LIQUID CONTROLS DEPLOYS BP LOGIX PROCESS DIRECTOR TO AUTOMATE WORKFLOW PROCESSES AND ELECTRONIC FORMS

IDEX Corporation manufactures and markets a wide array of engineered pumps and other industrial products and is the world leader in fluid-handling technologies. IDEX’s business units are organized into four groups: Fluid & Metering Technologies, Health & Science Technologies, Dispensing Equipment and Fire & Safety/Diversified Products. Its business units are leaders in their niche markets. The IDEX strategy of a shared vision has led to the company to a 15% compound annual growth rate in sales since 1989, compared with 9% for its peer group, and a 16% growth rate in profits.

IDEX Fluid & Metering Technologies are precision engineered pumps, meters and systems that move, measure and dispense high value liquids, gases and solids. Within the pump and flow metering world, these core capabilities support worldwide growth in the process industries, particularly the infrastructure-related markets like alternative fuels, chemical processing, and water treatment, as well as a growing range of highly precise sanitary applications within the pharmaceutical and food and beverage industries. With operations on six continents, IDEX seeks to develop the right applied solution to meet customer specifications, anywhere in the world.

Liquid Controls has been an industry leader in flow measurement and process control instrumentation for 50 years and is a part of the Fluid & Metering Technologies group. Since 1954, Liquid Controls has been dedicated to providing high quality flow meters and accessories for accurate liquid measurement in both custody transfer and process control applications. The first LC meter aircraft refueling unit was purchased by the United States Air Force in 1956 and performed consistently for over twenty five years, testimony to the quality, durability, and reliability of Liquid Controls products.

Continuously branching out from the original military aircraft fueling requirement, LC now serves a variety of industries from Adhesives, Agriculture, Asphalt, Animal Feeds and Beverages to Cosmetics, Paints, Pharmaceuticals, Printing Inks and Textiles. The company relies on in-house engineered designs and a network of strategically located factory authorized distributors to ensure that global customers are supported with technology tailored to each industry's particular requirements.
LEVERAGING TECHNOLOGY INVESTMENTS
Bruce Lawrence is the Group Network Manager for Liquid Controls. That Group, in turn, responds to the IT needs of employees at five companies (Liquid Controls, Toptech in Orlando and Belgium, Corken in Oklahoma City, Faure Herman in France and Sampi in Italy.) Liquid Controls also manages a plant in India that makes castings for its meters, as well as sales offices in Mumbai.

GIS (Corporate IT) drives all initiatives, reviews Group budgets and looks at the corporate plan. If a chosen product has a high enough profile, GIS looks at sharing that product or product suite throughout IDEX in order to leverage the investment. IDEX, for example, has a Microsoft licensing agreement and a global contract with Dell.

As the person responsible for managing the Group level Information Technology requirements, including its business processes, Lawrence and his team coordinate with Corporate on all IT initiatives – and he follows the initiatives of IDEX Corporation. At a Group level, the initiatives come through Lawrence. Another of the major initiatives across all companies involved integrating applications with its JD Edwards ERP system.

In addition, IDEX has two hosted data centers for its top level services, MS Exchange for email, JD Edwards for ERP, VPN, fax services and web access (including proxy services) Lawrence reports.

CAPITALIZING ON THE COMPANY INTRANET
Like most successful companies, Liquid Controls (LC) has an intranet that employees access for the forms and information they are seeking – from policies and procedures to expense forms. According to Lawrence, employees wanted to make changes to these documents to reflect changing business processes. The existing system, however, could not accommodate those changes, and, as a result, employees often became frustrated.

The company Intranet also provides a sales quoting tool which is used on a daily basis. While the form itself was appropriate and easy to use, it had no workflow associated with it. Instead, employees would complete the form then submit it for manual processing. “These documents were then either stored in file cabinets or, when we were luckier, kept in an electronic file system under a Windows share drive,” observed Lawrence. “As a result, many of the documents were misplaced and information frequently lost.”

Another issue that arose had to do with the fact that most of the forms available were static forms! While some could be filled out online, others required the employees to print and fill out by hand. As a result the intranet appeared to be more of a repository than a dynamic portal that provided information.

To address the need for a system that would work the way that LC employees worked, Lawrence began a search. Initially he thought he would primarily evaluate online forms processing solutions. He expanded that, however, to incorporate workflows that could address the business processes reflected by those forms. Among his criteria Lawrence knew that he wanted to a product that would not require him to do any extensive back end development. He did, however, want a product he could roll out quickly – one that would be easy to rewrite or change as the processes themselves changed. Version control was also important. And the IT group wanted a development tool that would allow IT to process user requests more rapidly.

GETTING THE BUY-IN FROM BUSINESS USERS
Lawrence then consulted with his business users to further determine what they needed. Accounting wanted to control the process for capital expense (CapEx) requests, a manual, paper-based process at that time. As a result of misplaced documents, Accounting was missing deadlines for audits. The Quality Assurance team, another group that helped to drive the initiative, required that all of its quality procedures be online. One of its documents required 12 signatures – and several times it was discovered that no one knew who had the form. As an ISO-certified organization, any time there was a change in a procedure, Liquid Controls had to secure signatures approving that change, track the documents associated with that change and ensure that information access and distribution was seamless.
The IT team initiated a needs analysis, conducting it over a period of three months. Their goal was to find one product that would allow them to embrace workflow, electronic forms and document management – a product that would enable them to manage and continuously monitor LC’s activities and processes.

Lawrence’s team was already committed to doing development on widgets that were not being handled by its ERP system or by other 3rd party software. He recognized that there were a lot of gaps. “We knew we could always write code but questioned how much time we wanted to spend being a development shop. What we wanted was to deploy applications, not to have to rework code,” Lawrence remarked.

The IT team then established five criteria for the product it wanted to procure. That product needed to provide online forms and workflow and: 1) Would require minimal coding, 2) Would enable users to make changes easily, 3) Be scalable, 4) Be cost effective and 5) Be deployable out-of-the-box.

**EVALUATING WORKFLOW AND FORM BUILDING PRODUCTS**

Lawrence’s team examined trial versions of Adobe and Microsoft forms builder. Both were good products but did not address the workflow issues Liquid Controls needed to resolve. Upon completing its evaluation, the team found that the best product for creating the workflows it needed was Process Director from BP Logix.

Designed as an out-of-the-box solution that is easy to install and administer, BP Logix Process Director is web-based software that fuses business process management (BPM) with project management and business intelligence. Process Director defines, automates, manages and reports on business processes, while also moving those processes under the direct control of business users. (No coding required.) With its one-of-a-kind Predictive BPM™ and Timeline™ technology, business users can make faster and more accurate decisions.

“We have already discovered that Process Director’s business logic lets you go as deep as you need to be consistent with your business process. This has made our lives a lot easier,” commented Lawrence.

**EXPLORING A BROAD RANGE OF APPLICATIONS**

Liquid Controls is now using Process Director for applications ranging from attendance applications and Engineering Change Control to shop floor work constructions. One challenge for example, was how to provide the appropriate workflows to ensure that a new hire would be able to build a product with such high tolerance. “We have 600 work constructions to build flow meters, for example,” Lawrence observed. The process of making changes to them is now done through a workflow. Approved instructions are now published in real-time making them available to the shop floor employees immediately,” observed Lawrence.

There are also situations where a workflow goes across different companies within the Group. At the Group level, for example, all the Accounting departments are required to submit Capital Appropriation Requests, (CAR), at the start of the year. Once approved, the companies can spend against those CARs using an Expenditure Request workflow. CAR balances are tracked automatically using the integrated SQL function capabilities of the Process Director product. Additionally, the accounting departments are able to get a picture of current capital spend at any time using the built-in reporting functions. Also as a result of today’s economy Liquid Controls is being more careful about the credit it extends to customers. LC was able to develop workflows to allow Management more visibility to make the appropriate decisions for extending credit.

**LIVING IN AN ON-DEMAND WORLD**

Lawrence lives in a world of non-stop projects. He always has a queue of people waiting for his team to respond to a request. “Many of the requests for adjustments to the workflows that IT receives can be handled with simple drag and drop functions on the graphical interface,” Lawrence remarked. “Process Director enables us to not have to be a development shop yet we can customize applications for our business users,” he declared.

One of the benefits that Lawrence likes best about Process Director is that the product provides all the tools necessary to develop the user requested workflows Liquid Controls requires. Neither Lawrence nor his team has to write code, leaving the IT team to focus on filling in the gaps created by the company’s migration to a new ERP system.

Another growth opportunity occurs with company expansion. New companies are being bought all the time. “Even within our
group we have seven different businesses – and there is always a development solution on the horizon or upgrades to the current ones,” Lawrence explained.

Perhaps the biggest growth opportunity, however, is the result of gaps being created between its old and new ERP systems. The former system has become highly customized over the years but corporate initiatives are to migrate to a new ERP. We are finding process gaps between the old system that the new system cannot do. IT expects to fill these gaps using Process Director.

EMPLOYING PROCESSES THAT WORK
Sales is the lifeblood of any company. In the case of Liquid Controls, the sales quotes that are issued by its representatives represent a very critical part of the sales process. The LC sales director is a fan of Process Director. “We do our sales quotes in Word then email them to customers and prospects. On a monthly basis we then provide an ‘opportunity report’ to management,” stated Jeff Rizner, Director, Customer Support & Service. Pulling that information together represented a lot of work. According to Lawrence, “We decided to create a form that would allow him to work the way he worked before, send quotes to customers but then dump the information into a directory, tag with metadata (like follow up date with customer, amount of the quote) and indicate the status.” Once filed using the workflow, the workflow then comes back on the date identified previously, with an email reminder to call the customer. And at that point the status is then reset. Later the data is automatically available for opportunity reports using the reporting module feature of Process Director.

Another example is the audit procedure. “We are always audited at least once a year as part of an annual audit, as well as undergoing a SOX (Sarbanes-Oxley) and an ISO audit. If you write a procedure and you are ISO certified, that procedure must be available to all people who need it and changes must be approved and recorded,” reported Lawrence. With Process Director in place, auditors can quickly access the information they need and the approvals are easy to produce.

The reporting, tracking and auditing functions are seamlessly integrated into the Intranet site giving authorized employees and auditors the ability to easily access any information and see the entire lifecycle of a change or request. Information about any request can be instantly pulled up and displayed in a graphical format. This audit trail includes electronic signatures for anyone who approved the request or change.

Lawrence finds that there is less re-work, better parallel tasking and more standardization as a result of deploying Process Director. One of the other things he appreciates is that the users have a visual audit trail, know to whom tasks were assigned and when completed, making the process a lot more efficient.

Process Director has been easy to deploy and his users appreciate both its friendliness and the user interface. “While we might have unrelated processes, the fact that Process Director offers familiar screens, simple integration within the IT infrastructure (email systems, portal, file systems, scanners) and is web-based speaks volumes,” observed Lawrence. “It is enabling us to drive from the results side backwards and to better leverage our investments. And that says a lot,” concluded Lawrence.

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