For more than 50 years, Xerox has been the leader in document technology and services, helping businesses of all sizes simplify workflows and reduce document costs.
Xerox Office Products: Multiple Product Families, Multiple Design Strategies, Many Geographies, and a Myriad of Manufacturing Strategies
Solid Ink: Ground up design utilizing Aras Innovator
Solid Ink Printing Technology

ColorQube™ 9201/9202/9203

Color: up to 50 ppm
Black: up to 50 ppm

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The Print Process

Modular Piezo-electric Print Heads
- Each printhead is four-color (Cyan, Magenta, Yellow, Black).
- Drop size & operating frequency tunable by jet.
- Life of product.

Staggered Full Width Array (SFWA)
880 Jets per Head
= 3520 Jets with 4 printheads
= 150,000,000 drops per second
Solid Ink Innovation

Eco-friendly Packaging
- Trays 100% recycled
- Box is 45% recycled
- 100% recyclable
- Printed with soy-based ink

Less Energy
- 14% reduction in energy consumption with new inks

Cartridge Free
- No cartridge to deplete, discard, or recycle

No Mess
- No dust
- Safe & clean

Compact Storage
- 42,000 pages per box

Eco-friendly Packaging
- 2X reduction in material
- 100% recycled
- 100% recyclable
- Printed with soy-based inks

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The Solid Ink Advantage: Easy on the Environment

90% Less Waste

ColorQube

88 lbs.

Canon IR5180

815 lbs.

Total waste produced printing 22k pages per month over 4 year life

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Business Problems Fixed by Aras Innovator

- **Current Change Management Systems**
  - ICN/ECO (paper based system)
  - ECO (Oracle Engineering system)
  - Antiquated, Time consuming, Poor use of resources, Low rate of adoption

- **Data Silos**
  - No single location to store or get information
  - Multiple authentication/access required
  - Continuously changing/evolving processes for dealing with data
  - Constant invention of work a rounds, Reporting requires manual collation of data, Impossible to stay current

- **Communication, Internal and External**
  - Functional group to functional group
  - To other Xerox facilities
  - To supply chain for NPI
  - To contract engineering
  - Infrastructure/Architecture doesn’t support sharing of information between systems

- **Employee Retention and Satisfaction**
  - EES Results
  - Lack of consistency, not logical, waste of time and money, constantly changing
Aras Innovator ECO Dataflow

**Connectivity is KEY:**

The ability to connect Aras Innovator to internal and external data is key to the ECO’s success.

Reporting turns ECO data into useful business information.

**Graphical**

**Tabulated**

---

**ECOs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Accounts</td>
<td>1,961</td>
</tr>
<tr>
<td>ECO Authors</td>
<td>229</td>
</tr>
<tr>
<td>ECO Approvers</td>
<td>400</td>
</tr>
<tr>
<td>ECO Notify Only</td>
<td>295</td>
</tr>
<tr>
<td>ECO Facilitators</td>
<td>21</td>
</tr>
<tr>
<td>ECO Affected Products</td>
<td>88</td>
</tr>
<tr>
<td>Imported Legacy</td>
<td>≈50,000</td>
</tr>
</tbody>
</table>
Welcome to the Jungle …

Control flow exceptions to the ECO process historically caused teams to create local processes

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Sam (Early Warning Solution)

Replacement of PPTS (MS Access Database, WGC) built quickly in Aras Innovator.

Adding value to Product launch!!!!

- Full suite of tools designed around data/event collection and classification
- Integration to Xerox Service systems (AIF complete, more coming)
- Can be used on multiple projects
- Process is built around the generic data, not on top of
- Source to Source Data Transfer (Customers → Engineers)

Customer | Machine | Data | Event | Issue
CPM (Critical Parameters Management)

Application Benefits
- Access – All in one place, Searchable
- Email Change Notification
- Program Maturity Metrics
  - Concurrence
  - Verify Status – Nominal, Latitudes
- DSFLSS CPM Methodology
  - Module/FIT Partitioning
  - IPO Diagrams – In/Out Relationships
  - Critical Parameter Identification
- Transfer Functions → Sys Level Optimization

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Automated graphical relationship view of the CPM reference structure
More Aras Innovator Solutions

In process

Stay tuned... more to come
Connected vs. Monolithic

• Much of the PLM discussion tends to center on the concept of installing a single monolithic system to replace various legacy systems.

• The success rate of monolithic PLM systems across the industry appears to be fairly low. Causes of failure include: technology limitations, high cost, excessive deployment time, and rejection by users.

• Due to the lack of success in this area, many companies are looking beyond the monolithic approach to solving their data management issues.

• One of the newest trends emerging is the notion of using networking technology to connect and manage relationships between new and existing systems.

• Connected environments use the latest developments in Service Oriented Architecture (SOA) to link together existing data silos into a managed collection of connected data. This approach allows companies to build on existing investments in infrastructure, while continuously improving their data streams.

• Connected environments allow flexibility when interfacing with external partners and vendors as well as flexibility in dealing with acquisitions and new business requirements.
A Different Approach to PLM

Service Oriented Architecture

...Non-Proprietary Information Bus!

Advantages:

✓ Not tied to single vendor
✓ Data is not held hostage
✓ Agility to meet changing business needs
✓ Best of Breed tools approach
✓ Make use of existing legacy information/tools
✓ Map business practices to business data

enables communication between disparate systems

Connected vs. Monolithic Environment
Connected Federated Environment

- **Very low investment required**
  - Allows for reuse of existing data
  - Allows for continuous improvement
  - Focus on areas of immediate return without large investing in infrastructure

- **Data designed to be connected**
  - New thought process in data construction and organization
  - Data integration defined by basic low level understanding of data sharing

- **Diversity allowed**
  - Tool Agnostic
  - Preserves the culture of specific groups
  - External partners tied in
  - Teams working toward a common goal, while still empowered to meet the needs of their local organizations

*Simplified view of a connected federated infrastructure*
## Architecture Comparison

<table>
<thead>
<tr>
<th>Connected</th>
<th>Monolithic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to Implement (focused approach)</td>
<td>Difficult to Implement (big bang theory)</td>
</tr>
<tr>
<td>Flexible / Rapid Response</td>
<td>Rigid / Predefined</td>
</tr>
<tr>
<td>Best of Breed (We Own)</td>
<td>Data / Processes Hostage (Vendor Owned)</td>
</tr>
<tr>
<td>Technology Based</td>
<td>Product Based</td>
</tr>
<tr>
<td>Makes use of existing processes and infrastructure</td>
<td>Replacement of existing processes and infrastructure</td>
</tr>
<tr>
<td>Preserves Culture</td>
<td>Dictates Culture</td>
</tr>
<tr>
<td>Throttled pace to change, users embrace</td>
<td>High degree of change, users rebel</td>
</tr>
<tr>
<td>Focus on the problems</td>
<td>Focus on everything</td>
</tr>
<tr>
<td>Making Success</td>
<td>Questionable Success</td>
</tr>
<tr>
<td>Low Up-front Investment</td>
<td>Large Up-front Investment</td>
</tr>
<tr>
<td>Low TOC</td>
<td>High TOC</td>
</tr>
<tr>
<td>Immediate ROI</td>
<td>Takes Long Time to Get ROI</td>
</tr>
</tbody>
</table>
Deploy Globally, Act Locally ;-)