Image Quality

Breaking the paradigm by leveraging collaborative, net-centric efficiency

April 18th, 2013

Image Quality
The Shifting Paradigm

Established quality approaches that focus on assuring the highest level of accuracy, despite their tremendous utility, are increasingly unsustainable in a "Big Data" environment

Significant gains in quality and improvements in cost are available by migrating to collaborative, enterprise environments

System Quality Approach

> Workflow Management

> Collaboration

> Value Added Processing

> Data Management & Dissemination

> Results Verification

> Business Analytics

Customizable workflow solution yield significant gains in resource management efficiency, while ensuring accuracy

ITT **EXELIS**

Workflow Management
Architecting Intelligence into the Quality System

Provides a fully-customizable agile architecture that is re-usable and easily re-deployable to other customer mission areas. Delivers functionality for low risk and low cost solutions to enable collaborative, on-line and self-service workflow management

Design & Development

> Sensor neutrality

> Service-oriented architecture

> Exposed via web-based interoperable applications

> Removing physical barriers and facilitating collaboration

Future Implications

> Extensible and Scalable

> Organizationally Synergistic

> Building Cost Efficiencies and Continually Reduce Risk

Intelligent workflow management most effectively uses the available resource pool for improved schedule and cost performance
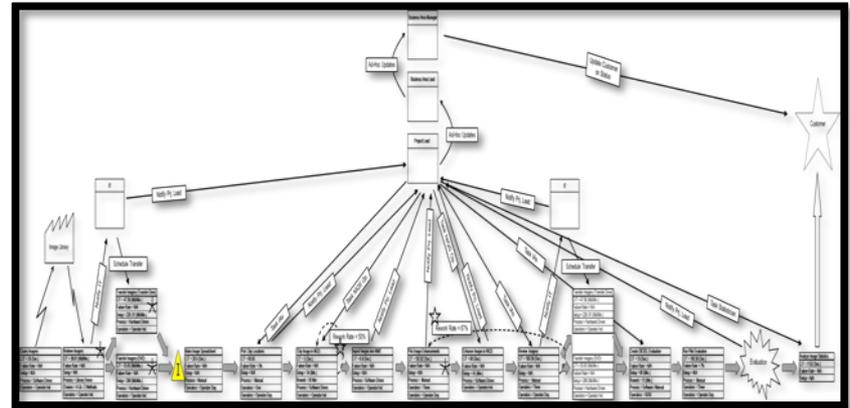
ITT **EXELIS**

Collaboration
Leveraging Production Efficiencies

Architecting for collaboration allows the application of manufacturing best practices to reduce errors, increase quality and yield significant savings
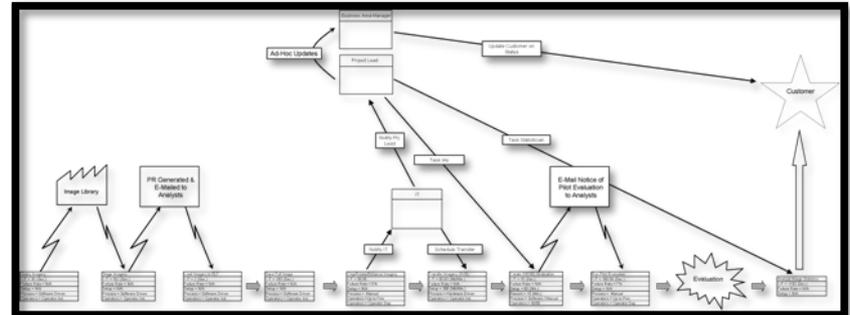
Implementing Distributed Quality

> Configurable Roles

> Interactive Queuing

> Real-Time Notification

> Automating Feature Sharing

Value Stream Improvement

> Configurable Roles

> Interactive Queuing

> Automated task status and tracking

> Eliminating re-work

Highly collaborative workflow solutions enable significant resource savings to be achieved by optimizing the value stream

Value Added Processing
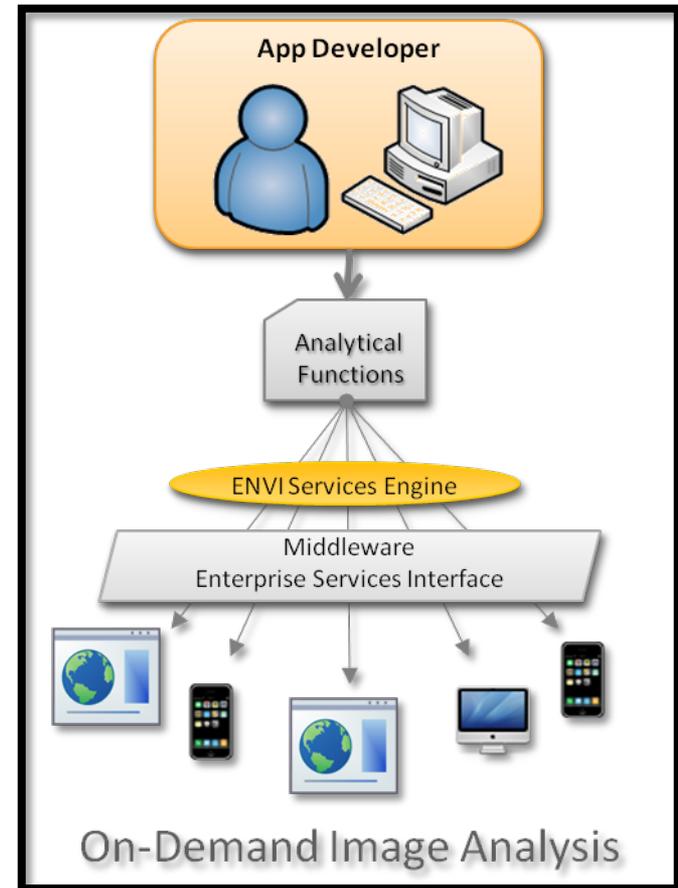## Enabling the Enterprise "Easy Button"

The incorporation of value added processing directly into the consolidated workflow eliminates the need to invest in several software packages to get the job done. This provides one of the greatest benefits to the production and quality process saving critical time

Leveling the User Base

> Automatic

> Assisted

> Self-Service

Processing in the Cloud

> Processing to the Data

> Collaboration

Upstream, on-demand processing has been demonstrated to enable exploitation efficiencies and is highly extensible across applications

Data Management & Dissemination
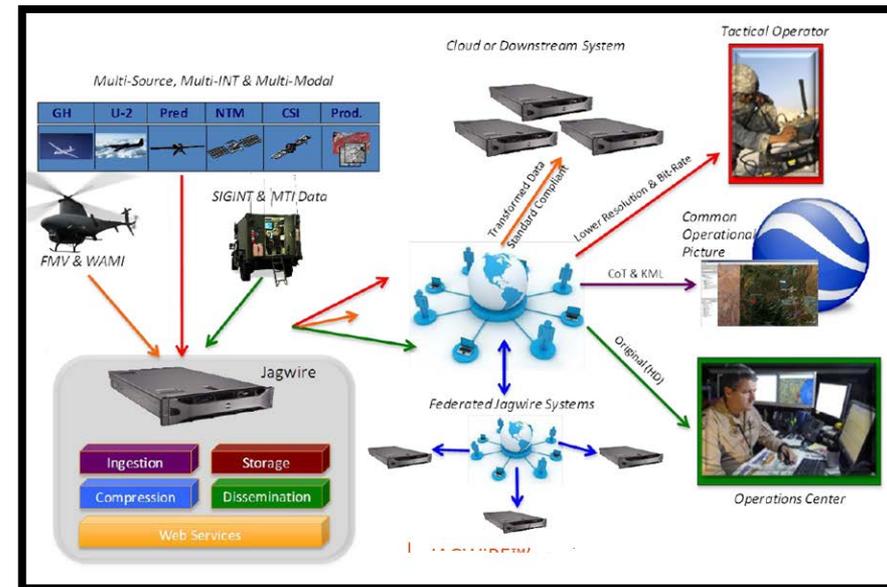## Virtualized Supply Chain Logistics

Distributed data management architecture decreases costs associated with data movement and supports the enterprise workflow

Inventory Management

> Configurable organization of massive volumes

> Rapid discovery; advanced filter / sorting

> Physical and virtual across the enterprise

Dissemination

> Standards Based, web-enabled solution

> Multi-source, multi-INT, multi-modal

> Automated dissemination

> Bandwidth management

Directing, managing and disseminating data across the enterprise means having the information in the right place at the right time
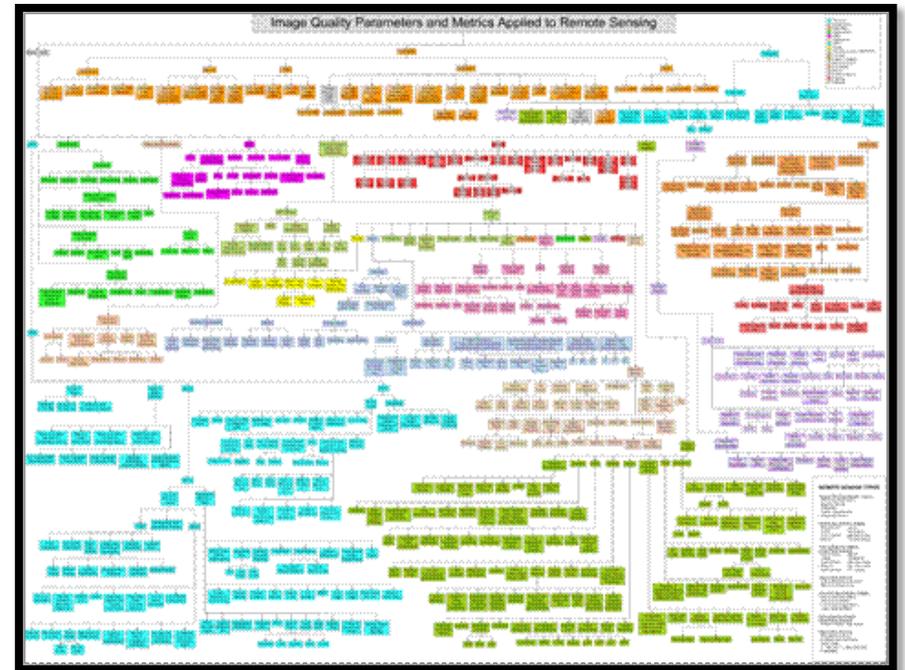
Results Verification
Too Good to be True…

Maintaining the high product and image quality standards for validation and verification under resource constraints is always a challenge. Through innovative workflow management solutions quality can be maintained while reducing resources that needs to be dedicated to the process.

Complicated Equation

> Track

> Validate

> Characterize

> Understand

> Replicate

Complex, technical challenges are overcome with custom and automated workflows, processing and information management approaches

Business Analytics
Driving a System that Learns

Expanding data volumes and diversity continue to increase the complexity of mission quality assurance—challenging resource bandwidth and skill levels

Comprehensive business analytics adapted to the QA workflow enable powerful counter-measures

Watch & Learn
> Who, What, When, Where
> Why & How
> Critical information

Teaching the System
> Empower users with historical data
> Automation / Assistance
> Tagging
> Getting Smarter

Use accumulated knowledge of the intelligence system under management to shape the workflow and eliminate the need for exponential growth in level of user knowledge and experience

For more information contact:

Brandon Migdal
585.269.6157
brandon.migdal@exelisinc.com
www.exelisinc.com

Josh Nauman
571.721.2538
joshua.nauman@exelisinc.com
www.exelisinc.com