

# FRONT END ANALYSIS PLAN

CLOSING THE GAP OF SOFTWARE CHANGE IN AN  
AEROSPACE COMPANY

IDE 712 FEA Plan Presentation

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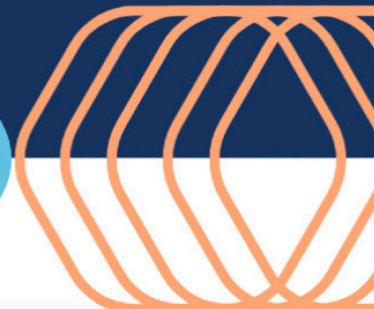
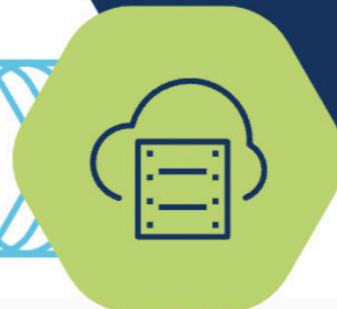
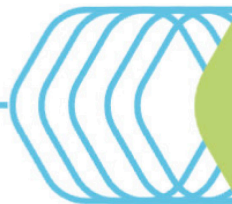
# PERFORMANCE PROBLEM CONTEXT



- Major aerospace company needs to replace old ERP system
- Affected: Engineering, Supply Chain, Sales
- Affected locations: 3 US cities



- Chosen solution: SAP
- Diffusion activities in progress
- Some departments already use SAP



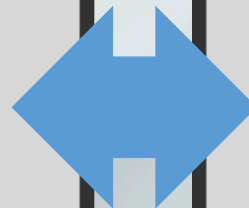
# PERFORMANCE PROBLEM STATEMENT

Current  
Performance

Optimal  
Performance



Using existing  
GTS system



To perform the  
necessary tasks in  
new SAP software







## Importance of Solving Problem



- No system to manage production, or inferior system, leads to ill-manufactured parts
- Revenue lost
- Time lost
- Potential for lives lost due to accidents



# Intended Audience

For the FEA:

- HR Director or Director of T&D
- IT Director
- Department Heads

For training:

- Engineers
- Sales account executives
- Buyers
- Supply chain managers
- Support staff



# Overview of FEA Plan (Using BEM Model)

Environment	1 Data	2 Resources	3 Incentives
	<ul style="list-style-type: none"> <li>• Need clear and consistent communication.</li> <li>• Learners should know what they are supposed to do.</li> <li>• Feedback is an important source of data. To be effective, feedback should be frequent, timely, specific, and useful.</li> </ul>	<ul style="list-style-type: none"> <li>• Tools, resources, time and materials provided to the learners that will facilitate expected performance.</li> </ul>	<ul style="list-style-type: none"> <li>• In order to effectively stimulate desired outcomes, consequences, incentives or rewards need to have meaning.</li> </ul>
Behavior	4 Knowledge	5 Capacity	6 Motives
	<ul style="list-style-type: none"> <li>• Knowledge and skills are gained through a variety of sources including formal education, training, experience, observations, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• An individual's physical and mental talents and capabilities to perform.</li> <li>• If they don't have the capacity to perform the job, the training won't help.</li> </ul>	<ul style="list-style-type: none"> <li>• The reasons people do what they do: needs, desires, aspirations, fears, self-esteem, self-efficacy, and a host of other internal characteristics.</li> <li>• Assessment of workplace motivation</li> </ul>



Environment	1 Data	2 Resources	3 Incentives
	<ul style="list-style-type: none"> <li>Do the learners know what to do with the new system?</li> <li>Are the learners aware of what is expected?</li> <li>Are the learners provided with timely and appropriate feedback?</li> </ul>	<ul style="list-style-type: none"> <li>Are the learners provided with tools and time to learn the new system?</li> </ul>	<ul style="list-style-type: none"> <li>Were the learners affected by the change? How did you motivate them?</li> <li>Is good performance being recognized with any incentives, monetary or otherwise?</li> </ul>
Behavior	4 Knowledge	5 Capacity	6 Motives
	<ul style="list-style-type: none"> <li>Was the difference between the new and old software communicated to the learners?</li> <li>Were the managers and/or super users completely trained on the software to help learners learn?</li> <li>Was the training made relatively simple for the learner to understand?</li> </ul>	<ul style="list-style-type: none"> <li>At what points during the learning curve did learners receive appropriate performance feedback?</li> <li>Were the learners provided with all aids to build knowledge and skill?</li> </ul>	<ul style="list-style-type: none"> <li>Did you explain to your staff the benefits SAP will bring?</li> <li>Did you address learners' fear of learning a new system and leaving the old system?</li> </ul>

# Procedures to collect information

## DOCUMENT STUDY

- As-Is vs To-Be
- Flow chart and process analysis
- Job analysis through JDs

## ONE-ON-ONE INTERVIEWS & SHADOWING

- Observing the super users
- Conduct interviews with the intended audience

# Data Collection Tools

1

## Task Knowledge Structure

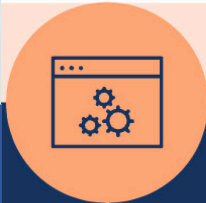


### Data/Information Collected

- ☐ the time it typically takes to execute the new task or subtask
- ☐ the steps that exist in the new task that did not in the old task
- ☐ the steps that do not exist in the new task that did in the old task
- ☐ any differences in the order of tasks between the old and the new

2

## Critical Incident Method



### Data/Information Collected

- ☐ assessments of the user's experience level in the job
- ☐ behaviors that are critical for or detrimental to job performance
- ☐ realistic task events in real world settings
- ☐ certain important facts concerning behavior in defined situations



# Causes and Proposed Solutions

## Causes of Slow or Unsuccessful Implementation

New system might have bugs

Need for instruction not properly incentivized

Fear of making a mistake in new system

External events causing instruction to be delayed

## Possible Solutions

- Instructor-led training, conducted by an outside SAP expert
- Instructor-led training, conducted by super users in Brightstar's various business streams
- Self-paced e-learning, available by user role in the company LMS
- Publicly available training such as LinkedIn Learning, YouTube videos, and/or training content on SAP's portal
- Deskside coaching by super users, conducted during a transition period
- Documents such as job aids, step-by-step work instructions, and slide presentations

Questions?



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Thank You