A Telelogic Success Story: Manufacturing

SYNERGY



Telelogic SYNERGY/Change[™] Looks Good to Leading Consumer Electronics Manufacturer

- Customer: One of the world's largest electronics companies and a global leader in designing and manufacturing high quality technology products for consumers and businesses.
- Situation: Under pressure to reduce time to market, the company finds that change management is one of the main inhibitors to a fast turnaround. Its software development process is often delayed because of numerous rounds of code changes, bug fixes and enhancements prior to final product release.
- Solution: The company selects Telelogic SYNERGY/Change to manage the entire change management lifecycle. The solution establishes lines of communications within remote project teams, enhances productivity and ensures high quality standards across a broad range of products.
- Bottom Line: SYNERGY plays a vital role in delivering change management best practice and ensuring product consistency. This has had a positive impact upon the company's software development processes.

The Story

One of the industry's largest players in consumer electronics selects Telelogic SYNERGY/Change for change management. The manufacturer's technology group spearheads the move to SYNERGY to foster a real-time, remote working environment that encompasses more than 20 geographically dispersed sites and hundreds of different projects.

Inherent in the software-driven nature of modern embedded systems development are tremendous time-to-market pressures. It can take from nine months to two years to develop a new piece of embedded software, but often market demands do not allow the company to wait that long.

"SYNERGY delivers the ability to monitor individual activities in detail at every stage of the change request or enhancement lifecycle. Without such a sophisticated solution, our development teams would incur delays and massive project cost overruns."

– Director, Design Technology Group





Unfortunately for this manufacturer, its software development process is inefficient due to the many rounds of code changes, bug fixes and enhancements prior to a final product release. The company seeks a solution to increase productivity, reduce delays and focus the development efforts of systems analysts, integrated circuit designers, programmers and project managers.

Finding the right commercial solution proves more difficult than the company imagines. "There were a number of products on the market, but we knew that whatever tool we chose, it was vital that everyone had access to the system for it to deliver its key goal: helping project teams collaborate in the truest sense of the word," says the director of the design technology group.

"Without such a sophisticated solution, our development teams would have incurred delays and massive project cost overruns."

SYNERGY: Change Management on a Global Scale

The company selects Telelogic SYNERGY/Change to underpin its global product development organization. According to the director of the design technology group, SYNERGY/Change delivers a powerful way to maximize collaboration, project quality and, most importantly, it helps to prevent incorrect software releases from reaching manufacturing. "SYNERGY delivers the ability to monitor individual activities in detail at every stage of the change request or enhancement lifecycle. Without such a sophisticated solution, our development teams would incur delays and massive project cost overruns," he says. "Our programmers are based in Bangalore, India, while many of the project teams are located in the United States, U.K., the Netherlands, France and Germany, and our manufacturing base is split across Singapore, China and Taiwan."

The Benefits

With Telelogic SYNERGY/Change, the company leverages a change management solution that manages and progresses change requests and enhancements across the development lifecycle. The solution replicates project information overnight between countries and makes project data available in real time over the Web, standardizing change-reporting processes across three continents.

SYNERGY is such a success, the company progresses with plans to implement Telelogic DOORS® to improve its requirementsmanagement process as well as to increase communication and collaboration among its global development teams.

About Telelogic SYNERGY

Telelogic SYNERGY is an integrated family of tools for change and configuration management, which provides lifecycle control for a company's software development assets. Giga Research¹ stated, "SYNERGY/CM is one of the most mature products on the market," and French analyst firm Yphise² wrote, "SYNERGY/CM is the market leader and demonstrated a clear differentiating comparative advantage."

About Telelogic DOORS

Used by more than 100,000 professionals at over 1,300 companies around the world, Telelogic DOORS is a multi-platform, enterprise-wide system for capturing, linking, tracing, analyzing and managing changes to information to ensure a project's compliance to specified requirements and standards. META Group³ stated, "Telelogic DOORS is the market share leader for requirements management products and has the most complete lifecycle integration." The Standish Group⁴ also hailed DOORS as the market share leader.

About Telelogic

Telelogic is the leading global provider of solutions for advanced systems and software development. The company's requirements-driven solutions span a project's entire lifecycle, from initial analysis and planning through development, testing and tracking. Solutions include Telelogic DOORS for a structured requirements management process, Telelogic TAU[®], a unique visual development environment and Telelogic SYNERGY for lifecycle control by change and configuration management. These best-in-class software tools improve visibility and collaboration, enabling companies worldwide to deliver better software and systems faster.

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¹⁾ Market Overview 2003: Enterprise Software Configuration Management,

Market Overview 2005: Enterprise Software Configuration Management, Uttam Narsu, Giga Research, July 2003.
Application Change Management Software, Laurent Mynard, Yphise, 2002.
Mastering the Requirements of Requirements Management: Application Delivery Strategies, Integration & Development Strategies, Thomas Murphy, META Group, April 2003.
What Are Your Requirements? 2003, The Standish Group, Inc., 2003.

A Telelogic Success Story: Banking

DOORS



BANKINVEST

BankInvest Profits from Using Telelogic DOORS® to Streamline Processes

- Customer: BankInvest Group, one of Denmark's leading asset managers of mutual funds and large portfolios for private institutional and commercial clients.
- Situation: The firm needs to streamline requirements management for thousands of rules, regulations and policies that must be constantly amended and updated.
- Solution: BankInvest chooses Telelogic DOORS to manage and link all of the organization's information, activities and processes, including internal and external requirements and automated reporting.
- Bottom Line: Telelogic DOORS improves efficiency, streamlines processes and helps BankInvest adopt best practices throughout the organization for superior customer service.

The Story

Like all financial institutions, BankInvest, headquartered in Copenhagen, Denmark, is governed by thousands of rules, regulations and policies, which are constantly changing. The company finds making updates is a highly complex process that is inefficient and time consuming.

"In 2000, Bjarne Nørgaard Eriksen, deputy director, and I were employed to drastically improve how BankInvest manages, documents and controls processes within the organization," remembers Jakob Hermansen, head of risk management. "We came up with the idea of building a model for how all the different activities and processes inside BankInvest were linked to each other and how they all related to meeting a set of specific requirements."

The team at BankInvest looks for a requirements management solution and finds that Telelogic DOORS is the only tool that meets its needs. DOORS is flexible enough to grow and change with the company. Today, DOORS is an intrinsic part of BankInvest's requirements and

"Adding value, reliability and control of processes is what is important to us. Telelogic DOORS allows us to achieve this in a unique and powerful way – and saves us time in the process."

– Jakob Hermansen, Head of Risk Management





process management activities and helps the organization stay flexible and extend best practices throughout the organization.

DOORS Makes the Complex Manageable

BankInvest creates a DOORS module to manage and link all of the organization's information, activities and processes that affect and influence each other, including internal and external requirements, activities and controls, automated reporting, software applications, data, IT infrastructure, risk management, and tests. Hermansen and his colleagues add more external documents to the DOORS database, including laws and restrictions from the government, tax authorities, financial bodies and audit firms. The company now has a very powerful tool to manage external and internal requests and activities.

BankInvest integrates its corporate systems with DOORS ensuring that each employee always accesses complete, up-to-date information about how to perform each activity. The DOORS database also drives new development and updates to the other systems. This makes many common processes, such as certification audits, much more efficient.

"Auditors can instantly see how BankInvest meets all of their requirements – how we handle investments, trading, verification and documentation, who is involved and with what frequency," Hermansen says. "Before DOORS, they basically had to go around and ask everybody to find out how things worked and the documentation of the performance was not expressed according to today's standards. Now, with DOORS, the audit process is faster both for us and for the auditors."

DOORS also contains specifications for the entire IT infrastructure, including networks, hardware servers and software, with specifications on which systems at BankInvest are dependent on which IT infrastructure.

"This is excellent from a risk management point of view," claims Hermansen. "We can instantly spot which of our business-critical activities would be impacted by technical failures in different parts of the infrastructure. Conversely, we have set up rules for how much downtime we can accept for each activity. By drilling down from this, the IT department can see exactly how they need to secure our business by, for example, setting up a certain server configuration or establishing a back-up procedure.

"When a change in a process or activity is entered into DOORS, we can see immediately how this will affect other systems outside DOORS – in effect creating new requirements for the ongoing development of our in-house systems," Hermansen adds. "Adding value, reliability and control of processes is what is important to us. Telelogic DOORS enables us to achieve this in a unique and powerful way – and saves us time in the process."

Benefits

BankInvest has been phenomenally successful and has grown from 60 to 116 employees over the past five years. "When you grow so rapidly it is often difficult for administration and documentation to keep up," Hermansen says. "DOORS has helped us manage this growth, and as BankInvest adds new business activities and products to its portfolio, DOORS allows us to reuse definitions and get new activities up and running quickly and reliably.

"DOORS also saves us resources and ensures that BankInvest's standards for adding value, reliability and control are very high," Hermansen adds. "This makes our employees more secure, it makes our auditors more satisfied, and ultimately, it should make our customers more confident in BankInvest's services and products."

About Telelogic DOORS

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A Telelogic Success Story: Communications

DOORS



Global Communications Network Provider Calls on DOORS and Cuts Time to Market in Half

- Customer: A Fortune 500 global leader in mobility, optical, software, data and voice networking technologies that designs and delivers the systems, services and software to drive next-generation communications networks.
- Situation: This telecommunications infrastructure giant combines a number of resources to create a single, global organization – the Mobility Business Unit – to react rapidly to industry developments and marketplace opportunities. Time to market is critical and a delay of even a few days can mean significant financial and market share losses.
- Solution: The company selects Telelogic DOORS® to formalize requirements capture during the systems engineering process. Streamlining processes and reusing requirements maintains quality and reduces time to market.
- Bottom Line: Managing requirements becomes a mission critical capability for the worldwide Mobility Business Unit. The communications network provider reduces cycle time for systems engineering and time to market for new products is slashed by 50 percent after deployment and integration of DOORS into its development process.

The Story

The company, one of the industry's largest global players, combines a number of resources to create the Mobility Business Unit – a single, global organization that reacts rapidly to the latest industry developments and marketplace opportunities.

In this industry, a delay of even a few days can mean significant business losses so time to market is critical. Meeting the changing needs of multiple global markets makes strong requirements management essential. As such, the company selects Telelogic DOORS. "Since using DOORS in our development process, we've significantly reduced our systems engineering interval, which positively impacts our business."

Director of Systems
Engineering





The company uses DOORS to define and record complex specifications within a single global repository, ensuring systems engineers can instantly access all necessary information without having to search multiple documents or databases.

"Using DOORS to underpin the business unit's development processes offers the chance to vastly improve the way we manage the formation and documentation of all requirements during the development of hardware and software," says the director of systems engineering for the Mobility Solutions Group.

DOORS: A Mission-Critical System

For this telecom giant, DOORS and its industry-leading requirements management capabilities are more than helpful – they are mission-critical.

The Mobility Business Unit needs to support its customers in the best possible way. Operating as a global, 24/7 manufacturing organization and working seamlessly together is a given. DOORS helps the business unit gather requirements from disparate geographic markets and makes them available for the manufacturing groups around the globe. As such, DOORS delivers a high degree of commercial flexibility that is vital to the success of the business unit and its multiple global development sites.

"We're seeing a return on our investment through interval reduction, quality improvement and a sharing of knowledge."

"DOORS provides a global, distributed requirements database that supports up to a thousand users worldwide," says the director. "Our users are able to talk in a common language on an unprecedented scale. Because DOORS is a single, open source for information, geographically diverse development sites share and reuse information and there's no needless repetition of the same processes.

"It's a clear indication of how valuable requirements management is to us that we have made such a large investment in Telelogic and DOORS," he continues. "We're seeing a return on our investment through interval reduction, quality improvement and a sharing of knowledge."

The Benefits

DOORS transforms the speed of the business unit's development process. The company formalizes requirements capture during

the systems engineering process and now reuses this information in different products and future releases of the same products. The result: high quality and reduced time to market.

The director explains, "If we don't have the traceability in place to see precisely where changes have occurred and why, we can soon run into difficulties. Telelogic DOORS allows us to view and interrelate all the development information during the product lifecycle. Since using DOORS in our development process, we've significantly reduced our systems engineering interval, which positively impacts our business."

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A Telelogic Success Story: Academia

TAU





Telelogic Tools Pass the Test at Queen's University of Belfast

- Customer: The School of Computer Science at Queen's University of Belfast, recognized globally for its research into software and system design.
- Situation: Students need to gain real-world experience to meet the demands of a highly competitive global software and systems development marketplace.
- Solution: Telelogic donates the TAU Generation1 tool family, US\$350,000 worth of software for use in one of the university's most popular courses: Rigorous Software Design.
- Bottom Line: The course is so successful that the university plans to introduce Telelogic TAU/Developer[™] and Telelogic TAU/Architect[™], based on ULM[™] 2.0.

The Story

Telelogic donates US\$350,000 worth of its TAU Generation1 family of software development and testing tools to the School of Computer Science at Queen's University of Belfast.

As one of only two universities in Northern Ireland, Queen's has produced many of the high quality graduates now working within some of the country's thriving industries. Two of these industries, software engineering and telecommunications, have enjoyed particular success in recent years, and this growth has been, in part, attributable to the work of the School of Computer Science at Queen's. The school, one of the first of its kind in the U.K., consequently enjoys an enviable reputation within the business world for its research into software and system design.

"Telelogic's tools are leading the market today and are perfect for helping our students gain the hands-on experience they need."

– Dr. Khaled Benkrid, Lecturer of Computer Science, Queen's University of Belfast





"We try to put Computer Science into the context of the wider world," says Dr. Khaled Benkrid, lecturer in Computer Science, Queen's University. "Local industry is looking for the systems and software designers of the future and it's our aim to equip students with the practical skills they need to gain an edge in the market. We also encourage students to undertake research that will eventually have a real-world application."

The university uses Telelogic software in one of its most popular courses: Rigorous Software Design. Already in its third year, the course educates students about the Unified Modeling Language (UML) for analysis, systems modeling and design, as well as how to design and build real-time, event-driven communications systems. Students leverage Telelogic tools in practical sessions, and in the final year, use them to research and create their own software systems.

"The aim of this course is to produce students capable of complex software development using formal, recognized techniques," says Dr. Benkrid. "To do that, we need to educate them with the skills to use the latest sophisticated software suites currently available on the market. Telelogic's tools are leading the market today and are perfect for helping our students gain the hands-on experience they need."

"TAU Generation2 demonstrates once again that Telelogic is a real innovator in the systems and software design industry."

Hands Up for Hands-on Experience

As TAU Generation1 tools support many of the widely used techniques practiced today, they have been extremely valuable. Students begin to use and understand the functionality of the UML standard and learn how it can transform the development process using Telelogic's UML Suite. In turn, Telelogic's SDL Suite shows students how the Specification and Design Language (SDL) can be used as a common framework for requirements and specifications of the event-driven systems that are widely used in products developed for the telecommunications industry.

The course is so successful that the University plans to introduce Telelogic's enhanced TAU Generation2 tool family, which supports the latest version of the Unified Modeling Language (UML 2.0). "TAU Generation2 demonstrates once again that Telelogic is a real innovator in the systems and software design industry," says Dr. Benkrid. "We believe that with TAU Generation1, and now with TAU Generation2, we're able to equip our students to meet the most pressing industry challenges."

The Benefits

"When our students go into the workplace, they will face increasingly difficult demands for higher quality products to reach the market faster than ever," says Dr. Benkrid. "Inevitably these demands will be reflected in the sophistication of the software development processes they follow. TAU Generation1 and TAU Generation2 especially are among the most sophisticated tools for design and verification. By using them, our students learn how to automate many of the usually manual development tasks to ensure they can deliver products to market faster, as well as ensure that the software is as error-free as possible. We believe the experience of using Telelogic's tools offers our students a really valuable edge when they enter the job market."

About Telelogic TAU

Telelogic TAU is an integrated family of analysis, modeling, design and testing tools that provides a unique visual development environment. This simplifies, automates and accelerates the production of advanced systems and software. Industry analyst firm Gartner¹ wrote, "Telelogic's TAU Generation2 is the co-market leader... for (Object Oriented Analysis and Design) modeling of real-time applications." That same year, TAU/Developer was awarded four out of five stars after an in-depth product review conducted by *Software Development*² magazine, which equates to "Great" and "Probably belongs in your shop" on the magazine's rating scale.

About Telelogic

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1) The OOA&D Market: 2004 Vendor Update Details, Michael Blechar, Gartner, August 2003. 2) Software Development, April 2003.



A Telelogic Success Story: Communications

DOORS



Telelogic DOORS Helps Worldwide Leader in Mobile Communications Connect with Carrier Requirements

- Customer: A leader in the consumer electronics industry, known for its ability to integrate R&D, manufacturing and sales operations.
- Situation: The company operates multiple product design and development sites in the United States, United Kingdom and Japan (as well as a subsidiary in China) to serve these regional markets. It is under pressure to develop new products that meet the differing requirements of telecommunications carriers, service providers and end users around the world. The company needs to unite the design centers, streamline collaboration and manage requirements of wireless communications software across the enterprise.
- Solution: The company deploys Telelogic DOORS at design centers in England, Japan and China.
- Bottom Line: DOORS helps provide a competitive advantage by managing requirements at all levels and for specific regions, effectively and efficiently.

The Story

A mobile communications company introduces a complete, integrated communications device with vibrant color images and sound for voice conversation, instant text messages, Internet access and a 110-megapixel CMOS camera. To capitalize on this success it must quickly release line extensions and develop additional products that leverage its technology. Achieving these goals will satisfy the escalating demands of telecommunications carriers, service providers and end users around the world – each with specific requirements.

Requirements management has become an increasingly important resource for the company, as the complexity of the phones and demands of the market have increased significantly.

"Telelogic DOORS helps us produce mobile phone handsets on a global scale by effectively managing customer requirements from telecommunications carriers in each geographic region. It lets us cost-effectively create a developmental architecture that is customizable for different markets, including managing requirements tailored for products from high to low end in each market."

– Senior Staff Engineer, Systems Engineering Group





The company begins using Telelogic DOORS in 2002 to merge the individual requirements of customers with the engineering requirements of product development. As a result, DOORS plays a critical role in developing technology for the unique demands of all levels of the telecommunications industry. In the quest for greater efficiencies and faster time-to-market, the company creates a task force to consider how DOORS could deliver even more advantages.

The task force determines that the company should link all global design centers with a centralized DOORS database in Atlanta, Georgia. After a four-month deployment process, the task force uses Citrix servers to deploy DOORS at design centers in Thatcham, England; Yokohama, Japan; and Beijing, China. This architecture provides each design center with seamless access to the central DOORS requirements management database in Atlanta, which runs on a separate, well-protected server with backup.

Telelogic DOORS Provides a Powerful, Global Solution

As the world's leading requirements management tool, Telelogic DOORS captures, links, traces, analyzes and manages information to ensure the project's compliance with the customers' requirements and standards. It revolutionizes systems and software projects with Dynamic Requirements Management, the practice of effectively managing an evolving set of requirements within a complex incremental development project.

"It helps us cost-effectively create a developmental architecture that is customizable for different markets..."

The Benefits

With DOORS up and running, each product design center can work simultaneously on three product lines. Previously, each design center could only work on one product line at a time.

"Telelogic DOORS lets us respond to the demands of producing these handsets on a global scale by effectively managing customer requirements in each geographic region," says a senior staff engineer of the Systems Engineering Group, which spearheaded the company task force.

"It helps us cost-effectively create a developmental architecture that is customizable for different markets, including managing requirements tailored for products from high to low end in each market." Other benefits of extending DOORS to additional sites are:

- More productivity due to enhanced communication among product design centers and with system engineer liaisons at customer sites.
- The ability to quantify requirements through compliance to customer specifications.
- Being able to detect and understand when separate requirements contradict each other.

DOORS provides this wireless communications market leader with a significant advantage. The company now brings the best products to market in the shortest time by strategically using requirements management in a creative, global solution, resulting in higher volume sales and greater market penetration.

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A Telelogic Success Story: Consulting

SYNERGY



Telelogic SYNERGY/CM[™] Helps Leading Global Human Resources Consulting Firm Boost Productivity by 18 Percent

- Customer: A leading global human resources consulting firm.
- Situation: The company's Internet development group needs to find a way to meet evershrinking application development deadlines. The group enables Web access for the company's benefits outsourcing clients, which lets employees manage their benefits, including pension, 401(k) and health plan benefits, online.
- Solution: The company selects SYNERGY/CM to meet increasing customer expectations for faster project delivery and provide its development organization with more control. Currently all e-services Web development groups use this product.
- Bottom Line: The consulting firm achieves all of its initial project objectives after a successful implementation. These include raising productivity of its Web development group by 18 percent, speeding the delivery of Web-enabled services and increasing overall quality.

The Story

As a global human resources consulting firm, this company helps organizations get the most from their employees by reducing administration and pension plan costs, tackling tough personnel issues and increasing ROI.

Unfortunately, the company struggles with its own extremely complex technology systems. This leads to inconsistencies that cause many time consuming broken builds. As such, a high level of consistency in software configurations spanning the entire development process is needed. In addition, the ability to isolate problems that may occur along the way, especially querying of all tasks and identifying conflicting changes, is a key capability that the company looks for.

"Telelogic SYNERGY/CM speeds up the development process because it guarantees the consistency of our software configurations all along the process... We have realized at least an 18 percent improvement in productivity using SYNERGY/CM."

– CM Systems Administrator





The company completes an in-depth review and chooses SYNERGY/CM. With its advanced configuration management capabilities, the company's development team is now able to isolate and fix any build that may break with maximum efficiency.

"Our systems are extremely complex and there are thousands of variants," says the CM systems administrator for the company. "SYNERGY/CM speeds up the development process because it guarantees the consistency of our software configurations all along the process."

SYNERGY/CM also enables the company to close the development and maintenance loop, especially the querying of all tasks. "The ability to isolate problems is a huge advantage," says the CM systems administrator. "If a build breaks within our environment it is important to find a resolution as quickly as possible and with SYNERGY/CM tasks, we are able to do exactly that. SYNERGY/CM helps us isolate problems so that we can fix them immediately. It also speeds up the bug fixing process significantly so it's night and day using SYNERGY/CM versus not." In addition, due to improvements in predictability and repeatability, developers and testers no longer waste time on failed or incomplete builds.

"The sophistication of SYNERGY/CM... allows us to manage a very complex environment."

Measurable and Impressive Gains

Using Telelogic software, the company's Web Development Group increases productivity and cuts costs on many levels. The CM systems administrator attributes the following gains and performance benchmarks to Telelogic SYNERGY/CM:

- Automation workflow improvements help teams achieve more than 18 percent productivity gains.
- Each developer saves several hours of work every week.
- An average of 90-100 builds a day are completed, which would require five times more developers to complete if SYNERGY/CM were not in place.
- Two change management system administrators manage 640 developers many other CM systems require one administrator per 35 developers.

"We could not do what we're doing today with a file-based change management system," the CM systems administrator says. "The sophistication of SYNERGY/CM... allows us to manage a very complex environment."

The Benefits

Prior to using Telelogic software, the company – widely regarded as people management experts – was not getting the most from its own technology personnel. With Telelogic SYNERGY/CM, the company's Web Development Group cuts costs and boosts productivity while bringing consistency, responsiveness and efficiency to an otherwise problematic and cumbersome process.

"SYNERGY/CM makes our life easier by giving us the control and predictability essential to meeting our customer's expectations," the CM systems administrator says.

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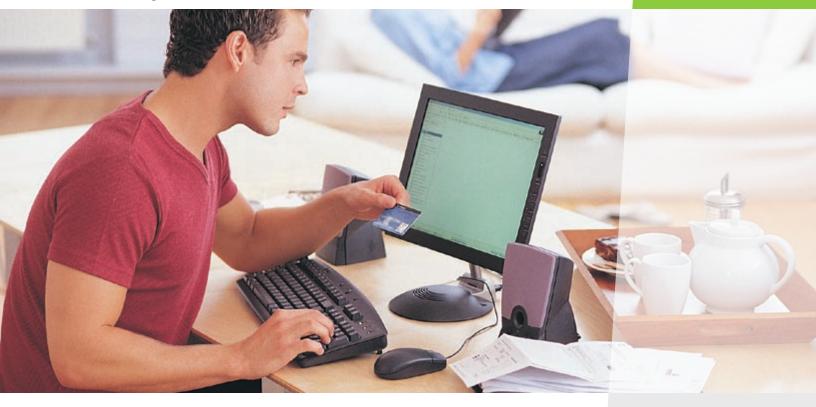
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A Telelogic Success Story: Banking

SYNERGY



International Banking Leader Invests in Telelogic SYNERGY[™] to Increase Efficiency and Reduce Software Development Costs

- Customer: One of the largest U.S. banks and a leading provider of online financial products and services.
- Situation: An international banking institution has multiple development teams using a wide variety of software development tools in diverse locations throughout the U.S. There is no consistent development environment, no central support and it is very difficult to move developers among project teams.
- Solution: The bank deploys Telelogic SYNERGY to manage software development for all online and interactive banking services. Distributed development teams use SYNERGY/Change[™] and SYNERGY/CM[™] on complex multiple-site projects to support the bank's trend-setting Internet and digital technology.
- Bottom Line: Telelogic SYNERGY enables the bank to reduce development costs, improve quality and reliability and accelerate time to market.

The Story

One of America's premier banking institutions, a global leader in providing online and interactive financial products and services, needs to maintain its competitive edge in an increasingly crowded marketplace. The bank uses a wide spectrum of software development tools across a geographically dispersed network. It realizes it must centralize change management support and establish a common development environment to increase operational efficiency and reduce the cost of producing code.

The bank completes an exhaustive review and chooses Telelogic SYNERGY to manage the development of software for all online and interactive banking projects.

"SYNERGY's centralized change and configuration management support and common development environment helps the bank reduce the cost of producing software code while enhancing quality and reliability and shortening time to market."

– Senior Software Analyst





SYNERGY maintains the integrated, central database of software assets and all related information about projects, tasks, processes and people associated with them. Software change and configuration management makes it possible for businesses to improve their development processes, accelerate release cycles, maximize productivity (regardless of team size or location of team members), and minimize overhead through automation and the use of repeatable best practices.

The bank purchases 300 SYNERGY/Change licenses and 200 SYNERGY/CM licenses. The bank uses SYNERGY/CM to manage the departmental intranet and SYNERGY/Change as a Web-based tracking tool. Overall, SYNERGY streamlines the change/configuration management (CM) process and enhances communication and collaboration among the bank 's software analysts and developers, designers, system engineers, test engineers and managers.

"Prior to using Telelogic SYNERGY, we had lots of development teams using multiple tools," says a senior software analyst and officer at the bank. "There was no consistent development environment, no central support and it was difficult to move developers between project teams."

"Telelogic SYNERGY brings simplicity and efficiency to our developers and managers alike."

Increased Efficiency and Quality with Reduced Costs

Today, software developers around the country use SYNERGY/CM for configuration management and SYNERGY/Change to track changes for the complex multiple-site projects focused on the bank's trend-setting Internet and digital technology. SYNERGY's Distributed Change Management (DCM) feature enables geographically distributed development teams to share and manage common software components and change requests. Developers can safely make changes to the same object even though they may be working on different project teams, using different CM databases and working in different locations.

"SYNERGY's centralized change and configuration management support and common development environment helps the bank reduce the cost of producing software code while enhancing quality and reliability and shortening time to market," the software analyst says.

The Benefits

SYNERGY proves itself to be the most powerful and flexible solution for remote and distributed change management at hundreds of sites throughout the world for this international banking giant. As a result, the bank enhances its competitive advantage by improving quality, increasing efficiency, and accelerating the delivery of advanced software and systems. Because SYNERGY maintains an integrated, central database of software assets and all related information about projects, tasks, processes and people associated with them, the company improves its development processes and maximizes productivity using globally distributed development teams. It also minimizes development costs through automating processes and repeating best practices.

"Telelogic SYNERGY brings simplicity and efficiency to our developers and managers alike," the software analyst says. "Everyone works faster and smarter. Most importantly, SYNERGY brings our distributed development teams together in a proven, team-oriented workflow approach that ensures high quality results."

About Telelogic SYNERGY

Telelogic SYNERGY is an integrated family of tools for change and configuration management, which provides lifecycle control for a company's software development assets. Giga Research¹ stated, "SYNERGY/CM is one of the most mature products on the market," and French analyst firm Yphise² wrote, "SYNERGY/CM is the market leader and demonstrated a clear differentiating comparative advantage."

About Telelogic

Telelogic is the leading global provider of solutions for advanced systems and software development. The company's requirements-driven solutions span a project's entire lifecycle, from initial analysis and planning through development, testing and tracking. Solutions include Telelogic DOORS® for a structured requirements management process, Telelogic TAU®, a unique visual development environment and Telelogic SYNERGY for lifecycle control by change and configuration management. These best-in-class software tools improve visibility and collaboration, enabling companies worldwide to deliver better software and systems faster.

Find out how Telelogic can help you develop better systems and software at less cost. Visit us at www.telelogic.com for more information on our products and lifecycle solutions or download our interactive CD-ROM at www.telelogic.com/collateral.

Uttam Narsu, Giga Research, July 2003. 2) Application Change Management Software, Laurent Mynard, Yphise, 2002.



¹⁾ Market Overview 2003: Enterprise Software Configuration Management,

A Telelogic Success Story: Government

SYNERGY



Dubai Municipality Creates Oasis for Parallel Development with Telelogic SYNERGY[™]

- Customer: The Dubai Municipality is a government organization that controls all facets of governance for the City of Dubai in the United Arab Emirates (U.A.E.).
- Situation: Multiple IT systems and supporting software continuously change making version management increasingly difficult. The Dubai Municipality needs a tool to manage its software by seamlessly maintaining different versions and enabling parallel releases of the same project.
- Solution: After a rigorous review of available products including IBM/Rational and Computer Associates, the municipality selects Telelogic SYNERGY as its enterprise standard for change and configuration management (CM).
- Bottom Line: SYNERGY enables programmers and project managers on distributed development teams to manage the development lifecycle, including tracking and monitoring changes for each software version, and provides full traceability as required by management.

The Story

The Dubai Municipality is one of the largest establishments in Dubai with more than 12,000 staff working in 30 distributed locations. Information technology is an integral element of the municipality and its large IT division develops and maintains a number of software systems developed internally, as well as those developed and maintained by third party companies. As most of these systems are continuously changing, version management becomes increasingly difficult. Keeping track of software changes manually on a spreadsheet demands a full-time, dedicated team and even with this in place, version management for all projects is impossible.

"By controlling, tracking and monitoring different releases of our software, it helped us reduce development time, communicate more efficiently and evaluate and adjust to changes within projects."

– Yousif Shams, Head of the System Development Unit, Dubai Municipality





The Municipality decides it needs a tool that can manage changes and configurations by seamlessly maintaining different versions and enabling parallel releases of the same project. It establishes an evaluation process and examines change and configuration management solutions from three leading vendors: Telelogic, IBM/Rational and Computer Associates.

Telelogic SYNERGY becomes the standard for change and configuration management for the municipality's entire systems and software development lifecycle. "We were particularly impressed with SYNERGY's robust GUI interface, version control and branching capabilities – all highly important attributes which are very valuable," says Yousif Shams, head of the System Development Unit for Dubai municipality.

SYNERGY Delivers Benefits across the Enterprise

SYNERGY is currently being used by all software teams, complemented by a core CM team that is comprised of three part-time members who migrate each project to SYNERGY and are responsible for meeting project objectives.

Development teams distributed in different locations access SYNERGY through the municipality's LAN and WAN to collaborate efficiently. Each team has a build manager who oversees the project in SYNERGY once it has been migrated.

"We were particularly impressed with SYNERGY's robust GUI interface, version control and branching capabilities..."

The Benefits

SYNERGY enables programmers and project managers to control the complete development lifecycle, including the tracking and monitoring of changes for each software version, as well as maintain full traceability as required by management. "By controlling, tracking and monitoring different releases of our software, SYNERGY helped us reduce development time, communicate more efficiently and evaluate and adjust to changes within projects," says Shams.

SYNERGY reduces the learning curve as it seamless integrates with multiple software platforms. All Visual Basic, MS Access and Web-based e-governance projects are currently managed within SYNERGY, with Oracle projects soon to be added. This enables developers to continue to work on their respective platforms without having to worry about the CM tool. "SYNERGY is a highly professional tool that organizes the software configuration management of our complex and multi-faceted organization," says Shams. "We preserve our development lifecycle and make use of the automated lifecycle capabilities of the solution. It makes the entire software development process easier and faster."

With SYNERGY, the municipality now has the control and visibility it needs to effectively replace or re-engineer projects – enhancing the services it provides to the people of the City of Dubai.

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