



Electronics & Communications

# Why Aras?

One Company's Journey

*Realization*

*To*

*Implementation*

*(as an Open User)*



Aras Community Event

May 2010

# The Road from Chaos

- 1 Company – 3+ R&D Divisions
  - Acoustical
  - Electronic
  - Mechanical
  - Systems
    - Electronic
    - Firmware
    - Software
    - Mechanical
- Operated Independently

# The Road from Chaos

- Each using a paper-based systems governed by ISO 9001 to track and manage projects
- There was little communication among the design facilities
- Management had no visibility into production, individually or cross-functionally
- Time to Market projections were occasionally missed

# A New Day Dawns

- Strategic initiative to unify and automate processes across all R&D divisions
  - Standards applied to all
  - Gain visibility into the projects
  - Optimize overall capacity
    - Shifting projects among the groups
      - when workloads were uneven
      - when one group required the specialization provided by the other
  - Maintain ISO 9001 integrity

# Where to Begin?

- Criteria
  - Central Administration
  - Web Based
    - Project Management
    - Content Management
    - Form Management
    - Reporting
  - Functionality
    - Microsoft SQL Server Back End
    - Ease of Use
    - Simplify Key Strokes

# Where to Go?

- In-House Design
  - Too complex to build with the resources at hand
- Prepackaged Applications
  - Project Management
    - Arena Solutions
    - MS-Project
    - vProject
    - Pro.file
    - xColla
  - Enterprise Management
    - NetSuite
    - Epicor
    - Plex

# The Sun Starts to Rise

3+ years later...

**a r a s**



**c o r p**



# Second Chance?

- Call from Jennifer McCullough
  - Aras solution functionality overview
  - Ability to change & modify the Aras solutions
  - Ease of use and simplicity of screens
- Registered to view the Demo



# More than Meets the Eye

- Program/Product Management
  - PMI Project Management
  - Resource Management
- Product Engineering
  - Bill of Materials
  - Change Management
  - Document Management
- Quality Planning
  - Compliance
  - FMEA Risk Management

# More than Meets the Eye


- Gain Control of Processes
  - Data Entry
  - Review
  - Approval
  
- Stop Changes to the Item
  - Lock the Item from change while in review or approval
  - Control who could change the data

# More than Meets the Eye

## Create & Modify Items

Created our own  
"Voice of the Customer"



 **VOC**

**RPD Planning**

Rapid Product Development Number

<b>Product Brand Information</b> Choose Type: <input type="text"/> Product Brand: <input type="text"/>	<b>Part Information</b> # Of SKU's: <input type="text"/> Lifecycle Length: <input type="text"/>	<b>Delivery Date</b> <input type="text"/>
<b>Product Family Information</b> Family Being Replaced: <input type="text"/> New/Existing Family: <input type="text"/>	<b>Additional Products In Family</b> <input type="text"/>	<b>Design Information</b> Choose Facility: <input type="text"/> Choose Type: <input type="text"/>

Voice Of The Customer

**Cosmetic Finish And Look**

**Logo Branding (Type And Placement)**

**How Will The Product Be Used**

**Where Is The Product Used**

**Selling Features**

# More than Meets the Eye

Made our own Workflows

The screenshot displays a workflow management application interface. At the top, there is a menu bar with options: File, Edit, Views, Search, Actions, Reports, Tools, Help. Below the menu is a toolbar with various icons. The main content area shows a workflow process for 'Rapid Product Development for 302-2'. The process flow diagram includes steps: Start, Input Project Mngr, Marketing, Input Marketing, Warranty, Input Warranty Mngr, Finance, Input Finance, Review RPD, Review Exec, Rf Reject, Approve, RPD St Shelf, and Re-Open. Transitions between steps are labeled with actions like 'Re-Marketing', 'Re-Finance', 'In Complete', and 'Review'. A yellow highlight is on the 'Input Finance' step.

Metadata for the workflow includes:
 

- Name: RPD-000152-QPD
- Started By: Kevin Ivey
- Active Date: 5/4/2010
- Label: [Empty]
- Process Owner: Project Management
- Description: Rapid Product Development for 302-2
- Current Status: Active
- Closed Date: [Empty]

Buttons for 'View Signoffs' and 'Cancel Workflow' are visible. Below the process flow is an 'Activity Summary' section with fields for Name, Managed By, Role, Status, Escalate To, and Duration. A message field contains 'Please Review...'. An 'Assignments' table shows 'Dan Salisbury' assigned to 'Input Finance'.

An overlaid window titled 'Report: Workflow Process History - Windows Internet Explorer' displays a 'Workflow History Report' for item 'RPD-000152-QPD'. The report includes the following data:

Activity	State	Assigned To	Completed By	How Voted	When	Comments
Input Project Mngr	Closed	Kevin Ivey	Kevin Ivey	Marketing	5/4/2010 11:56:48 AM	
Input Marketing	Closed	Steve Young	Steve Young	Warranty	5/4/2010 6:06:23 PM	
Input Warranty Mngr	Closed	Kevin Ivey	Kevin Ivey	Finance	5/5/2010 4:48:02 PM	
Input Finance	Active	Dan Salisbury				

The report also shows: Started By: Kevin Ivey, Started On: 5/4/2010 11:37:07 AM, Current Status is: Active, Completed On: [Empty]. The browser status bar at the bottom shows 'Done', 'Trusted sites | Protected Mode: Off', and '100%' zoom.

# More than Meets the Eye

## Product Lifecycle Management

Simple Search		Page Size:	Max Results:	Current	As Of: Today												
Project Number	Name	Sched Start [...]	Sched Due [...]	Status	Ph 1	Ph 2	Ph 3	Ph 4	Ph 5	Ph 6	Ph 7	Ph 8	Ph 9	Ph 10	Ph 11	Ph 12	
				Active													
1320	MTX - Wakeboard	7/8/2009	10/1/2010	Active	100	36	71	1									
1325	Monitor Home Ca...	7/28/2009	8/11/2010	Active	100	91	0	100	0								
1331	Atlas - SD722W	8/5/2009	12/11/2009	Active	100	100	0										
1335	2010 THUNDER...	8/24/2009	1/4/2010	Active	100	100	100	83	100	100							
1336	Streetwires - ZN1...	9/2/2009	2/1/2010	Active	100	100	100	100	94								
1337	THUNDERFOR...	7/13/2009	4/16/2010	Active	100	100	95	100	24								
1338	THUNDERFOR...	7/28/2009	4/16/2010	Active	100	100	95	100	24								
1339	THUNDERFOR...	7/28/2009	4/16/2010	Active	100	100	95	100	24								
1340	THUNDERFOR...	7/13/2009	4/16/2010	Active	100	100	95	100	24								
1342	Atlas SD-150W-8...	9/23/2009	12/17/2009	Active	100	100	0										
1344	THUNDERFOR...	10/12/2009	4/15/2010	Active	100	100	93	100	24								
1346	Atlas SD100N	10/21/2009	9/1/2010	Active	100	100	0										
1348	Atlas FAP42TC-S...	10/29/2009	3/10/2010	Active	100	100	0										
1351	Thunder Marine	12/29/2009	3/10/2011	Active	60	0	0	0	0								
1352	THUNDERFOR...	12/1/2009	4/15/2010	Active	100	72	85	81	19								
1353	Streetwires, ZN3 ...	1/18/2010	5/11/2010	Active	100	100	81	68	0								
1388	MTX - WPS Pow...	2/9/2009	7/9/2010	Active	100	0	0	0	0								
1394	TDX NEW DESI...	3/2/2009	6/17/2010	Active	100	100	98	100	0								
1395	MTX TX COMPO...	3/3/2009	6/17/2010	Active	100	83	98	100	0								
1409	TDX 7 X 10	4/30/2009	6/10/2010	Active	100	100	84	100	13								
1411	Atlas PD75T	5/15/2009	9/2/2009	Active	100	100	0										
1420	ATlas - IPTA-M1Y	4/1/2010	5/1/2010	Active	100												
1421	Streetwires, Soun...	2/15/2010	10/26/2010	Active	50	0	0	0	0								
1425	Terminator Coaxials	2/25/2010	1/12/2011	Active	42	0	0	0	0								
1426	MTX - TR9500 ...	3/25/2010	11/10/2010	Active	22	0	0	0	0								
1431	MTX 2010 TE A...	11/13/2009	11/23/2010	Active	100	76	57	32	1	0	0	0	0				
1433	MTX-XTL110P/X...	4/26/2010	2/15/2011	Active	11	0	0	0	0								
1434	THUNDERFOR...	5/10/2010	11/16/2010	Active	0	0	0	0	0								
1435	ATLAS AMP TEA...	4/30/2010	5/19/2010	Active	0	0	0										
1439	Atlas Signal	5/4/2010	2/15/2011	Active	0	0	0	0	0								

# Seeing Clearly Now

- Criteria
  - Central Administration
  - Web Based
    - Project Management
    - Content Management
    - Form Management
    - Reporting
  - Functionality
    - Microsoft SQL Server Back End
    - Ease of Use
    - Simplify Key Strokes



# And Away We Go

- Engineering Implementation
  - New Idea
  - Rapid Product Development
    - Voice of the Customer
      - Sets forth pre-approval for the use of man hours on a product
      - Gathers Necessary Information
        - » Marketing
        - » Engineering
        - » Finance
    - Quotes, Profitability and Design
      - Finalizes the information for final approval
      - Authorizes the creation of the project

# And Away We Go

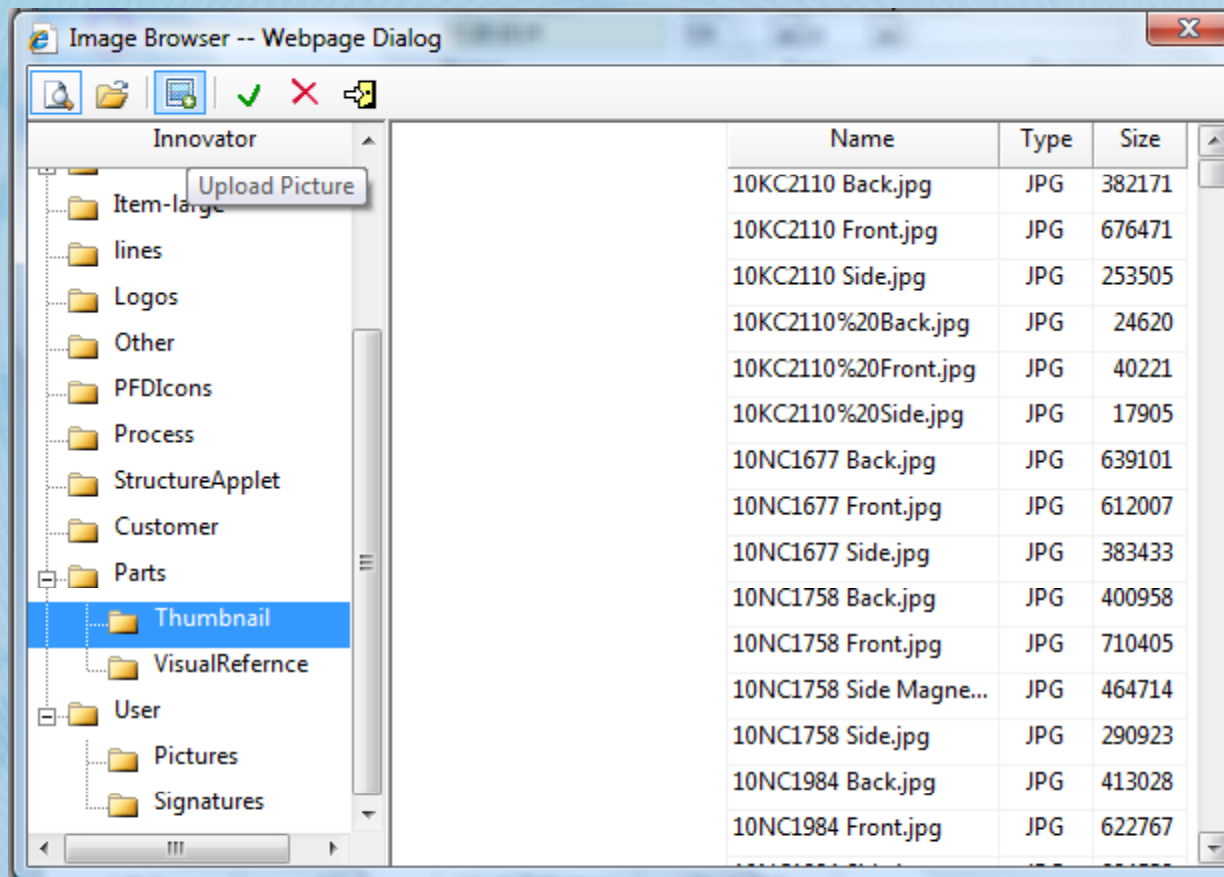
- Quality Systems Implementation
  - ISO Binder
  - ISO Document Approval
    - Monitor Changes in Control Documents
    - Sign off Approvals
  - Issues
    - Internal, Customer and Supplier
  - CA/PA
    - Root cause Analysis
    - Corrective Action
    - Preventative Action

# Time to Add on

- ITIL Service Desk
  - To help with Customer Service
  - Track Incidents
- Skills Management
  - Track Continuing Education
  - Set Course Training
- Meetings
  - Visibility of Notes and Agendas
  - Assignments
  - Supporting Documents

# Time to Modify

## Upload functionality to Image Browser



# Time to Modify

## Use of Signatures on Documents

The image shows a screenshot of a web application interface. The main window is titled "User - Mike Ellefson (read only) - Windows Internet Explorer". It displays a user profile form with the following fields:

- First Name:** Mike
- Last Name:** Ellefson
- Company Name:** Mitek Corporation
- Email:** Mike.Ellefson@MitekUSA.com
- Telephone:** 608-328-5560
- Mail Stop:** 1592
- Starting Page:** My Inbasket
- Fax:** 608-328-5575
- Home Phone:**
- Cell:**
- Pager:**
- Working Directory:** C:\Documents and Settings\mikee\Desktop
- Manager:** [Walter Pynas](#)
- Default Vault:** [Default](#)
- Title:** Director Of Quality

The "Signature" field is circled in blue and contains a handwritten signature. Below the profile is a table with the following data:

Authorized Generator: Nick Leiendecker	Date: 04/30/2010
Title: Senior Engineer	
Authorized Approver: Mike Ellefson	Date: 04/30/2010
Title: Director Of Quality	

The signature in the "Authorized Approver" row is also circled in blue. The interface includes a menu bar (File, Edit, Views, Search, Actions, Reports, Tools, Help) and a status bar (Ready, INNOVATOR).

# Time to Modify

## Extended Part Viewer

Able to View All Sides

Part Number: 65JB1814  
Unit: EA  
Make / Buy Cost: [ ]  
Name: 65JB1814  
Type: Warranty  
Revision: B  
Description: MIDRANGE, 6 1/2" (TFE100/ TFE200)  
Created By: Innovator Admin  
Created On: 1/31/2005  
Modified By: Jeremiah Kraft  
Modified On: 3/11/2010  
Locked By: [ ]  
Major Rev: B  
Release Date: [ ]  
Effective Date: [ ]  
Generation: 6  
State: Preliminary

Part Viewer

Label	url [...]	Visual Reference	Visual Part
65JB1814 Front	[Image]	N	Y
65JB1814 Side	[Image]	N	Y
65JB1814 Back	[Image]	N	Y

# Time to Modify

## Part Visual Reference

Put in Picture Reference  
for Parts

The screenshot displays the MiTek Innovator web application interface within a Windows Internet Explorer browser window. The browser title bar reads "MiTek Innovator - Windows Internet Explorer". The application header includes the "MITek INNOVATOR" logo and a menu with "File", "Edit", "View", "Search", "Actions", "Reports", "Tools", and "Help". The right side of the header shows the date and time: "Sunday, May 09, 2010 4:49 PM".

The main content area is titled "Design" and features a left-hand navigation menu with categories such as "Design Forms", "DFMEAs", "Engineers", "Part Families", "Part VR", "Parts", and "Products". Below this, there is an "Administration" section with various management tools like "Change Management", "Dashboards", "Design", "Documents", "Financial", "ITIL", "Legal Agreements", "Library", "My Innovator", "Portfolio", "Process", "Quality", "Skills Management", "Sourcing", and "Templates".

The central workspace is titled "Select a Model Number" and shows a dropdown menu with "BUG10A-T45" selected. Below this, a "Make Selection" section contains a photo gallery of three images showing a speaker component. A large black arrow points from the text "Put in Picture Reference for Parts" to the first image in the gallery. To the right of the gallery, there are two buttons: "Create Part Serial Number" and "Enter/Update Pictures".

The Windows taskbar at the bottom shows the system tray with "Ready", "Innovator Admin", "172.21.21.1", "MitekInnovator", and "INNOVATOR Messages: 0". The taskbar also displays several open applications: "Microsoft PowerPoi...", "Case Study - MiTek ...", "MiTek Innovator - ...", and "Part Viewer.png (t0...". The system clock shows "4:49 PM".

# Time to Modify

## Different Look

MiTek INNOVATOR

File Edit View Search Actions Reports Tools Help

My Innovator

- My Desktop
- My InBasket
- My Recently Visited
- Search Center

Administration

Change Management

Dashboards

Design

Documents

Financial

ITIL

Legal Agreements

Library

My Innovator

Portfolio

Process

Quality

Skills Management

Sourcing

Templates

Filter by Type

Workflow Activities  Project Activities  Action Items

Filter by Status

Active  Pending

Type	Workflow/Project	Activity	Status	Start Date	End Date	Instructions	Assigned To
RPD-000146-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
RPD-000142-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
RPD-000152-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
QAP-00158-2009	QAM Review	Active	8/19/2009			Please Review...	QP Admin
RPD-000155-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
RPD-000059-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
QAP-00015-2009	Issuer Review	Active	3/9/2009				QP Admin
RPD-000153	In Creation	Active	4/18/2010			Please complete and process RPD VOC	Innovator Admin
IC10-111	Issue Closed	Active	4/5/2010			Please Review...	Innovator Admin
RPD-000088-QPD	RPD Shelved	Pending				Please Review...	Project Manage...
RPD-000139-QPD	RPD Shelved	Pending				Please Review...	Project Manage...

Ready Innovator Admin 172.21.21.1 MitekInnovator INNOVATOR Messages: 0

... and made our own Outlook-style Navigation

# Surprise!

- Ease of Configuring & Programming
  - No central programmer
    - User from Internal Departments / Business Users are taught to create Own Items
    - Maximizes Resources
  - Easy to use GUI
    - Microsoft look and feel
    - Takes most of the guess work away
    - Logical process
  - Quick Implementation

**a r a s**



**c o r p**

