



VENDOR PERSPECTIVE ON THIRD PARTY INVOLVEMENT

ADSA 13 Workshop
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October 29, 2015

Third Party – how did I miss the first two parties?

- Third Party Definition : Other than TSA and direct equipment vendor
 - Academia, National Labs, Companies, Consultants
- Technology opportunities – positives
 - Something vendor can't or won't do?
 - High Technical risk , Early development (feasibility stage)
 - Resource limitations, Technical capability
 - Do something a new, different, unique way
 - Add value to product - better, faster, cheaper
- Issues / Roadblocks - negatives
 - Who controls the program?
 - Is it a directed effort between third party and equipment vendor?
 - Is the goal set too high?
 - Finger pointing?

Example Project - Reconstruction

- Scanner geometries and content of raw data varies substantially from system to system
 - Source specifics (spectrum, power, number of sources, etc)
 - Detectors (geometry, efficiency, energy detection)
 - System speed, tunnel size, etc

3rd Party working directly with vendor has best chance for success

- General techniques (eg. Iterative reconstruction) research
 - Adapted by individual vendors for specific systems

Example Project - Detection Algorithms (ATR)

- Scanner data varies from system to system (even within vendor)
 - General algorithms are at minimum tuned to a system
- Successful projects
 - Direct, Subcontract type programs (ALOG has been “3rd party”)

Example Project – Operator Interface

- Positives:
 - Use image data from scanner
 - Open formats?
 - Work with human factors experts
 - Provides common interface for screeners
 - Not limited to a single image source
- Negative
 - Performance may vary by machine
 - Needs tailoring for each system
- Somewhat analogous to medical imaging
 - Third party tools exist
 - Separate viewing stations to review standard format images

