

Capture lucrative market opportunities quickly to drive a competitive advantage.



Highlights

- Deliver innovative products to market rapidly and cost-effectively through enhanced collaboration and streamlined change management processes
- Drive product quality and minimize costly recalls by improving visibility into project life cycles
- Help reduce the overall cost of development through effective reuse of existing assets and components
- Accelerate the product change process by uniting disparate defect tracking systems, product data management systems and requirements management tools

Manage change processes cohesively to speed time to market

In the fast-paced electronics industry, delivering high-quality, innovative products to market quickly is virtually the only way for companies to differentiate themselves from competitors and drive profitability. But achieving success is a major challenge.

Today's complex electronics products are impacted by a barrage of changes at different stages of development as the products move through design, development and production cycles. The strategic impact of product changes across divisions, disciplines, external partners and supply chains is often misunderstood. The problem is not with the changes themselves — the problem arises from change management processes that are not

well integrated but are instead ill-defined, inconsistently recorded and noncompliant with the latest quality requirements.

To complicate matters, most original equipment manufacturers (OEMs) depend on external suppliers to produce sophisticated electronics components. As a result, there are multiple data repositories and other legacy systems that don't integrate — and little reuse of software components and assets across product lines.

With limited visibility or control over the entities involved in product development, defect tracking, data management and requirements management, OEM products that are released to market can contain many flaws. And these flaws can threaten a

company's brand equity, profitability and competitiveness. In response, your business needs a way to cohesively track defects, manage and allocate resources, and monitor the overall progress of development.

Leverage IBM's electronics industry expertise to transform your integration of product change management

IBM solutions for the electronics industry bring together the extensive IBM portfolio of hardware, software and high-value services — and its wide network of Business Partners — to address the most prevalent challenges for clients in the industry. IBM solutions and electronics industry experience help each client accelerate its progress in becoming an On Demand Business — so it can respond with flexibility and speed to virtually any customer demand, market opportunity or external threat.

Creating business processes with a *service orientation* has emerged as the best way to achieve that flexibility and speed, as well as agility and resilience. Service orientation takes everyday business applications and breaks them

into individual business tasks, called services. These services can then be shared with other departments within your company, integrated with your trading partners and exposed directly to customers to create new or modified business processes. As a result, you have the flexibility to easily respond to changing market requirements. And because these services can tie together existing enterprise resource planning (ERP), human resources (HR), customer relationship management (CRM) and supply chain systems from leading vendors such as SAP, Oracle, Siebel and JD Edwards, there is no “rip and replace” required. Furthermore, these services can be used across multiple processes — rapidly, easily and consistently — to help drive improved time to value and reduced costs.

IBM software, a key building block of the IBM solutions for the electronics industry, is vital to employing a service orientation strategy. It helps our clients achieve business flexibility by enabling them to model, assemble, deploy and manage business processes for today's on demand business environment.

To build a flexible, low-risk and cost-effective solution that can help you minimize costs throughout the product life cycle and accelerate the time it takes to implement changes, deploy IBM integrated product change management for electronics — part of IBM software for electronics product life-cycle management. IBM can provide you with tools to help you:

- Streamline development by unifying disparate people and systems.
- Maximize visibility into defect and change tracking across the development life cycle.
- Minimize design and development costs by facilitating effective reuse of components.
- Enable executives and project managers to make intelligent decisions that put your business strategies into practice.

Unite disparate people and systems to streamline development

With IBM's deep experience in the electronics industry, we understand the key process areas that have the greatest impact on your profitability. We also recognize the complexity inherent in participating in, or managing, widely

distributed development teams — teams that often include people who live in different time zones, speak different languages and use an assortment of tools and technologies.

IBM integrated product change management for electronics includes a powerful core combination of world-class IBM Rational® and WebSphere® software products. Together, these products enable project managers to streamline the development process by uniting disparate defect tracking systems and driving enhanced collaboration. For example, electronics companies can take advantage of IBM Rational ClearQuest® software, to help improve communication and collaboration among virtual team members by linking extended development teams — regardless of their locations — into the development process. And IBM WebSphere Process Server provides the ability to easily and flexibly connect enabling applications and services across the enterprise and beyond so you can realize service orientation.

Use IBM integrated product change management for electronics to help you optimize quality and reduce time to market for all your innovative products. By integrating IBM's proven software with your existing product life-cycle management tools, you can help build a software development platform for the on demand world, enabling you to:

- React quicker — through better visibility — to product changes in the development process.
- Reuse business-critical assets to reduce costs.
- Create development programs designed to align IT with enterprise strategies.

Gain better visibility into change tracking

With ever-increasing numbers of changes in the product development process, project managers often lack control over and insight into widespread development processes. To address this challenge, IBM integrated product change management for electronics includes Rational ClearQuest software that helps you deliver flexible defect and change tracking across the complete development life cycle. In addition, WebSphere Portal can help simplify and

accelerate access to personalized product development information.

For example, project managers often struggle with monitoring and prioritizing projects and their workloads. The information is either “siloed” — and not easily accessible — or simply doesn't exist. Using the software's comprehensive support for tools such as queries, charts and reports, project managers can more effectively gain the visibility they've been missing and reassert control over their projects. Furthermore, they can also consistently enforce software development best practices throughout your organization by using customizable, automated workflows. Your organization can also leverage electronic signatures and audit trails to facilitate compliance with regulatory and audit requirements.

Reduce costs through effective reuse of components

As development activities become more distributed, architects and developers are challenged to determine what assets exist, where they reside and how to

Asian semiconductor company enhances development projects

Challenge: Improve business competitiveness by gaining better management and control over increasing numbers of product development projects.

Solution: Deploy Rational and WebSphere software to help enhance the change management process.

Benefits: Transformed business processes, shorter product development times and a 9% reduction in development costs.

categorize and reference them in design and development activities. With IBM Rational ClearCase® software, you can effectively create, update, build, deliver, reuse and maintain business-critical assets. Your organization can utilize features like integrated version control, automated workspace management,

parallel development support, and build and release management.

Managers no longer have to struggle to locate assets or engage in lengthy and costly redundant development. They now have the ability to help reduce development costs because they have access to all existing assets — regardless of where the assets reside. No longer will development costs spiral out of control because project managers will be able to effectively control these critical development components.

Make intelligent decisions that put business strategies into practice

As the need to align IT projects and investments with business priorities becomes more critical, enterprises must put capabilities in place that provide both their corporate leaders and project managers with insight into ongoing development life cycles. This can be a challenging goal. For example, key portfolio stakeholders frequently lack an integrated and comprehensive view into their organization's projects; this can

be caused by insufficient processes or technology inefficiencies. But overcoming the challenge with the right solution leads to better analysis, prioritization and investment decisions about IT assets and activities as part of an integrated portfolio.

By automating the project portfolio life-cycle process — from opportunity identification and prioritization through project execution and closure — IBM Rational Portfolio Manager software helps both executives and project managers align portfolio investments with business goals. The software provides real-time visibility into the development life cycle so project managers can make rapid, well-informed decisions. IBM integrated product change management for electronics gives project managers a way to utilize best practices throughout the stages of a product's software and logic life cycles — by providing tools to effectively track, manage, monitor and assign skills inventories so resource demands remain balanced.

**Business Partners help further leverage
IBM software capabilities**

IBM integrated product change management for electronics is complemented by applications and services provided by our IBM Business Partners — including the hundreds of Business Partners specializing in service orientation — helping to make this solution a world-class foundation for successful, rapid implementation of product changes, at reduced costs. Working in partnership with our clients, IBM and IBM Business Partners can help meet the needs of today's electronics industry organizations.

For more information

IBM is unique in its combination of unmatched electronics industry experience, deep service orientation skills, unparalleled Business Partner network, and software and technology product excellence — and as a result is a clear leader in service orientation. We can help you get started with service orientation, whether for the enterprise, a departmental initiative or a single project. IBM is the ideal partner for electronics industry organizations seeking to meet the challenges of enhancing customer loyalty and brand

equity to combat customer defection; managing the increased complexity of the enterprise, including processes that extend to collaborations with business partners; and growing business in new and innovative ways.

To learn more about IBM integrated product change management for electronics and other electronics industry-specific offerings, contact your IBM representative or IBM Business Partner, or visit ibm.com/software/industries/electronics



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