



# Analog Devices Adds e-Forms Workflow Capability to its New Enterprise Employee Portal

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***Analog Devices Inc. (ADI), recognized throughout the electronics industry for high-performance technology and world-class engineering support, chose FormArtist WorkFlow from Quask to move their internal forms processing from a paper-based manual method to an electronic format. FormArtist WorkFlow has enabled ADI to put all their employee related forms online in their new portal, and its workflow capabilities enable them to route forms intelligently around the organization for efficient processing. The result is a far better service to employees, a reduction in end to end process times, improved productivity and enhanced employee satisfaction. ADI anticipates that the time it will take to get all approvals in order to grant access to systems and applications will be reduced by 200%.***

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## **Situation**

Analog Devices Inc. (ADI), is a world-leading semiconductor company specializing in high-performance analog, mixed-signal, and digital signal processing (DSP) integrated circuits (ICs). Since ADI was founded in 1965, it has focused on solving the engineering challenges associated with signal processing in electronic equipment.

ADI's products fill the gap between the analog and digital world and play a fundamental role in converting real-world phenomena such as temperature, motion, pressure, light, and sound into electrical signals to be used in an array of applications: from industrial process control, factory automation, radar systems and CAT scanners to cellular base stations, broadband modems, wireless telephones, computers, cars, and digital cameras. ADI has 8,900 employees worldwide. The company, which is headquartered in Norwood, near Boston, Massachusetts, has direct sales offices in 19 countries and has manufacturing facilities in Massachusetts, California, North Carolina, Ireland, UK, the Philippines and Taiwan.

ADI had already implemented a new enterprise employee Web portal using Microsoft technology. (Microsoft® .NET Framework and Microsoft Windows Server™ 2003 with Microsoft Content Management Server 2002). They needed an employee portal that would enhance productivity and the user experience by providing a centralized resource for employee information and personalized content. The new portal was accessible from ADI's internal network and the Internet, and provided users with a single sign-on, centralized access to information and services. The result was that the ADI Information Technology (IT) group returned control of content posting

## Solution Overview

### **Customer Profile**

Analog Devices Inc., a semiconductor company with over US \$2 billion in sales, is a leading supplier of analog and digital signal processing integrated circuits.

### **Business Situation**

Needed an electronic forms processing solution with workflow capabilities to fit in with their new employee Web portal, and to replace their manual paper-based system.

### **Solution**

Deployed the FormArtist WorkFlow software package from Quask, which allowed them to produce 'intelligent' online forms and surveys with workflow capabilities.

### **Benefits**

- ADI anticipates that the time taken to get all approvals to grant access to systems and applications will be reduced by 200%.
- Forms processes more efficient
- Reduction in end to end process times
- Provide better service to employees
- Improved employee productivity
- Enhanced employee satisfaction
- Movement of ownership of form creation and management from IT group to users

### **Software**

FormArtist WorkFlow – e-forms driven workflow solution  
Form Design Client

### **Supplier**

Quask

and maintenance to more than 200 content authors, achieved a 50% reduction in IT hours spent on content maintenance, and enhanced overall employee productivity and satisfaction.

In addition to delivering a personalized experience for employees, the IT group at ADI's corporate headquarters were looking to further improve efficiencies by eliminating the scores of paper forms and related workflows that employees used on a regular basis. The process of completing a paper form, routing it manually for signatures, and faxing it to the form owner for services was highly inefficient and inconsistent with the electronic world. Services such as ordering a PC, gaining access to IT and business systems and facilities, requesting legal services, initiating an office move, or setting up a new employee, were typically performed through a printed form routed through the mail for approvals.

With this paper-based method, there was no consistency in the form approval process - forms would just sit on people's desks, it was difficult to track down at what stage a form was at in any given process, and it would take a long time for forms to be completed. Then, there was the issue of having to manually transfer data from the paper forms to their internal systems and databases for further action. In all, they had between 80-100 active forms running at ADI's corporate headquarters at any one time. The IT group wanted to dramatically improve the whole forms processing function to reduce end to end processing times, increase efficiencies, and improve the service they were providing to their employees. What they were looking for was an electronic forms processing solution with workflow capabilities that would allow them to route forms intelligently around the organization for approvals, and that would fit in with their existing employee portal infrastructure, as all form access would be through the portal.

## **Solution**

ADI's human resources department had used a product called FormArtist from Quask for conducting an online survey. Learning of this, Mathilde Triclot, Employee Systems Business Analyst, Corporate Information Services, downloaded a trial version of the software from the Quask website to test it out. The trial was a 15 day full Professional version of the product. She was impressed with what she saw and, on approaching Quask, was informed that they had recently launched a new product called FormArtist WorkFlow that matched their needs perfectly. FormArtist WorkFlow incorporated all the functionality of FormArtist for producing online forms and surveys, but also offered the high-end, database driven functionality and forms routing and workflow capabilities they were looking for.

FormArtist WorkFlow delivered on a number of their key requirements. Firstly, it allowed them to produce very attractive, online and offline HTML and PDF form designs, quickly and easily, with no technical knowledge or programming skills required. This would come in useful for the future when they had plans to put form creation and deployment directly in the hands of the content providers rather than the IT group. The system's ease of use was an important factor and was due to its PowerPoint like WYSIWYG and drag-and-drop approach to form design, its pre-defined style sheets, and its extensive library of data collection objects, form design features and emoticons. They felt that visually appealing forms would make the form filling experience more intuitive for their employees. FormArtist WorkFlow would also enable them to produce multi-page forms that didn't require web page re-loading between pages, and didn't require plug-ins to view the forms, making the form filling process quick and easy.

*"The feedback from employees using the forms has been very positive. They have commented on how impressive the forms are to look at and how quick and easy they are to fill out. As a consequence, more employees are accessing and utilising the forms, more forms are being filled out, and we are already seeing marked reductions in end to end process times. We anticipate that the time it will take to get all approvals in order to grant access to systems and applications will be reduced by 200%."*

Peter Forte  
Director of Decision Support  
Systems  
Analog Devices Inc.

FormArtist WorkFlow also delivered on the workflow side and enabled them to easily map their business processes and approvals to FormArtist WorkFlow's forms, encapsulating the routing, notification and other logic into the form itself. Workflow rules could easily be defined through a dialog-driven script manager without having to resort to using JavaScript and with no technical skills required, though JavaScript could also be used where required. Where there was more than one form involved in a process, they were able to set up multiple forms, with access levels for viewing and creating forms easily defined. In addition, any degree of intelligence could be built into the forms to allow dynamic form behavior such as page skipping, validations, calculations, etc. It was very important for ADI that not only could they produce and deploy forms electronically, but also that the forms behaved intelligently to mirror their internal processes. They already had a high-end workflow solution in place which was being used for new product development, but which was less appropriate for the design, routing and tracking of e-forms. FormArtist WorkFlow offered them the forms creation and workflow functions they were looking for in one solution and came in at a very attractive price.

FormArtist WorkFlow also fit with their technical infrastructure and Microsoft technology platforms. They were able to install the server-side components onto their Windows Server™ 2003, and they were easily able to host the forms on their web server. FormArtist WorkFlow came with one desktop Form Design Client and a LiveStats module which will enable them to carry out real-time, browser-based reporting and analysis on forms and workflows.

Forms include: work order facilities forms (personnel move order, new hire work order, badge replacement, security form, conference room setup, cafeteria services), wireless LAN access, VPN access, PC order form, NT and email account setup, network access, FTP access, Dial-In access, data warehouse access, contractor network access, among others.

## **Benefits**

Explains Peter Forte, Director of Decision Support Systems, ADI "The reason for implementing an electronic forms solution was to make our forms related processes more efficient and reduce end to end process times. We also wanted to provide a better service to employees and help make them more productive in their day to day tasks. By deploying the forms to the new portal, we also hoped that a successful implementation would help encourage a positive overall perception of the new portal amongst employees. Although in the early stages of our use of FormArtist WorkFlow, I'm happy to say that these expectations are being met and quicker than we anticipated."

Continues Forte "The feedback from employees using the forms has been very positive. They have commented on how impressive the forms are to look at and how quick and easy they are to fill out. As a consequence, more employees are accessing and utilising the forms, more forms are being filled out, and we are already seeing marked reductions in end to end process times. We anticipate that the time it will take to get all approvals in order to grant access to systems and applications will be reduced by 200%."

Each FormArtist WorkFlow form is stored in a relevant section of the portal for easy access, and for the first time, all forms are listed in one central location in the portal, the FormFinder, making it extremely easy for employees to locate forms. The FormFinder contains a list of all forms (both electronic and paper) broken down into relevant business sections, and indicates where in the portal each form can be located and accessed.

*"What we are now finding is that employees are expressing an interest in creating the forms themselves within their own departments and business units. This is exactly the sort of response we're looking for as it is our intention down-the-line to further increase process efficiencies by putting the power in the hands of our users, rather than having to rely on IT support. This is when we'll see the real power of the system."*

Peter Forte  
Director of Decision Support  
Systems  
Analog Devices Inc.

Says Forte “We will continue to monitor and track form usage and adoption rates, though we feel that the initial burst of activity is very encouraging and bodes well for the future. What we are now finding is that employees are expressing an interest in creating the forms themselves within their own departments and business units. This is exactly the sort of response we’re looking for as it is our intention down-the-line to further increase process efficiencies by putting the power in the hands of our users, rather than having to rely on IT support. This is when we’ll see the real power of the system.”

In the same way that content posting and maintenance has been moved from the IT group to the individual departments and business units, the IT group is looking to put e-forms creation and management firmly in the hands of their users too. In preparation for this, they are currently mapping out the infrastructure that will be needed to support this move, and preparing a set of guidelines on form creation, activity and management for users to follow.

## ***Future***

As an organization, ADI has dozens of forms that are mainly paper-based and offer little or no workflow capabilities. The intention with their new e-forms workflow capability, is to expand its use worldwide throughout the entire organization. Currently, FormArtist WorkFlow is being used at their corporate headquarters in Norwood, Massachusetts. In addition, they intend to roll-out the implementation to their international offices and manufacturing sites through their five satellite IT groups. In this way, all of ADI’s 8,900 employees will benefit from the improvements in efficiencies, productivity and satisfaction that the e-forms solution is bringing to employees at corporate HQ.

## ***For More Information***

For more information about Quask’s products and services, please contact:

Quask, Tel: 1 (888) 853 1441 (US), Tel: +44 (0) 870 017 0601 (Europe), Email: [sales@quask.com](mailto:sales@quask.com)

web: [www.quask.com](http://www.quask.com)

For more information about Analog Devices products and services, visit the web site at:

<http://www.analog.com/>

# Two Sample FormArtist WorkFlow Forms

## PC Pre-Installation Form

**SIGNALS** News, Information, and Resources

Home Knowledge Centers Tools & Resources My Portal

Home > Knowledge Centers > Information Services > Forms >

**PC Pre-Installation - Norwood Campus**

**Current Location**

- Home
- Knowledge Centers
- Information Services
- Forms

**PC Pre-Installation Worksheet for New and Used PC's - Norwood Campus**

Employee\*:  New Hire  Current Employee

NT ID / Email creation form sent to CRC?\*:  Yes  No  Don't know [\(Get an NT ID and Email Account\)](#)

New PC on order [\(ADI Standard PCs\)](#)

Redeploying PC from:  (former users name)

User Name\*:  Network ID\*:

User's Extension\*:  Location\*:

**Printers:** To find the Network printer name: Click start - settings - printers. Right-click on the printer, click on properties click on the details tab; copy down what's listed in "Print to the following port". (i.e: \\NWD2USR1\NWD2CRC) if you don't connect to a printer, type NO PRINTER.

Network Printer:

2nd Network Printer:

**Software:** The Windows XP versions of selected ADI standard applications will be installed on your PC for you. These Applications include: Acrobat Reader, Internet Explorer, McAfee Anti-Virus, MS Office 2003 and MS Outlook 2003.

<input type="checkbox"/> WRQ Reflections X	<input type="checkbox"/> Microsoft Access 2002
<input type="checkbox"/> WRQ Reflections for Unix/Digital (PROMIS)	<input type="checkbox"/> MS Project 2003 **
<input type="checkbox"/> Impromptu	<input type="checkbox"/> MS Visio 2003 **
<input type="checkbox"/> PICS	<input type="checkbox"/> Nortel VPN Client
<input type="checkbox"/> SAP GUI	<input type="checkbox"/> Fiberlink Internet Dialer
<input type="checkbox"/> RIM Blackberry Desktop Software	

Other:

\* Required Fields  
\*\* License Verification Required

## Security Work Order Form

**SIGNALS** News, Information, and Resources

Home Knowledge Centers Tools & Resources My Portal

Home > Tools & Resources > ADI Office Finder > Norwood >

**Norwood Facilities Work Order**

**Current Location**

- Home
- Tools & Resources
- ADI Office Finder
- Norwood
- Norwood Environmental Health & Safety

**Norwood Site Security**

Once you fill out this form, it will be submitted to your supervisor who will specify which restricted areas you need access to. After all approvals are granted, the form will be submitted to Security and you will be notified when your badge is ready. Thank you

Type of Employee\*:  Hire Date\*:  5/5/2005

**Primary Vehicle** Make\*:  Model\*:  Color\*:   
License Plate State\*:  Registration Number\*:

**Secondary Vehicle** Make\*:  Model\*:  Color\*:   
License Plate State\*:  Registration Number\*:

**Check off if you travel to the following:**

<input type="checkbox"/> Cambridge	<input type="checkbox"/> Wilmington	<input type="checkbox"/> Santa Clara	<input type="checkbox"/> San Jose
<input type="checkbox"/> New Jersey	<input type="checkbox"/> Nashua	<input type="checkbox"/> Raleigh	<input type="checkbox"/> Austin
<input type="checkbox"/> Other <input type="text"/>			

Do you have a walled office?  If so do you want it locked at night?

Do you want Security to open it in the morning?  If so, what time?

Additional Information: