

## BACKGROUND



“LIVES DEPEND ON WHAT WE DO”

**Thales Defense and Security Inc.**, headquartered in Clarksburg, MD, is a defense contractor specializing in the design and production of military communication hardware. Thales' main facility houses 5 engineering labs and a full scale manufacturing floor.



**PROJECT CHAMPION**  
STEVEN KUTCHI - Q1  
ENGINEERING LAB MANAGER

11,000  
SQ. FEET

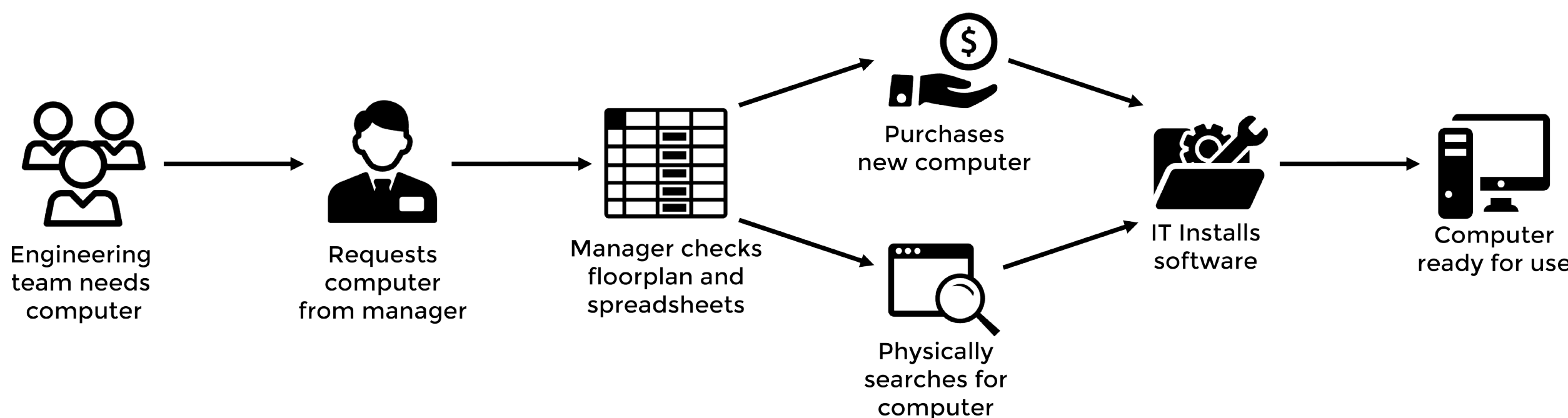
150  
ENGINEERS

155  
LAB BENCHES

200+  
COMPUTERS

4  
NETWORKS

## CURRENT STATE



PROCESS: COMPUTER ASSET REQUEST - TIME: 1-2 WEEKS

**Engineering**  
1-2 Week Wait  
20-50 IT Tickets

**Lab Manager**  
Hours Searching  
Physical Lab Map

**IT Personnel**  
6-7 Hour Build  
Tedious Approvals

## METHODOLOGY

INDUSTRY RESEARCH



Feasibility &  
Cost Analysis



Thin Client  
Research

IN-DEPTH INTERVIEWS



IT  
Department



Department  
Managers

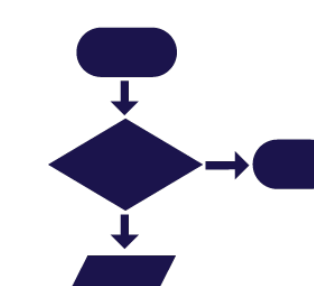


Hardware  
Engineers



Software  
Engineers

ITERATIVE IDEATION



Process  
Mapping tools

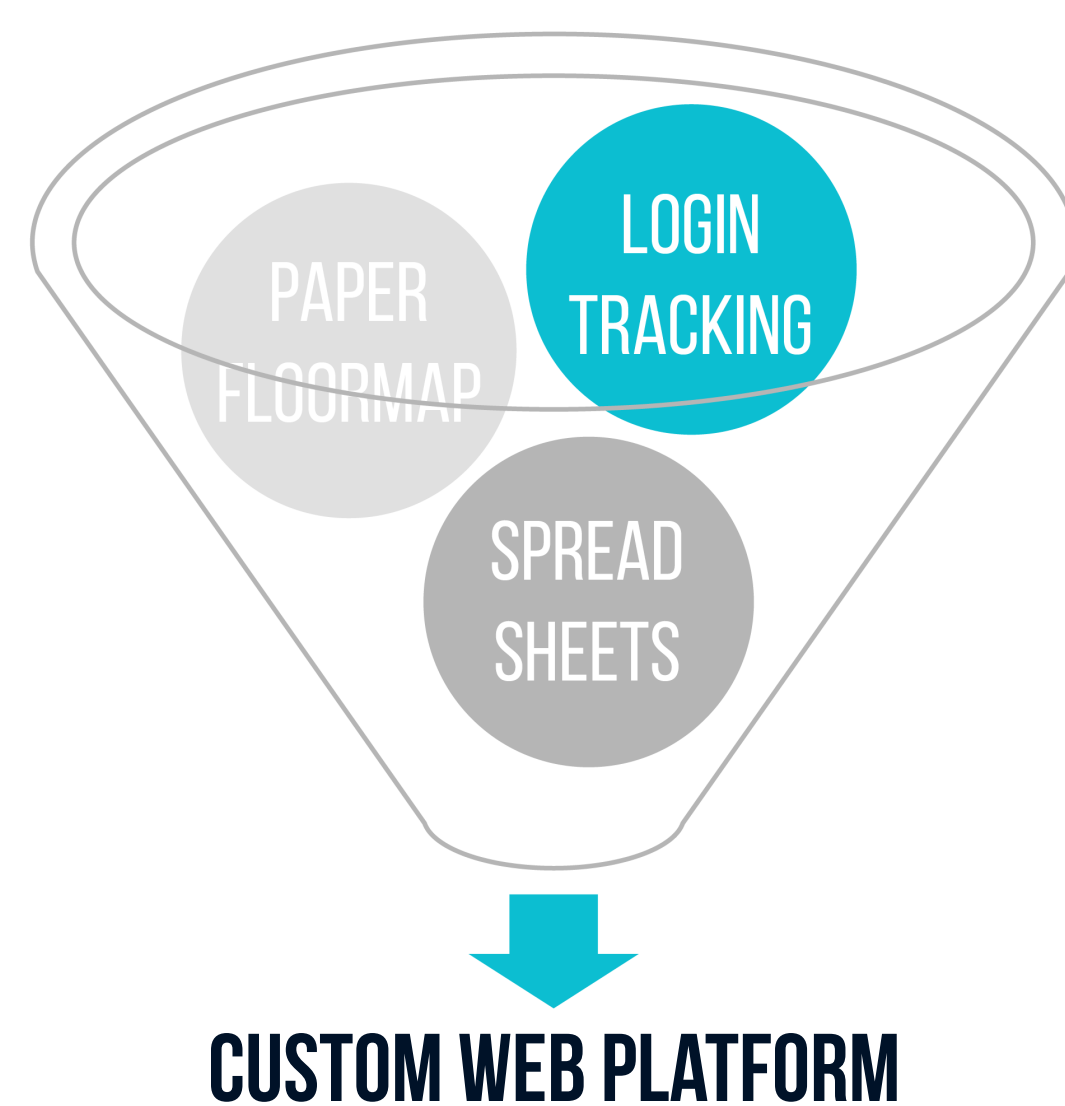
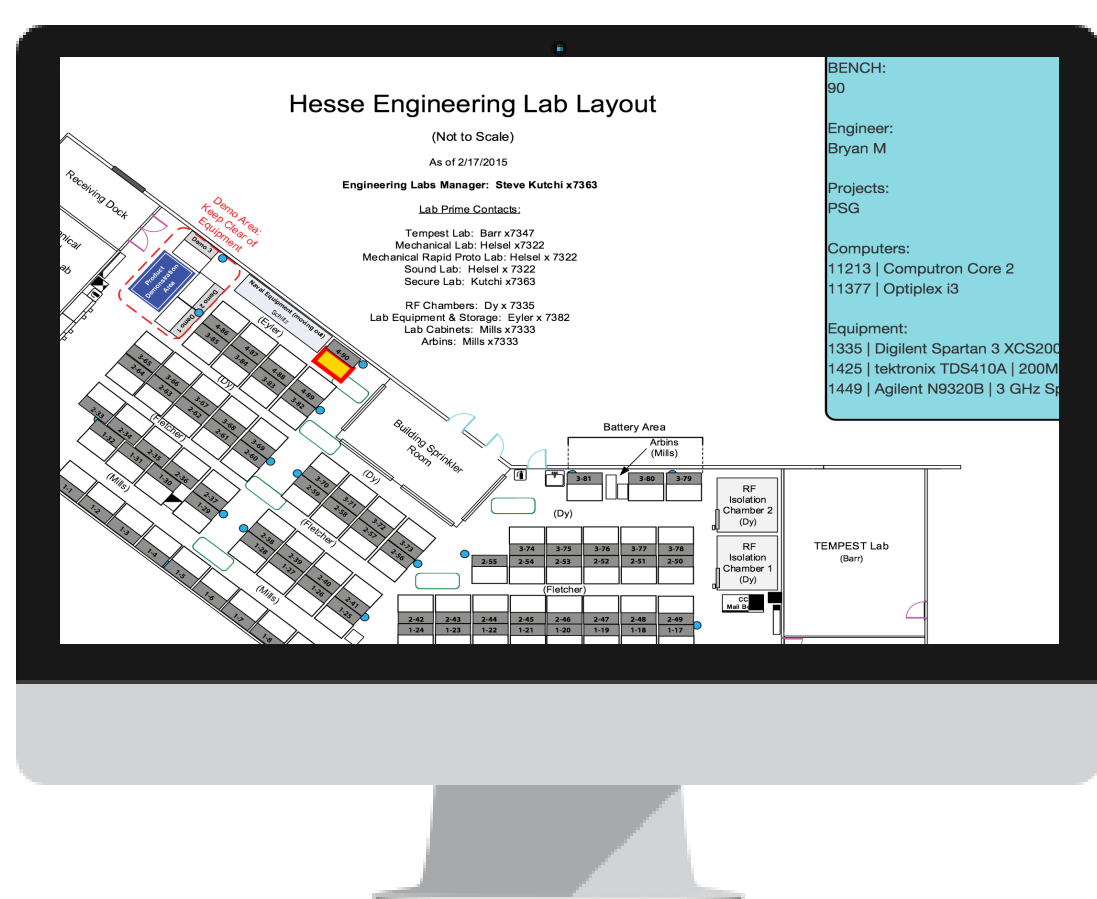


Software List  
Analysis

## RECOMMENDATIONS

### VISUALIZATION SOFTWARE

100% custom web application integrates proposed and existing information sources, and eliminates need for physical floor layout with manual editing.

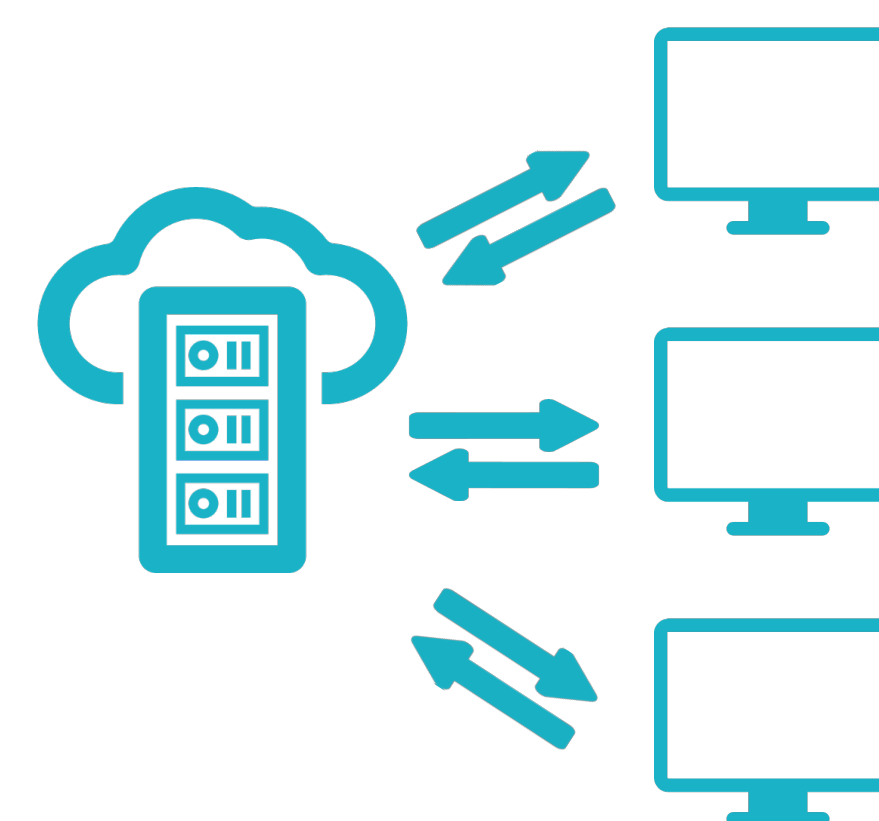


**Key Features:**

- » Log-in Tracking
- » Real Time Data Updates
- » Export to PDF
- » Customized Data Filters

### THIN CLIENT COMPUTING SYSTEM

Transition to virtual systems on low cost platforms reduces IT load and eliminates build time. New operating systems and network connections can be repurposed without ever moving the machine.



|                         | CURRENT SYSTEM | THIN CLIENT SYSTEM |
|-------------------------|----------------|--------------------|
| RISK OF LOCAL DATA LOSS | YES            | NO                 |
| NETWORK SWITCHING       | 6-7 HOURS      | INSTANT            |
| UNIT LIFESPAN           | 4-5 YEARS      | 7+ YEARS           |
| LEGACY PORT EXPANSION   | ADAPTERS       | BUILT-IN           |

**90% LESS**  
IT Build Time

**95% Smaller**  
Physical Profile

**75% LESS**  
Energy Use

## IMPACT

IT ASSET REQUEST  
**75%↑ EFFICIENCY**  
STREAMLINED PROCESSES

MINIMUM SAVINGS  
**\$50,000/YR**  
LABOR & EQUIPMENT

ENERGY SAVINGS  
**170,000 kWh**  
THIN CLIENT POWER DRAW



LIYA AI  
INFO. SYSTEMS & ACCOUNTING



STEVEN GRESH  
MECHANICAL ENGINEERING



TREVOR PUTMAN  
ELECTRICAL ENGINEERING



ERIN TUMNEY  
AEROSPACE ENGINEERING

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DR. JEFFREY HERMAN  
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THE QUEST QUALITY GUILD