

**Industry:**  
Services — Consulting

**Organization:**  
Covansys

**Description:**  
Covansys is a global technology services company, with a focus on Industry-Specific Solutions, Strategic Outsourcing and Integration Services. Covansys helps customers address challenging technology issues through a unique on-site, off-site, offshore delivery model that helps achieve rapid deployment, world-class quality and reduced costs.

**Business Problem:**  
Covansys needed to ensure that onsite, offsite, and offshore development teams were communicating clearly at the technical level, and that the projects followed a clearly defined development process.

**Solution:**  
Rational Unified Process  
Rational RequisitePro  
Rational Services

**Key Benefits:**  
Ensures that onsite, offsite and offshore teams understand each project and its priorities

Promotes project success through a customized RUP process that geographically distributed teams follow on every project

Mitigates project risk and speeds delivery by following RUP best practices such as "Develop Iteratively" and "Manage Requirements"

Uses RUP best practices to involve the client in defining the system and keeping the client informed of progress

Uses RUP to ensure business success, where development deliverables and business conditions are based on a clear understanding of project scope.

**Rational** software

## Covansys Builds Business Success with Offshore Development Model and Rational Unified Process®

How do you manage risk when your business is global software consulting and you are providing onsite, offsite and offshore development services? As a global software consulting organization, Covansys faced typical system integration challenges such as meeting customer needs, delivering with speed and quality, controlling costs, and gaining repeat business. As practitioners of onsite, offsite and off-shore development, they had to ensure that all teams in all locations understood each and every project and its priorities—and that these teams were communicating completely and clearly. Covansys solved these tough challenges by adopting the Rational Unified Process platform and Rational tools.

Covansys has been using RUP® since it was introduced. They have found that RUP helps them reduce risk by: improving communication on onsite/offsite/offshore development projects; delivering software more quickly and cost-effectively; and ensuring appropriate client interaction and involvement. Kirti Vaidya, Senior Director, E-Business for Covansys explains, "We started using Rational Unified Process because we were doing component-based development using the UML, and RUP works hand-in-hand with both. Over time, we have found that RUP delivers many additional risk-reducing benefits," he says. "The iterative development approach helps us complete the most critical project priorities first, and we can split large projects into several smaller, more manageable iterations."

### Delivering with Speed and Quality

The core principles of the RUP approach help Covansys to deliver projects much more quickly. Covansys customizes RUP from a best practice standpoint. As examples of this, the "Develop Iteratively" best practice gives them improved control, over early risk mitigation. "Use Component Architectures" leverages Covansys' skills-base in J2EE and .NET architectural patterns so that development can proceed more quickly, and "Model Visually" provides a common technical language platform across for Covansys' onsite and offshore teams thereby reducing communication-related delays.

On a Web site prototyping project that Covansys was completing for a client, the typically expected completion schedule was one to two months. By employing these best practices through RUP, Covansys was able to operate like a SWAT team, delivering the completed project in 3 weeks and at a lower than expected cost. On this and many other projects, Kirti feels that RUP has helped Covansys consistently deliver with speed and quality.

### Addressing Offshore Development

Communication Needs Covansys has learned that strong communication is crucial to the success of offshore development projects. Language and time zone issues are common concerns that Covansys addresses by conducting business in English and ensuring that its more than 4,000 employees are well-versed in the Covansys work culture. "We have been practicing offshore development for more than ten years," he explains, "and we initially experienced communication problems across multi-site development teams that threatened project success. We identified the need for a structured technical communication solution. Today, our customized RUP process



provides the strong basis we need for technical communication and helps ensure successful completion of offshore development."

Covansys has customized their offshore development processes by creating and adding "Multi-site Management" artifacts to RUP. These artifacts, which were created over time based on project needs, have been added to Covansys' customized version of RUP using RUP's process engineering tools. The artifacts define a 'software development assembly line' for offshore development that keeps team members in synch. The artifacts also explain the process for transitioning project components between onsite, offsite or off-shore teams, as well as when and how project control passes between teams. As project activities and components transition from one team to another, Rational tools provide key artifacts that help teams quickly and clearly understand project and iteration priorities at the technical level.

One of the MultiSite Management activities that Covansys has added is called the "Golden Loop". It synchronizes multi-site teams and ensures that the process workflow is being followed. The "Golden Loop" is iterative to ensure that projects not only start on track, but also stay on track during each iteration. A set of auditing, control and monitoring activities are determined from the planned workflows for the project and performed during the iteration, thus ensuring that the onsite/off-site/offshore assembly line of activities and artifacts continually adheres to the RUP customization for that particular project.

## **Client Interaction, Powered by RUP**

By using RUP and Rational tools, Covansys is able to ensure successful client interaction throughout the project. They employ RUP best practices, and base the project's deliverables on RUP phases or iterations as per the client's need to see progress. Due to the project knowledge and definition they gain early on by following RUP, they are able gain client commitment on scope in advance.

Covansys uses Rational® RequisitePro® for requirements management on many projects because it dovetails with RUP and integrates with visual models created in Rational modeling tools. During RUP Inception and Elaboration phases, Covansys works at the client site to gather requirements and develop use cases and architectural models. After validating these with the client, they have a good handle on the project and can proceed confidently with onsite, offsite or offshore development using a version of RUP that is customized to project needs. Frequent reviews, phase-end formalities and iteration releases serve to keep Covansys and the client in close communication throughout the project.

One case in point is a financial application project where the client had completed requirements prior to calling on Covansys. As Covansys went through RUP's Inception and Elaboration phases, they discovered incomplete requirements and several unknowns regarding company-to-company system integrations and production environment systems. Through use cases, interface prototypes and architectural diagrams that were validated with the client, a more complete set of requirements was documented, and the client committed to the broader and more specific project scope.

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— Kirti Vaidya,  
Senior Director,  
E-Business

"This financial application project had the potential to be a failure, but instead it was a success due to our ability to define the right solution from the start. And because we were successful, we gained repeat business from this client," says Vaidya. "When we understand 80% of the project's requirements in Elaboration, we can review the estimates and mature them to a very high level of accuracy. We explain this process in our proposals, and this gets us off to a good start with our clients."

On a different project to rewrite a client/server system into a Web-based system, Covansys encountered the need to manage scope. Additional requirements and changes came in during the Elaboration phase of the project because of the client's revised needs. Covansys was able to perform an impact analysis and explain to the client where and how the project deviated from the originally defined scope and plan. "The client had useful information for determining the balance between functionality, schedule and cost that they were comfortable with. This avoided the need for painful negotiations during the project and helped us manage our costs," Kirti adds.

Covansys is also able to use the metrics and data generated throughout the project to keep the client informed on progress. They track and share project status information, giving clients a real sense of what has been accomplished at what cost. "We can confidently discuss ROI measures with our clients, and we feel it is a competitive differentiator. In some cases, we base payment on completion of RUP milestones. Without RUP, we would not have the confidence to do this," he concludes.

### **Rational Services Accelerate Success**

Even with RUP process experts on staff, Covansys still uses Rational Services to build employee and client skills. Employees use Rational University training to become Certified Consultants, and learn additional Rational tool and best practice areas. Rational's Web-based Training courses are popular because they can be completed on a flexible schedule. They access the Rational Developer Network<sup>SM</sup> as needed, particularly to build skills on J2EE and .NET.

Both the client and Covansys work together on development in some projects. Covansys leverages tailored onsite Rational University training to bring the client up to speed on RUP before it is used on the project. The tailored courses generally include material on the benefits of RUP's iterative approach vs. the waterfall method.

### **Business Success Through RUP**

"We have been very active and successful in both the software development and offshore project delivery areas for the past decade. Rational Unified Process plays a pivotal role in helping us manage development risks, ensure strong team communication and manage customer needs and expectations. Overall, we are highly confident in RUP. It is a process that we can turn into client success," concludes Vaidya.

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## About Rational

Rational provides a software development platform that improves the speed, quality, and predictability of software projects. This integrated, full life-cycle solution combines software engineering best practices, market-leading tools, and professional services. Ninety-six of the Fortune 100 rely on Rational tools and services to build better software, faster. This open platform is extended by partners who provide more than 500 complementary products and services.

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