

# Global Excellence in Workflow Award Winners 2003: Analysis

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## INTRODUCTION

This chapter offers a comparison of the case studies that went through to the finals of this year's selection. My intent was to see what one could learn from them about the present state of applying process management tools.

I looked mainly at the way these products were used rather than at the details of what they ran on or with. If for no other reason, any such technical analysis would get out of date quickly. Implementation lessons are longer lasting.

The resulting picture is unlikely to be representative of the market as a whole. Although the suppliers sent in interesting accounts of their chosen installations, with plenty of descriptive material, these were competition entries. They were not the sort of independently written, "warts and all" case study used at business schools, for example. There was the occasional blemish revealed but these submissions did not go into product weaknesses, say, or project management failings. It would be unreasonable to expect them to do so.

The other factor that skewed the sample was that the finalists had been chosen in part for the novelty of what they did. The competition guidelines talk of the "innovative use of technology" and use words like "complexity," "creative" and "advanced." Such language would give the heebie-jeebies to the project assessment committees of many organizations. Although praise is due to the user organizations described in these cases, they are perhaps braver and more imaginative than many of their peers. Let us hope they reap the benefits. Nonetheless, they do not represent the bulk of users, especially first time users of workflow. These prefer well-trodden routes.

Perhaps a better analogy for this exercise is a test drilling. As with making a geological sample, I had an idea of the ground I was probing but no certainty. The sample I extracted was narrow but rich in multilayered material. I was able to compare this with results from elsewhere.

This evidential material combined to give enough solid data and clues for an informed idea of the whole terrain. Set out below are the results of my analysis of this "core sample."

## BASICS

First, some outline statistics about the 16 finalists.

**Geography.** They came from 10 countries—Brazil, Canada, France, Hungary, India, Korea, South Africa, Switzerland, United Kingdom (3) and USA (5). The Anglo-Saxon countries—USA and United Kingdom—predominated among both the finalists and the entire entry.

The entire entry was drawn from 14 countries. This is smaller range than one might have expected. There were no entries from Scandinavia, Ireland, southern Europe or the Antipodes, for example. Perhaps this is just chance.

**Industry sector.** Finalists represented 10 industries—automobile manufacture, banking (4), furniture making, industrial chemicals, insurance (3), IT services, local government, pet and garden products, retail stores, and telecommunications (2). Just over half them thus came from the “clerical factory” sectors—banking, insurance and government. Nonetheless, there was widespread use outside these traditional homes of workflow.

Among the full set of submissions, there were 14 industries represented. Here, a slightly lower proportion of cases came from banking, insurance and government.

**Suppliers.** The finalists used 14 suppliers for their main workflow software. They were Action Technologies (2), ADEX, eiStream, Exigen, Fornax, HandySoft, Metastorm, Oracle, Proforma, Singularity, Staffware, TATA, Teemplate and W4. Not all these were product suppliers. ADEX is a service bureau and TATA a systems integrator, for example. One case was submitted by a user organization that had developed its own system (not published in this book for privacy and security reasons).

This is a more diverse collection than one might have expected five or ten years ago. The same is true of the complete set of cases sent in.

Industry convergence has played a part. What would once have been regarded solely as an image management product, for instance, will have evolved into something more versatile. Also, other product types now include workflow abilities, enterprise resource planning (ERP) software being a typical example. The entry of new companies has helped, particularly those who have based their products on Web and Web services models.

#### THE SYSTEMS THEY USED

The finalists used three kinds of system—electronic document management (2, including one via a bureau), electronic document management with workflow (9) and workflow on its own (5). Document-based working was thus in the clear majority.

The same three types of system were in use among the entire set of entrants but with less of an emphasis on documents. None used business process management, although some were clearly moving toward that.

Here are the definitions I used in separating the different kinds of system:

- **Electronic document management (EDM)** systems are designed to manage sets of electronic documents or their constituents. They let users scan, index, store, view, retrieve, reuse and transfer those files. These systems can link to transaction or line-of-business application programs. Also, they often include workflow management tools but mainly for routing files.

Where more complex tasks arise, such as controlling other processes and application programs, a full-scale workflow product is

used as well or instead of EDM. Indeed, if an EDM product can do this on its own, it qualifies as workflow. This is an example of the product evolution referred to earlier.

I include some related systems within this class:

- Document image processing (DIP) is, as its name suggests, designed to manage files that wholly or mainly consist of images of paper documents
- Engineering drawing management (another EDM) works mainly with files from computer-aided design (CAD) systems and with scans of paper drawings
- Electronic content management (ECM) handles the files that go to make up a World Wide Web site or page. It is optimized to manage rapidly changing material.
- **Workflow automation software** manages complete and complex work processes. The emphasis here is on the tasks to be carried out rather than the documents used in doing so. It enforces compliance with defined sequences and procedures, embodied in rules.

The software contains tools to design as well as manage processes, sometimes also to model, optimize and simulate them. It also provides a real-time (or near enough) view on the progress of each process instance.

These days, one would expect a workflow product to be able to handle company-wide and intercompany processes. One would also expect it to integrate with other application programs, offering two-way data transfers while both are running.

- **Business process management (BPM) software** carries these abilities to an extreme. It has three main technical features that distinguish it from workflow software:
  - it not only integrates with but can also manage other application programs
  - it gives users a real-time view of what is happening to all the processes and applications it connects with. In current parlance, it provides business intelligence (BI) or business activity monitoring (BAM)
  - it lets users easily change those processes or add new ones, though a separable logic layer (sometimes called a business rules engine). It can make these changes before an instance of a process runs or while it is in progress.

These are not official definitions and represent no viewpoint other than my own. In several instances, I have classified a system differently to how the case's sponsors have. This is unsurprising. I am trying to create a basis for comparison across systems; suppliers are looking to sell product.

A further point is that one should not read into these three definitions any implied superiority of one kind of system over another. As the old cliché has it, it is a matter of horses for courses. If EDM is what is demanded, then

workflow on its own, say, is going to be a waste of time, money and effort. The reverse is true, too.

Some finalists had started with EDM, perhaps as DIP, and moved on to using workflow software as well. They wanted to apply the benefits of electronic process management to other tasks, not necessarily based on a document. This is normal progression, indicative of corporate learning and of a successful earlier implementation.

Of the 16 finalists, all except three were first-time users of process management systems. Overall, there were five existing users.

#### WHAT USERS HOPED FOR

I have summarized below the corporate goals for these systems. The summaries are in some instances interpretations and paraphrases of what the case entries said. I tried in each to get down to the essence of the expected business benefit. (Any resulting omissions or misrepresentations are my fault and mine alone.)

In doing this, I have excluded specific project or operational objectives. Here is a typical example:

1. "To standardize and automate the capture of documents for document-intensive, multi-channel business processes,
2. streamline the processing of documents through automation wherever possible, and
3. provide real-time bi-directional data-level integration."

Although good motives for adopting a computer-based process management system, these do not say what it should do for the organization as a whole.

What the finalists reported they wanted to achieve can be regarded as falling into four categories, relating respectively to:

- financial improvement
- better information
- better work management
- better competitive position.

The first three categories are mainly or wholly inward looking. They are to do with running a better organizational machine. The third especially—better work management—could come out of any industrial engineering manual. This is the office as factory. Only the last deals completely with external matters.

FINALISTS' BUSINESS AIMS SUMMARIZED
<b><i>Financial improvement</i></b> <ul style="list-style-type: none"><li>• Attract and retain lucrative business</li><li>• Cope with increased pressures on profitability</li><li>• Reduce internal document processing costs</li></ul>
<b><i>Better information</i></b>

- Capture knowledge
- Improve data quality and integrity
- Improve the sharing of information, knowledge and experiences

***Better work management***

- Eliminate delays and errors
- Enable policy-based processing
- Gain greater control of the process
- Have fewer administrative failures
- Help prioritize work
- Improve productivity
- Improve staff versatility
- Improve the product installation process nationally
- Increase flexibility of business processes
- Increase productivity at branch offices
- Increase productivity in processing loans
- Integrate the company's activities
- Maintain quality, productivity and customer service
- Prevent duplication of work
- Process applications more efficiently
- Reduce response times
- Refocus on efficient product development
- Remove volume limitations
- Unify and rationalize the management of procedures

***Better competitive position***

- Ensure agreed customers' service level is met
- Give more consistent service to customers
- Improve corporate performance and customer satisfaction
- Improve customer service

It is notable that, of the entries under the financial improvement head, only two deal specifically with cost reduction or avoidance. This is often advanced as a reason for introducing the automatic control of work processes. If the case studies accurately reflect what was in users' minds before implementation, then this did not loom large in their thinking. There is, however, no surprise in the number of statements reflecting a desire for better work management.

WHAT THEY ACHIEVED

If we now compare users' expectations with what they achieved, we should have a classical before and after situation. I have separated quantified gains from others. This does not mean that "others" are nothing to do with

money. It is simply that the gain has not been counted (or if it has, the result has not been shown in the case study).

I have divided the statements into the same four classes as in the business aims. Here, first, are the quantified gains.

QUANTIFIED GAINS SUMMARIZED
<p><b>Financial improvement</b></p> <ul style="list-style-type: none"> <li>• \$2 million a year saved though fraud elimination</li> <li>• \$33,333 annual saving</li> <li>• “Several million dollars per year” saving</li> <li>• 16% fewer employees</li> <li>• 68% improvement in cost efficiency for the organization</li> <li>• Annual savings of £285,000</li> <li>• Application development costs down 30%-50%</li> <li>• Cost savings (workforce reduction)—22%</li> <li>• Expected annual cost savings of more than \$3.6 million</li> <li>• Improved profitability and accountability—99%</li> <li>• Internal rate of return (IRR) of 176%</li> <li>• Investment income increased by £1m</li> <li>• Net present value (NPV) of \$5.97 million</li> <li>• Paid for itself in 3 months</li> <li>• Productivity increased 15-30%</li> <li>• Productivity up 30%</li> <li>• Payback—4 months</li> <li>• Return on investment (ROI) of 366%</li> <li>• ROI of 362%</li> <li>• Saved roughly \$128,000 in direct labour cost, in one location</li> <li>• Total benefits equal \$2.03 million</li> <li>• Training costs halved</li> <li>• Unit cost of loan 28% lower</li> </ul>
<p><b>Better information</b></p> <ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>Better work management</b></p> <ul style="list-style-type: none"> <li>• 1,500 hours saved yearly by eliminating progress-chasing phone calls</li> <li>• 15% increase in efficiency in 2 years</li> <li>• 20,000 hours of telephone time saved yearly</li> <li>• 20,000-hour annual saving through task automation</li> <li>• 40% increase in on-time installations</li> </ul>

- 70% of invoices now processed in the month of issue (was 40% before)
- 70% decrease in processing time (from 14.6 hrs to 4 hrs per document type, per day)
- Average of 30% improvement in users' personal efficiency
- Average time to approve expense requisitions fallen from 10 to 2 minutes
- Cycle time down 75%
- Cycle time reduced 30%
- Improved processing time (repair turnaround)—66%
- Manual process took 5 days on average and 1 full-time employee. Now down to 1 day; allowed reallocation of that employee
- Reduced average claim processing time by 75%, from 2½ months
- Rework down 33%
- Turn-round time 41% lower

***Better competitive position***

- 90% of expected service levels met
- Customer retention capacity increased by more than 10%
- Increased customer satisfaction (on-line versus telephone inquiries)—85%
- Number of installations up 25%
- Number of loans increased 55%

I have have not tried to average these out. Not every case has listed quantified benefits. Where they are listed, they are unaudited and arise from unknown and probably different bases of calculation. One cannot therefore do a like-for-like comparison. These results are indicative only.

Nonetheless, they are impressive. There are savings of millions of dollars, rapid paybacks, two instances of 20,000-hour time savings, and marked improvements in service, customer satisfaction and business volumes.

The only lack is that of quantified gains from better information or better delivery of it. Either these did not arise or people did not have the tools to measure them readily.

One might say that such good news is only to be expected. After all, these cases came from suppliers. This would be overly cynical. Each entry was signed off by the relevant user organization and, I imagine, gone over carefully before being released to the world.

The irredeemably mistrustful might even suggest that the users have colluded with the suppliers in producing these results. This would be to malign both. It is natural for an organization to wish to portray itself in a good light, but to go that far would be highly irregular. Besides, an examination of the finalists' cases printed in this book shows that self-criticism among users and suppliers is refreshingly common.

I believe these results present a genuine picture of a kind of system that can meet its promises. This is providing it is selected, designed, installed and managed properly—which these systems clearly have been.

But that is not all. See what unquantified benefits these users have got from their systems.

OTHER GAINS SUMMARIZED
<p><b><i>Financial improvement (unquantified)</i></b></p> <ul style="list-style-type: none"> <li>• Lower operating costs</li> <li>• Reduced revenue loss</li> <li>• Significant saving in inventory attrition</li> <li>• Staff retention improved, reducing recruitment and training costs</li> <li>• Was able to redeploy some staff</li> </ul>
<p><b><i>Better information</i></b></p> <ul style="list-style-type: none"> <li>• Access to repair statistics allows managers to view trends and react accordingly</li> <li>• Better document tracking and reporting</li> <li>• Better traceability</li> <li>• Can now track request status in real time</li> <li>• Central tracking of file status</li> <li>• Customers say the company knows their building schedule as well as they do</li> <li>• Improved communication across the entire installation process</li> <li>• Increased visibility of the manufacturing chain</li> <li>• Link to public Web site gives better information to citizens</li> <li>• Most important advantage is staff's visibility of processes</li> <li>• Now have an electronic record of all changes, including comments and ideas for new products</li> <li>• Process data is captured automatically</li> <li>• Process visibility across the business not possible before</li> <li>• Quick and detailed information available to customers</li> <li>• Readily available knowledge base</li> </ul>
<p><b><i>Better work management</i></b></p> <ul style="list-style-type: none"> <li>• Can pay claims faster</li> <li>• Can underwrite more applications</li> <li>• Eliminated a backlog of policy applications</li> <li>• Faster process execution</li> <li>• Faster turnaround of mortgage applications</li> <li>• Fewer errors</li> <li>• Formalization of rules for processing claims</li> </ul>



- Further possibilities for process automation
- Greater compliance with government standards
- Has improved service levels, increased volumes and added new clients without reducing margins
- Immediate implementation of process changes
- Improved network availability
- Improved processes
- Increased individual and corporate efficiency
- Increased quality of the business area
- Lower operating risks
- Management of changes
- More straight through processing
- Potential litigation hazards lessened
- Reduced risk and liability associated with non-compliance
- Sales staff can more efficiently schedule offers and other tactics
- Standardization of control levels
- Tools and data for continuous process analysis and optimization
- Underwriting quality improved
- Workloads now shared across departments

***Better competitive position***

- Can begin moving to our target operational model, servicing clients in their preferred location, language and time zone
- Allows us to stay ahead of the competition and move forward profitably and confidently with its business plan
- Clients think better of the business
- Faster loan processing than competitors
- Gives customers faster service, fewer errors and personalized service
- Greater corporate competitiveness
- Greater credibility when making new sales
- Greater customer satisfaction and loyalty
- Greater internal client loyalty
- Greater trust from customers
- Higher company reputation through better quality
- Improved company image through using industry-leading IT system
- Improved customer satisfaction and loyalty
- Improved dealer satisfaction - making it harder for competitors to take away revenue-generating customers
- Now a virtual hub, able to take in work from other organizations

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| <ul style="list-style-type: none"><li>• Reinforced business capability</li><li>• Some customers now take our information as input to their own processes</li></ul> |
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<p><b>Other</b></p> <ul style="list-style-type: none"><li>• Managers feel greater accountability</li><li>• Reduced paper use</li></ul>
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The first thing that strikes the eye is that there *were* gains made from better information or the better delivery of it. It would seem that users lack tools to measure these that are easy to understand and apply.

Another aspect that stands out in this imposing list is the number of qualitative reports of improvements in competitive position. These far outnumber the number of quantified reports on this topic. Perhaps an absence of suitable measurement tools is the problem here, too.

I had hoped to see if there was any link between the size of a project and how long it took. I also wondered whether organizations new to process management software got more or different benefits from those achieved by established users.

Neither analysis was possible. The competition entry form did not request details of the time to complete the project or the number of users. Consequently, there were too few results on either topic from which to try to draw even tentative conclusions. To continue the geological analogy from earlier, I drilled at an unexpected angle. Investigating these aspects will have to wait for another time.

#### WHAT WE CAN LEARN FROM THIS

If one were to add these two lists of gains together, the result would be a resounding endorsement of the abilities of process management systems. In aggregated form, these findings read like the ultimate supplier's brochure.

It is not the suppliers who alone create success, of course. These are users' stories and reflect their effort, skill, perseverance and courage.

This has been an intriguing exploration for me and, I hope, interesting for you. I must, though, sound a small warning. It is one thing to ask questions of case studies that were not expected when they were compiled. It is another matter, and potentially misleading, to draw firm conclusions from the answers one gets.

These cases are not a market survey but a few pieces of user testimony. Their value lies in the insight they offer. The results of this test drilling are not statistically significant, therefore.

As has been said, the plural of *anecdote* is not data.