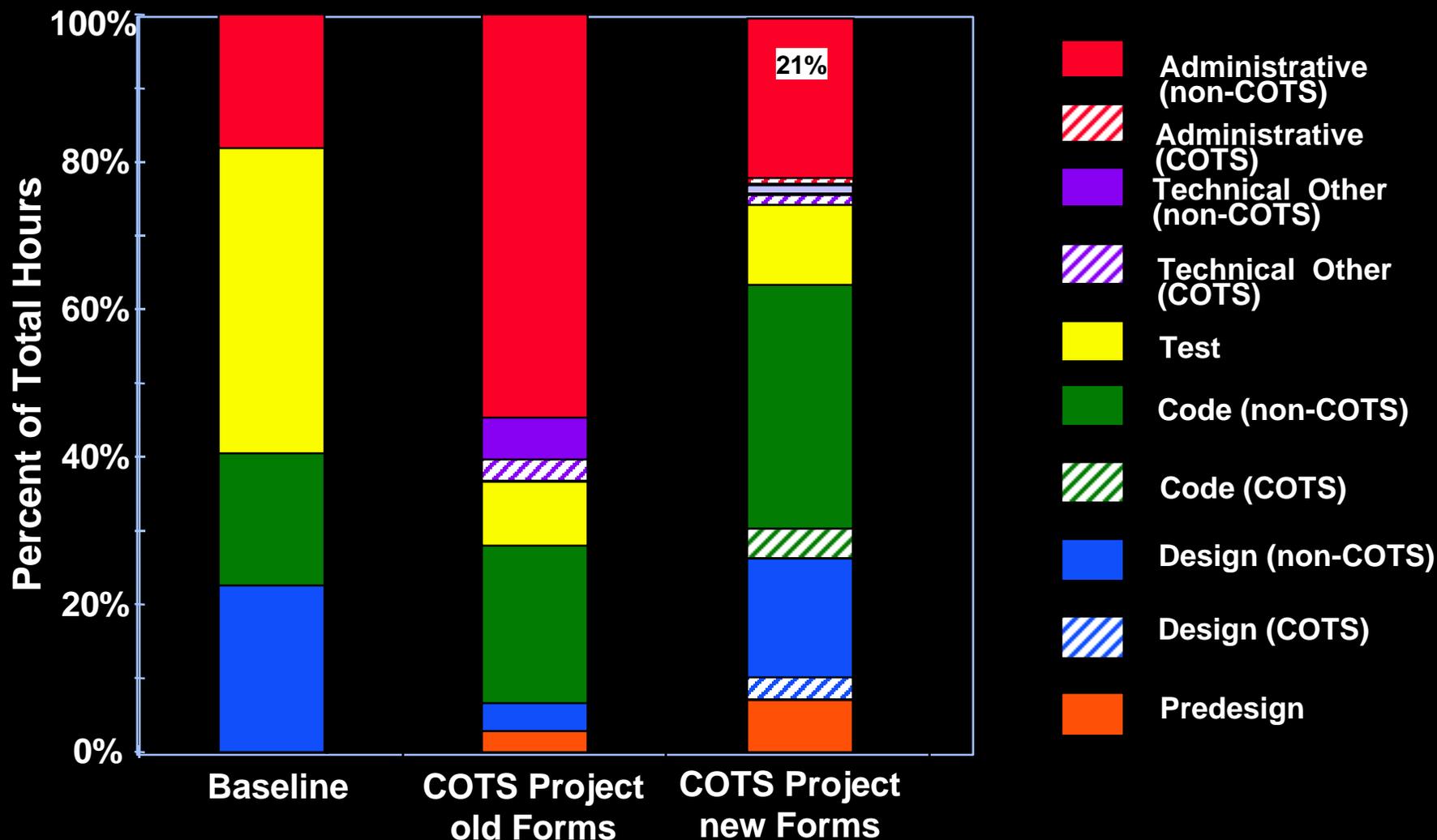
Configuration Management

Procurement

# SEL COTS Study Improvement Paradigm

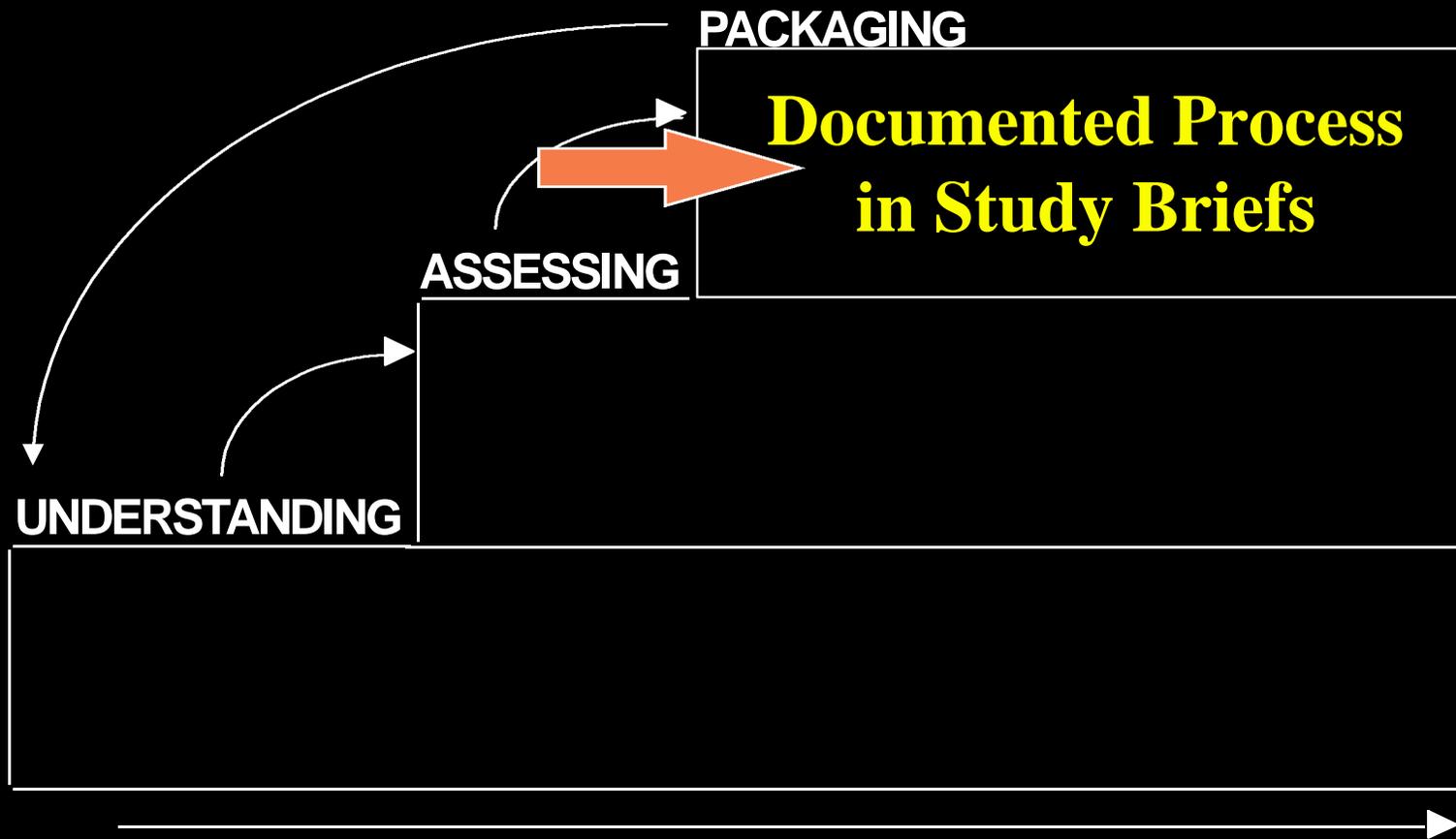


# COTS Data from Projects

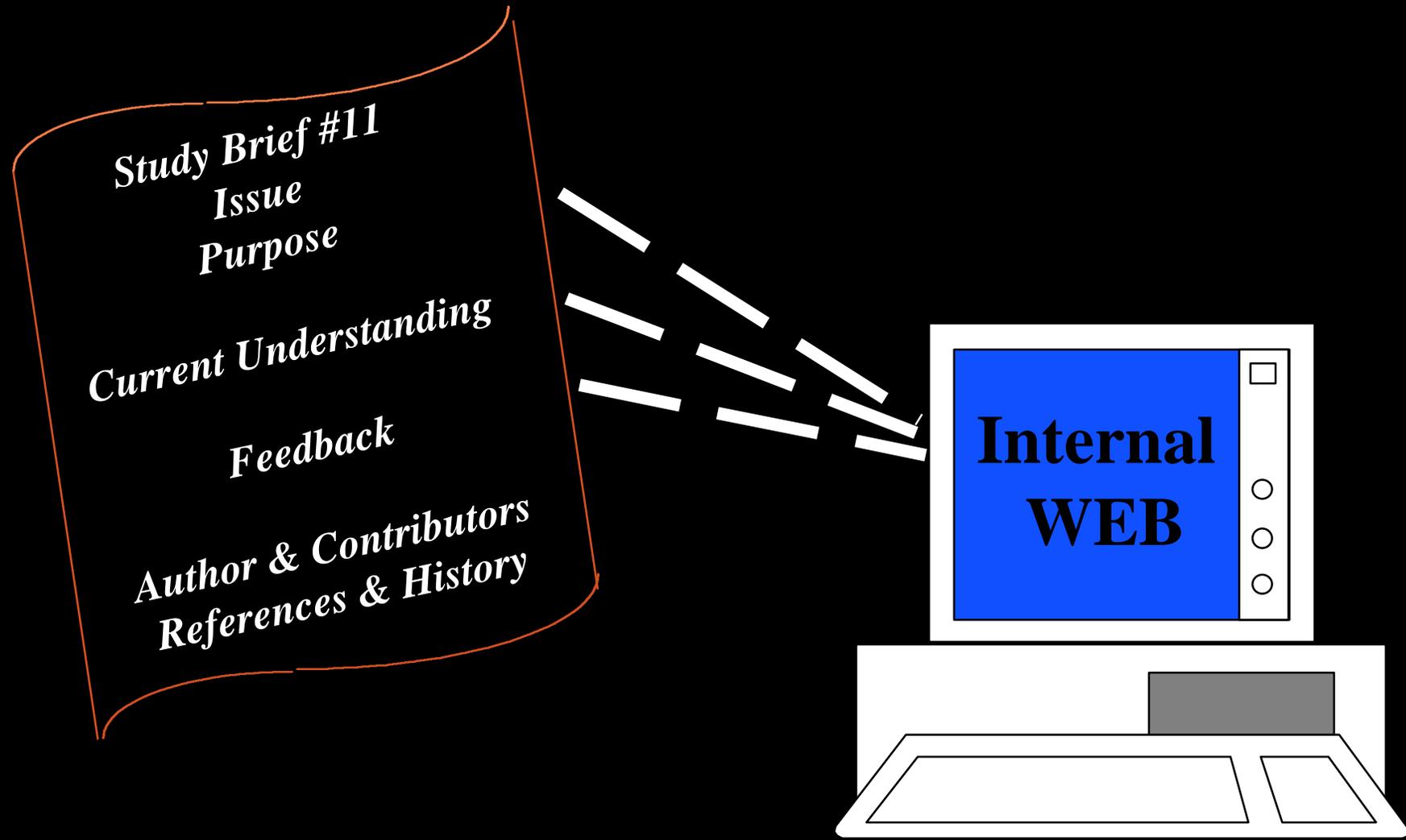


**New Data Meets Needs of COTS Project**

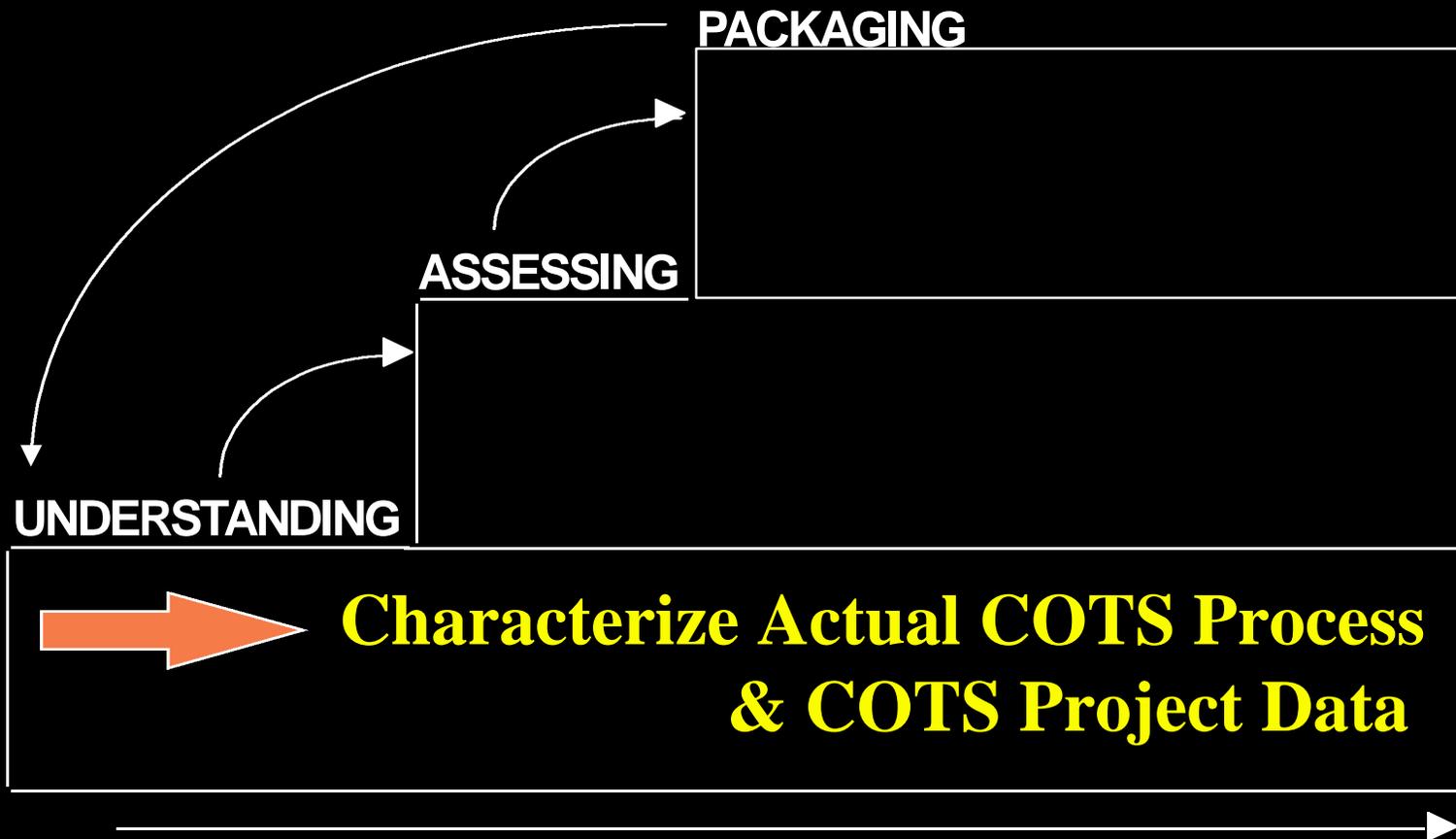
# SEL COTS Study Improvement Paradigm



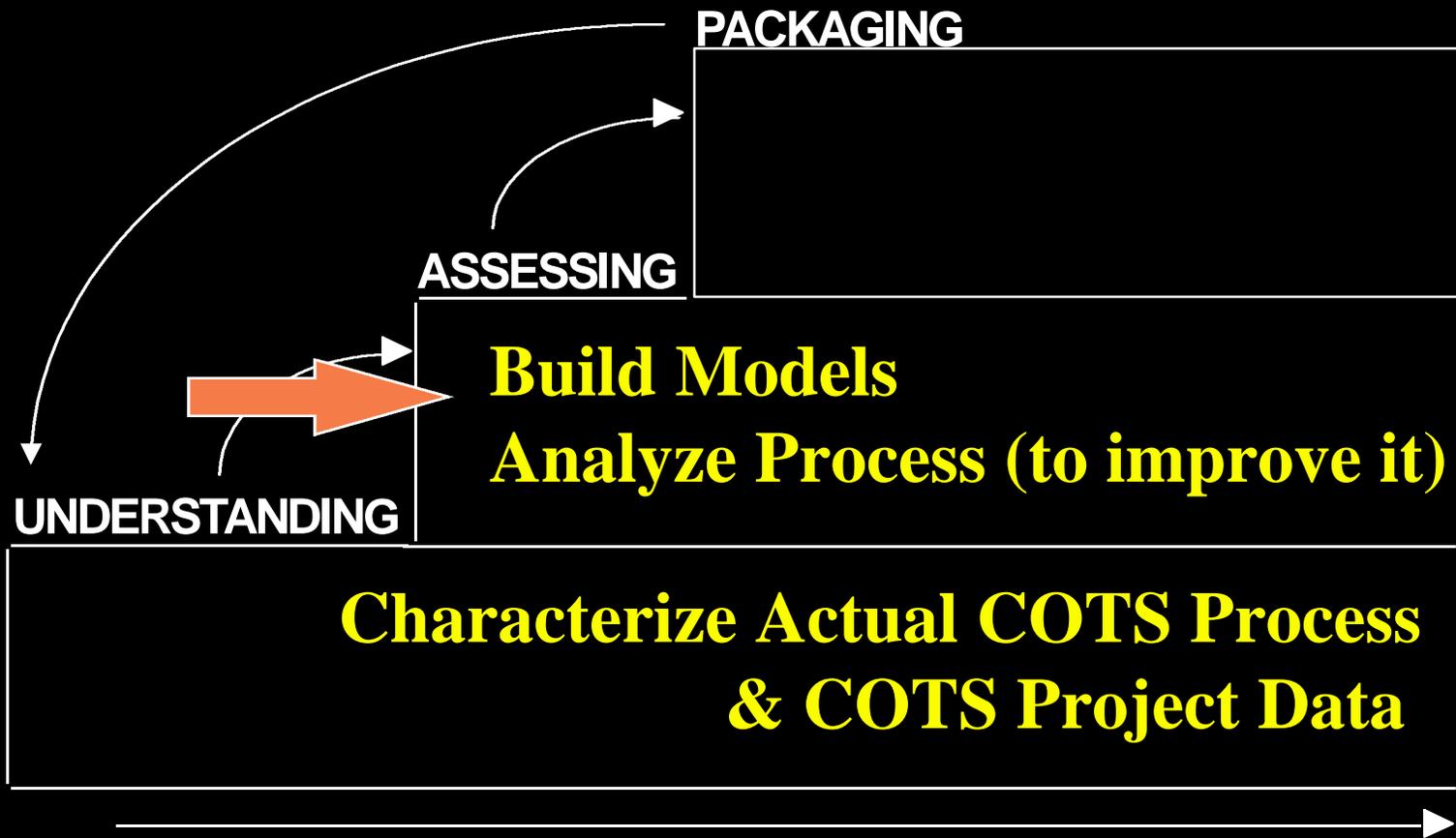
# Study Briefs



# SEL COTS Study Steps to the Future



# SEL COTS Study Steps to the Future



# SEL COTS Study Steps to the Future

