SMART SYSTEMS for LOGISTICS COMMAND and CONTROL
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Logistics C2 Research Areas

- Decision Aiding
- End User Hardware Selection
- Logistics Resource Information
- Information Visualization
- Manipulation & Analysis

SSLC2 Focus Area
Problem

SSLC2 benefits:
- Reduce manual data entry
- Eliminate duplication
- Increase data accuracy
- Improve timeliness of data

Warfighters need to know the state of readiness of warfighting resources beyond the state of repair of individual assets.
- Petroleum, oil, and lubricants (POL) levels
- Mission Capable (MICAP) parts visibility
- Number of 463L pallets, nets, and devices on-hand.

Current

Future

Logistics Readiness Center (LRC)
Limitations of the Current Practice
Garrison Environment

• Manual and duplicative entry into multiple databases
  — Current operations have limited technologies and rely on Access® and Excel® as their database tools

• Manual entry leads to data inaccuracies and problems with timeliness

• Most information contained in databases is on average eight hours old
Limitations of Current Practice
Contingency Environment

- Center designed to provide info on logistical status & operational impact to weapons systems
- Manpower intensive group
- Gets info manually through phone/fax/email
- Not typically proactive and relies on lagging indicators to display status
SSLC2 Goal

• Improve Logistics Command and Control business decision-making
  – Transfer of critical information is slow, inaccurate, and requires significant time and effort to collect, organize and display

• How:
  – Develop complex computer algorithms
  – Create advanced decision support tools for capture of business decision-making rules
  – Enable passive data collection technologies
  – Stimulate and simulate “as-is” and “could-be” business process changes and assess those improvements
SSLC2 Technical Approach

Presentation Layer

Stimulate and simulate “as-is” and “could-be” business process changes and assess those improvements

Integrating Information for Effective Presentation

Complex Computer Algorithms

Legacy Logistics Information Systems

SSLC2 Researching the Infrastructure Improvements for Timely C2 Information

Passive Data Collection Technologies Capture Business Decision-Making Rules
"Timely C2 information supports better decision-making"
Potential End-Users

Base Level:

• Command Post Personnel
• Functional Supervisors

Commander Level:

• Wing Level (Squadron, Group), Battle Staff, Crisis Action Team
• Above Wing Level – MAJCOM, HHQ, AOC, LRC, A-4, J-4
AFRL Risk Abatement

• Build on key Lessons Learned from previous AFRL efforts:
  • Early & Continuous Involvement of the warfighter
  • Establishment of User Groups – realistic feedback
  • Trade Shows participation – invaluable lessons learned
• Requirements defined by users for every spiral
• Pass/fail user defined metrics
• Modular design options
AFRL Risk Abatement (continued)

- Awareness of key development projects:
  - AF Portal
  - GCSS-AF
  - TBMCS-UL
  - Enterprise Data Warehouse
  - Logistics Enterprise Architecture
  - Early identification of Transition Agents
Collaboration Partners

• AF-ILMM
• AMC/A-4
• AFC2ISRC
• AFMC LSO/LOA, AF AIT Program Manager
• AFC2 Battlelab & AFAEF Battlelab
• AFSPC
• AFRL Information Directorate
• DARPA
• TBMCS-UL
Potential Transition Partners

Organizations

SMC/Det 11
AFSOC

Smart Systems

Programs

VSLRC
JSF ALIS
EMOC
POMX
TBMCS-UL
Summary

By achieving the Smart Systems goal:

Develop and/or leverage technology to passively collect the critical information required to effectively manage logistics resources in support of combat operations.

Smart Systems will:

- Improve the currency, accuracy, and completeness of data
- Improve the effectiveness of gathering, storing, retrieving, managing, and structuring data
- Improve the value of logistics data sent to higher headquarters for use in theater-level C2
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