



A CSC e4 SOLUTION

# Person-To-Person Business Process Management

## CSC e4<sup>SM</sup> INTEGRATES PERSON-TO-PERSON DECISION PROCESS MANAGEMENT SOLUTION FROM ACTION TECHNOLOGIES

Computer Sciences Corporation's global BPM Centre of Excellence has completed technical work that demonstrates the viability of end-to-end person-to-person processes embedded within end-to-end system-to-system processes, and vice versa, linking collaborative and transactional systems. The result is an industrial strength, enterprise class process management solution embodying the management of knowledge-related activities that accompany transactional processes.

Computer Sciences Corporation has selected Action Technologies as a “best in class” technology within CSC e4<sup>SM</sup>, a market-leading enterprise architecture. CSC has integrated Action's person-to-person business process management (BPM) capabilities within CSC e4 using web services. The combined solution is unique in the marketplace, integrating the “last mile” to the customer. CSC's process experts have confirmed that the solution can also drive improvement in IT Service Delivery processes. The two companies are collaborating to support the development and delivery of CSC e4 solutions that include decision-intensive processes.

Two examples illustrate the need for this systems integration:

**Order to Cash** is an end-to-end transactional process. However, to successfully complete the process requires the end-to-end management of commitments, negotiations and agreements by suppliers, partners and customers. A solution that does not take into account the dynamic interactions that are present in high-value transactions will only capture part of the business process. Organizations need a way to retain visibility into process status and control over execution costs whenever a process goes “off map.”

**Engineering change management** requires collaboration among the many parties involved in product design change. In some industries changes, and their impact on ongoing processes, persist for weeks, months, or, for example in the case of aircraft manufacturing, years. Cross-system transactions need to be processed so that the status of dependent changes is consistently reflected in all systems of record. Only the combined solution of transactional system-to-system and collaborative person-to-person processes can provide the long-term human-decision management involved in engineering change management.

Further examples are presented below in the areas of supply chain, logistics, insurance claims processing, service delivery, change management, fast moving consumer goods, help desk and work order and management processes, reflecting the breadth of the solution.

## PROCESS MANAGEMENT FOR KNOWLEDGE WORKERS

Action Technologies' resilient model of commitment and negotiation has been refined over the years, and has proven itself in areas such as new product development, customer self service, supply chain, corporate performance management, orders and fulfilment, provisioning of services, marketing processes, high touch sales, contract management, engagement management, vendor relationship management, human resource outsourcing, legal and compliance processes, budget review and approvals, and capital purchase approvals. The process solutions developed using Action are closely targeted on solving very specific business problems with high-impact returns on investment. This approach is very different from the weak business cases and functional compromises all too often associated with packaged application suites.

Traditional workflow and resource management solutions do not support decision-intensive business processes. The business processes that are crucial to an organization's strategy also are the most complex and dynamic, and nearly impossible to control using pre-packaged processes. Organizations need a solution that allows individuals and teams, internally as well as with partners and customers, to negotiate, collaborate, invent, and commit to activities. They need a solution that will monitor progress against agreed time and resource constraints. This is particularly important in processes where there is considerable interdependence among the different parties involved, which can make or break the overall success of the business or project. For more than 20 years Action Technologies has pioneered a business process model that solves this problem.

Action's solution has won multiple industry awards for its ability to allow decision-intensive knowledge work to be continuously analyzed, re-designed and subsequently re-implemented, leading to significant productivity gains. The approach is now coming of age because knowledge workers represent more than half of today's G5000 workforce, and are the largest investment for many organizations. Recognizing that knowledge workers create unique solutions, and that human behavior cannot always be predicted, the solution helps maximise the impact of decision-making and agreement about cross-organizational issues, particularly in areas of critical business planning.

Person-to-person business process management has broad applicability. It helps organizations better manage the process by which decisions are made. It fills a crucial gap in many business processes and provides a framework to significantly improve on unfettered and unmanageable electronic mail based communication or overly prescriptive transactional back office systems. Action allows an organization to analyze the performance of its business processes from a human perspective, focusing on how people work, rather than on how documents flow through an organization. Action tracks work from the initial request to perform activities through to the point where the customer declares satisfaction or, alternatively, identifies what remains to be done to fulfill the initial agreement. Action provides visibility into the preparation of work plans and the status of requests. It gives its users a means to negotiate about deliverables until agreement is reached about the activities to be performed, the services and products to be provided, and what needs to be done to complete the request. When a request is completed, Action provides completion reports and quality evaluations.

Action Technologies allows organizations to design specific decision-intensive processes with a view to realizing potential productivity gains. Delays in decision processes usually arise from poorly defined goals and needs, and from the inability of workflow technology to capture and drive the human intent behind electronic communications. Person-to-person processes must put a greater emphasis on analyzing

and executing the plans, negotiations, decisions, and commitments that people make, rather than on the outputs of data systems they use. Because Action's process tracks the history of each interaction, the underlying data is always readily available for analysis, fulfilling the adage of "that which can be measured can be improved." Steps may then be eliminated, consolidated, automated, or structured to process in parallel with other transactions. Individuals within negotiation and commitment processes are made accountable, leading to cycle time and cost reductions. Exceptions, a common source of delays whenever people collaborate, are accepted as the norm, and provisions to incorporate these exceptions are an explicit part of Action's software.

Unlike task-based workflows, the solution adapts to the way people actually work. Action empowers people to implement process improvement as part of their day-to-day work pattern while preserving a consistent process model that can be used by business analysts or process owners responsible for improvement. Innovations in productivity illuminated by this process can be put directly into operation, subject to management controls.

The most complex processes can be developed in days and weeks, with significant process improvement realized in months. Processes can be redesigned in real-time regardless of whether they have thousands of instances, as in support processes such as contract management, or only a few instances a year, as in core processes such as new product development. Activity monitoring, provided with the solution, includes real-time statistical reports, control charts and other graphical formats that are published via a portal and at the desktop. Based on this information, business owners can review where bottlenecks occur, examine whether the source of the issue is internal or external, analyze which portions of the process took longer than originally anticipated, discover how the process is trending over time, and, most importantly, take action to improve the process. The solution has been shown to be effective in facilitating Six Sigma and Balanced Scorecard improvements, increasing the likelihood of accomplishing business goals.

## ACTION TECHNOLOGIES AND CSC e4 ARCHITECTURE

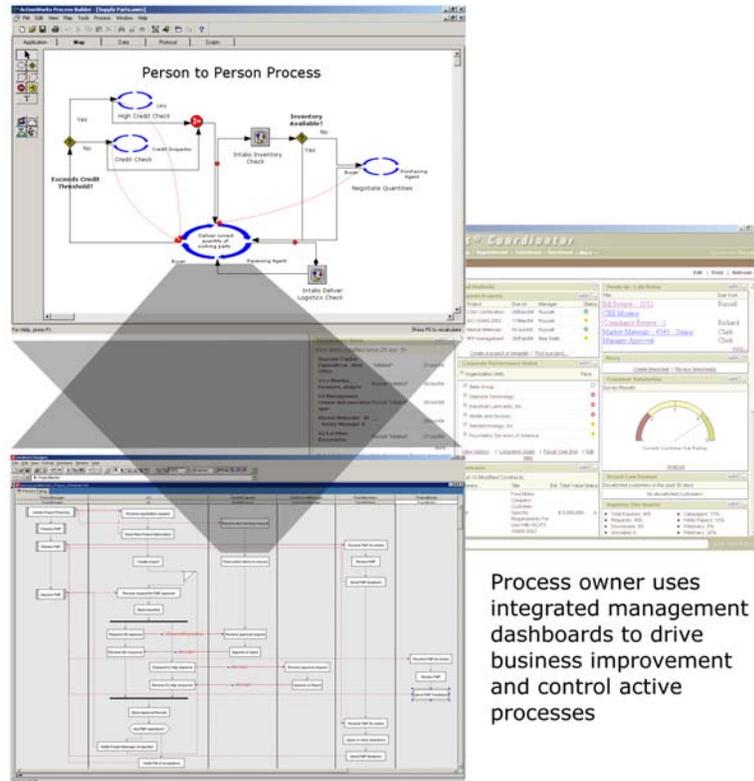
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CSC used web services to include Action Technologies within end-to-end transactional processes expressed in the Business Process Modeling Language (BPML) or the Business Process Execution Language (BPEL) and enabled using the Intalio Business Process Management System (BPMS). Specifically, processes managed by the Intalio BPMS can be invoked within processes managed by Action Technologies, and vice versa. Refer to Figure 1.

End to end, persistent,  
person to person decision  
management processes

Process designer uses  
Action Technologies and  
Intalio design tools to  
create business solutions

End to end, persistent,  
system to system  
transactional processes



Process owner uses  
integrated management  
dashboards to drive  
business improvement  
and control active  
processes

Figure 1 – Recursive embedding of collaborative and transactional processes  
(Screen shots are the copyright of Intalio Inc and Action Technologies respectively)

## ILLUSTRATIONS AND CASE STUDIES

**Supply chain** – Person-to-person management processes involving decision makers complement supply-chain forecasting and planning tools. Coordination, negotiation, and commitment tracking allow supply chain personnel to eradicate delays and resources tied up in resolving exceptions, to consolidate information from across the supply chain to provide accurate documentation such as customs declarations, to innovate to solve supply process problems, such as eradicating gaps or bottlenecks that could not be predicted in advance, to guide others in the efficient operation of supply best practices, and to implement time-based escalation procedures in cases where the performance of one supplier could jeopardize business performance up or downstream.

**Logistics** – A logistics company identified a way to match “lost and found” parcels and letters across distributed call centres and numerous depot operations using transactional business processes, integrating all required legacy database and CRM systems. But the company realized that items must also be physically found and re-routed and that this is a complex task requiring coordination across numerous sites. Decision management can be used to track and improve logistics exception handling while simultaneously keeping high-value customers informed on progress.

**Insurance Claims Processing** - The settlement of any insurance claim can be a complex process involving many stages. These stages range in content from automated business transactions through event driven processes to human based negotiation, commitment, and follow up. In many claims the ‘normal’ case is ‘unusual’—anything from fraud alerts to investigation results to problems with suppliers and consequential follow-on events can cause a re-evaluation and renegotiation to take place. Insurers, claimants and other stakeholders each stand to gain from a faster, more flexible, and more robust process. What is inevitably an end-to-end transactional process nevertheless has embedded within it end-to-end human collaboration processes across numerous parties, particularly in complex cases of commercial risk, for example, where it is important to track who has committed to whom, on what basis, and to what they have eventually agreed.

**Service Delivery** – A major private bank uses a person-to-person process management approach to manage all private client requests. These client requests are often non-recurring, complex, and often require the efforts of numerous areas in the bank to be completed. A client may want to buy land as an investment property in another country—a transaction that involves attorneys, real estate agents, and regulatory entities across international boundaries. Using a process approach solves the problem of knowing who has the next action item, and in what department the work is. This has allowed this bank to extend its reach to a wider band of prospective clients without hiring additional support staff. The person-to-person requests integrate with the established legacy ERP systems to ensure smooth issue resolution. The client calculates benefits of 366% ROI and 176% IRR have been achieved from this solution.

**Change management** – A major automotive parts manufacturer drives competitive advantage by using a person-person process framework to manage all aspects of change management for product changes. They understand they must coordinate all commitments and negotiations across a number of departments. Because they have embedded negotiation and commitment into their processes, they have recorded cycle time reductions of 60% - 75%, decline in defects of 33%, reduction in development costs of 50% - 70%, and an ROI of 362%.

**Fast-moving consumer goods** – New product introduction processes rely on decision management. It is critical for companies whose product categories are subject to complex and legally binding social or environmental regulations and requirements. Person-to-person decision management can be used to ensure that the associated marketing, legal, and manufacturing processes are implemented in a consistent fashion across the firm and by all suppliers and partners. Decision management complements product lifecycle management tools, supporting negotiations and commitments that implement necessary stage-gate and compliance checks, ensuring that everyone involved stays “on the same page.”

**Help desk and work order** – Traditional help desk software products excel at categorizing support calls, routing calls to the staff best able to deal with a particular category of question, recording the call status, and following up on open calls. However, with only limited pre-scripted workflow, help desk software provides no capability to drive process improvement and to support distributed teams who must work together to resolve the customer’s issue. Only a process solution can adequately track the commitments made to the customer and the responsibilities of those who agree to perform work in support of the work. A process solution can also help teams identify solution patterns and replicate them efficiently when other customers raise similar issues. A decision management process is needed to enable staff working on multiple trouble tickets or work orders to organize the work involved while keeping the customer involved in the resolution of the call and informed of progress towards a solution. By using transactional business processes to link help desk databases with decision support software service excellence can be improved over time and opportunities to empower customers with “self service” solutions can be identified.

**Management processes** – Rigid workflow and transactional back-office applications cannot support the knowledge-intensive activities that categorize many senior and mid-management processes, such as initiative planning and execution, contract and engagement management, legal and compliance processes, budget review, group decisions and capital purchase approvals. But this does not mean that management processes cannot be supported by IT. Goal-oriented individuals, who wish to reduce variability in the accomplishment of their objectives, recognize that their success depends upon the commitments made by others, and that these arise through complex negotiations around constraints such as time, resource and risk. Leading companies are integrating the disciplines of finance, engineering, strategy, statistics and asset management using principles of decision and portfolio management. Companies are starting to take a more process-based approach to managing strategic commitments and performance against strategic plans and goals.

## ABOUT ACTION TECHNOLOGIES

For more than 20 years, Action Technologies ([www.actiontech.com](http://www.actiontech.com)) has delivered award-winning Business Process Management (BPM) software that reduces the time and cost of decision-driven processes by 40-60% and typically generates returns of more than 300%. The ActionWorks® Suite enables our leading global customers to analyze, redesign, implement and continuously improve their operations through a patented system for managing negotiations and commitments.

Action Technologies software solutions support people as they plan, decide and act in risky and uncertain environments. Using a patented model that helps people negotiate agreements and monitor the work resulting from those agreements, interactions are far richer and more flexible than the task based model used by all other systems.

For more information about the Action Technologies solution, visit Action's website at [www.actiontech.com](http://www.actiontech.com).

## ABOUT COMPUTER SCIENCES CORPORATION

Founded in 1959, Computer Sciences Corporation is a leading global information technology (IT) services company. CSC builds long-term relationships with clients and partners in industry and government to deliver optimized business performance by developing, operating and continuously improving technology-enabled end-to-end business processes. CSC develops innovative processes that are crafted to meet the specific challenges of its clients, enabling them to profit from the advanced use of technology.

Since its invention of Business Process Reengineering, CSC has developed and maintains a "process-first" view in using technology to solve business problems. That view is today an integral part of CSC's tools, methodologies, architectures and approaches. In its own operations, CSC's processes have been independently rated among the most rigorous and mature in the world. CSC's capabilities in software engineering, information security, and integration have achieved the highest ratings by CMM; its global network and data centers are ISO 9000 certified; and CSC achieved Six Sigma performance in critical services for a global client.

Business Process Management is a new field in which CSC took a leadership role. CSC was a founder of the Business Process Management Initiative (BPMI.org) in 2000 and has subsequently been elected as the group's co-chair for 3 consecutive periods. BPM allows non-technical users to automate and modify the business processes they manage, enabling them to respond quickly to changes in the enterprise, without having to spend months reworking application software. Howard Smith, chief technology officer for CSC in Europe, wrote the definitive book, Business Process Management: The Third Wave, published in December 2002. It demonstrated how managing processes at the intersection of business and IT is a determinative factor of success. The book became a business bestseller.

With approximately 90,000 employees, CSC works with its clients around the world by applying leading process technology and CSC's own advanced process management capabilities. Headquartered in El Segundo, California, CSC reported revenue of \$13.8 billion for the 12 months ended Jan. 2, 2004. For more information about CSC's services in IT and Business Process Management and Outsourcing, visit the company's Web site at [www.csc.com](http://www.csc.com).

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