PLM Video Transcript

IBM Product Lifecycle Management solutions can help your business to execute in real life. IBM PLM - turning imagination into reality.

[Global Integration IBM Ad]

As we've just seen, IBM's key strategic directive is to help our clients to achieve their goals in becoming better Globally Integrated Enterprises.

Research has shown us that CEO's are expecting radical change toward globalization; and this shift mirrors the path IBM has pioneered. Integration; collaboration; global client focus...

IBM is working with our clients to help to turn the global enterprise they can envision into one they can deploy.

Today, we are able to use visualization and communication technologies to collaborate on concepts and ideas that were once only words on paper.

As the world *flattens*, it's important to recognize the where and how of creating business value.

It can come from anywhere... your customers, suppliers, partners and employees.

IBM has gained understanding of the Enterprise of the Future through its research studies such as the IBM Global CEO Study, the Global Innovation Outlook and the Global Technology Outlook - insight and knowledge we share with our clients.

It's all about innovation.

## 2. EMERGING MARKETS

(Yogi Berra quote)

As that wise sage of the 20<sup>th</sup> century lamented, prediction is difficult.

Yet, IBM is in the prediction business, as IBM helps clients to look globally for new routes to growth and profitability, we've done our homework.

Most industries today are seizing some benefits of Global Integration.

For example, in China, between 2000 and 2003 alone, foreign firms built 60,000 manufacturing plants. Some of these factories target the local Chinese market, but others target the global market. European chemical companies, Japanese carmakers, and U.S. industrial conglomerates are all building (or have declared their intention to build) factories in China to supply export markets around the world.

And this model is being replicated in emerging markets throughout the world, and affects PLM especially as design and manufacturing capabilities become more widely distributed.

3 THE BIG PICTURE/AGENDA

So, what does this mean to the design process? From IBM's perspective, as companies become more globally distributed, that means multiple partners collaborating in a shared product development process, leveraging an open SOA-based infrastructure.

1. Collaboration Great ideas are everywhere, and smart innovators tap them globally.

Programs like Innovation Jam and other mass-collaborative efforts have proven IBM's leadership in this arena. We're developing innovative approaches to Web 2.0 technology including visualization and virtual worlds, wiki's, and online teamrooms, and a host of other ways to collaborate for PLM initiatives. Let's take a look...

RUN AVATAR AD

IBM, with its deep Research initiatives is setting the pace in the development of virtual worlds... Imaginary worlds, but *real* business. We've invested heavily in the creation of online virtual experiences.

Here you can see how IBM has been helping Circuit City to use virtual worlds to simulate a physical store layout to improve the real-life customer experience.

IBM and Sears have launched a prototype 3-D showroom called the "Sears Virtual Home," which resides on an IBM "island" in Second Life.

Our Dassault Systemes clients are exploring placing CATIA designs in these public virtual worlds as a way to get feedback on design alternatives. Design teams in virtual worlds are building products, engineering new hospitals and exploring green solutions.

4 LOTUS

IBM's Lotus brand has developed several collaborative products that are helping millions of users communicate more productively.

Lotus Quickr for example provides support for mobile devices, meaning you can access a teamroom with your cellphone.

We're developing a range of open products around a platform we're calling Unified Communications & Collaboration, or UC2.

RUN UC2 Video

From a PLM perspective, UC2 can be applied to global conferencing. Where as, design reviews used to be conducted with paper in a conference room, then with computer screens and phone, with UC2, you can now participate in a design review - complete with product information from any number of sources - with colleagues who might be in Budapest and Shanghai - all while you're riding the train to Stuttgart.

Lotus Sametime Gateway allows you to not only connect to other enterprises, but to public IM networks including AOL, Yahoo! and Google.

All of this Sametime capability works beautifully with Dassault Systemes' products.

(start demo)

Let's take a look at this demo where we can see how the 3D PLM Contextual Buddy List enables instant collaboration between all participants across the extended enterprise in order to promote the sharing of data and ideas.

So we're right there with integration with 3D Live. IBM's collaboration capabilities help our clients take PLM mobile.

5 2. PROCESS SUPPORT/INTEGRATION

Let's move now into Process support, where integration and collaboration set the stage for a shared product development process.

IBM can help bring it all together, from SAP to CATIA to ENOVIA and other PLM and legacy applications, IBM business process management, or BPM, solutions use interoperability across file formats and open standards to enable design partners to innovate, no matter where in the world they may reside. Using our middleware technology, we can combine solutions from a myriad of sources including Dassault Systemes, IBM and a wide range of business partners.

Globally distributed resources, fitting together through integration.

IBM leads in the BPM space.

6

No one but IBM can provide the depth of business expertise and breadth of software that IBM can.

We've developed world-class methodologies, templates, best practices; We have competency centers around the globe dedicated to BPM. On the software side, we offer collaborative business process modeling and simulation tools.... We also offer Best-in-class integration tools, technologies and adapters For storage, we provide comprehensive asset repositories for BPM-related re-use.

And a number of other BPM and related PLM software is available across a wide range of requirements from each of IBM's five software brands...

Let's take a look at Rational

IBM Rational software helps organizations automate, integrate, and govern the core business processes of software and systems delivery.

Rational's latest acquisition of Telelogic continues to enrich IBM's portfolio with requirements and program management applications and capabilities.

Information Management software integrates data and enterprise content to leverage information on demand. Only IBM has the end-to-end capabilities to help you manage your data and content, pull together trusted information that cuts across diverse silos, and also gain valuable insights to optimize your business.

Cognos software extends the Information On Demand value proposition with the industry's most complete business intelligence and performance management capabilities. Companies can now make critical business decisions earlier in the development process with accurate and up-to-date business information.

IBM wants to be your partner in Systems Engineering... where by its very definition means software, hardware and electronics working in concert.

In Aerospace, where we are connecting aircraft passengers with the internet while providing the pilot with improved navigation.

In Telcom, we're seeing the merger of entertainment with the internet - video on demand.

In Automotive, it's improved safety and performance, making smart hybrid vehicles that know when to transition between gas and electric.

In Medical, we're seeing systems that improve diagnostics, allowing new links to specialists around the world.

In all of these areas, it's systems engineering that is making the difference, fueling innovation in these industries - turning imagination into reality.

Open standards. We're heading up the STSC (Software Technology Standards Council) which defines open standards not IBM standards... OPEN standards as defined by developers throughout the world.

Here are a few more of the organizations and industrial consortia IBM supports.

We support ISO STEP standards in our CATIA and ENOVIA products. ISO recently recognized the importance of the STEP standards work through its prestigious Lawrence D. Eicher Leadership Award.

We also participate in the development of OpenPDM and other PLM standards and now incorporate these into our integration framework that combines SOA and PLM.

(pause)

8

9 3. SOA

Service Oriented Architecture or SOA. Crucial to business process management and PLM, IBM's SOA offerings provide a flexible platform that allows our clients to manage the development process across the entire design chain.

IBM's SOA solutions integrate our own - and others - software, services and hardware.

IBM leads in SOA ... And it's not just us saying that ...

WinterGreen Research recognizes IBM as the leader, dominating the SOA marketplace.

In this graphic, we see how it all ties together. SOA is about creating reusable services. These can be broadly categorized as services to increase people productivity, instantiate and manage flexible business processes, and to access information within a variety of operational systems. It's all about how to build and reuse these services on a global basis to connect systems, users and business channels.

Websphere - IBM's web services brand - provides user portals for collaboration, supports business process management, and enables enterprise-wide integration across heterogeneous platforms. In short, Websphere is the cornerstone of our SOA support for PLM.

Tivoli is IBM's resource and performance optimization platform.

Tivoli supports monitoring for the Dassault Systemes applications.

This chart shows how we can use Tivoli Provisioning Manager to deploy CATIA on client workstations and configure CATIA to connect to a LUM server and to an ENOVIA LCA server.

And the Tivoli-Maximo Enterprise Asset Management solution combined with an SOA infrastructure can offer new ways to manage manufacturing plants, utilities, ships and large complex structures as well as provide new ways to service the end user in after sale support.

(pause)

10

On the hardware side, let's take Power Architecture platform. From high end servers, to desktops, to super computers, IBM's Blue Gene is the world's fastest super computer. It is based on the Power Architecture. We're chosen as the exclusive chip for each of the three major gaming consoles, and we're in the Mars Rover. In fact, most satellites use Power-based processors from IBM.

These graphics demonstrate the relative performance of POWER6 processors as measured on a per core basis versus leading contenders that represent other processor technologies. Simply put, regardless of your workload, POWER6 systems can deliver industry leading performance for your business.

Also, on the hardware side, we're proud of the fact that our IBM BladeCenter HC10 platform is the first certified Blade form factor to run CATIA V5R17.

12 'Grid' computing continues to evolve and mature, and we now call it 'cloud' computing.

So whether we're talking about grids simulating product behavior or being used in supply chains or public research institutions, grid - or cloud - is about enabling new types of computing in a collaborative way.

Today, our clients tend to build and run extremely complex, under-utilized and unsustainable scaled-out environments. We're helping them get past that and use their grids for things they might not have thought of.

13 So, Why IBM?

In the next few minutes, I'd like to talk about what differentiates us...

We've already highlighted much of IBM's rich portfolio of products, services and capabilities. IBM also provides.

- \* Global customer successes
- \* The world's best R&D
- \* Green leadership
- \* Global Business Services
- \* Strong commitment to PLM
- and \* PLM Centers of Excellence

## CUSTOMER SUCCESSES

Let's take a look at Meyer Werft. Their challenge, global competitors were raising the bar.

They embarked on a path to optimize their legacy PLM processes and rebuild their IT processes to be more dynamic and cost-effective.

Another recent success involved our Silicon Valley Lab working with colleagues in India, Australia and Vietnam, to deliver support to the Vietnam government in technology education and development.

Run HiPODS Clip

Imagine these successes replicated a thousand times - every day.

Globally integrated IBM and business partner teams like these are helping our PLM clients to meet demands when and where they occur.

IBM has 2,850 BPMS customers in over 30 countries - and we're growing.

The clients referenced here are leaders in their industries, just as IBM is the leader in PLM business transformation today.... (pause) 14 R&D

R&D. IBM is number one in R&D.

R&D magazine recently conducted a survey that prompted readers to identify the world's most successful R&D companies. IBM was recognized as the best R&D company in the world when the results in several different categories were evaluated.

IBM has 8 classic research labs around the world and more than 60 software development labs.

They're linked globally and exploring a wide range of investigation domains including emerging areas such as nano technologies, photonics, language translation, and, as I've mentioned, visualization, a key area for PLM.

Last year, IBM conducted more than 10,000 thousand engagements between its researchers, developers and clients.

As Kristof Kloekner, IBM's VP of Strategy for Software Group said recently: "We are effectively letting the 'genius out of the bottle' to collaborate more and more with companies around the world."

If you visit ibm.com, you can find our five in five predications. These are the five innovations that will change the way we live, work and play in the next five years. These range from super-smart cellphones to total traceability of every-day foods. These five innovations were selected based on projects in our research labs, insight from our think tank, and ideas from employees around the world.

15 IBM's Big Green initiative has enveloped our entire organization in a full-steam-ahead drive to help our own company - and our clients - to work toward a greener world.

GBS, our consulting arm, from a PLM perspective, we offer

Transformation Services Implementation services Managed Services And Service Lifecycle Management.

IBM's Commitment to PLM

Our worldwide staffing includes

- Over 1100 (1,110) PLM Consultants
- 95 in Strategy and Change
- 60 in PLM Research
- Over 10,000 GBS and GTS solutions practitioners
- 1,700 Systems Integrators
- 4,000 ISV Partners across a range of disciplines many of these are PLM partners.

and 470 Engineering and Technology Services individuals.

PLM Services collaborates extensively with the IBM integrated supply chain group, IBM research, and leading universities for transformation initiatives, skills and practices which we make available to IBM clients.

Which leads us to our Global Centers of Excellence, focusing on PLM and how to leverage SOA to extend the reach of PLM across the supply chain and to the boardroom.

The Center of Excellence objectives include:

Accelerating adoption of SOA

Demonstrating integration, business process management and collaboration

Showcasing PLM applications of ISV's

Providing an architectural framework for PLM

And Leveraging Open Industry Standards We're constantly interviewing CEO's of top companies. We help companies examine their businesses in new ways and we share our collected discoveries with our other clients in the form of white papers and other studies.

Sources of Intelligence such as ...

IBM Institute for Business Value IBM's CxO Suite and On Demand Innovation Services

... are helping our clients to transform their companies.

By embracing the business transformation principles that have become the basis for our leadership and growth today, IBM ourselves made a drastic turnaround.

IBM is now a showcase example of a Globally Integrated Enterprise; a unified, integrated company, delivering innovation that matters for IBM and the world.

Let me close with this summation from our CEO, Sam Palmisano:

"The globally integrated enterprise is a promising new actor on the world stage. Now leaders in business, government, education, and all of civil society must learn about its emerging dynamics and help it mature in ways that will contribute to social, economic, and human progress around the planet."

We look forward to helping you realize your vision; to helping you turn imagination into reality.

Please visit us on the web or talk with your IBM PLM representative.

Thank you for your time.

16