Product Lifecycle Management @ Atos

PLM Market & Trends from Systems Integrator's view

Paris, June 7th, 2013
Luca Benporath – VP Global PLM - Manufacturing, Retail & Services

Agenda

▶ **PLM @ Atos**
▶ The partnership with Siemens
▶ Context & Market challenges
▶ The PLM Market: current status & future trends
▶ Conclusions

Atos is helping its clients to face tough challenges related to product development

Global Collaboration

Global engineering collaboration

Innovation

Protect existing markets and intellectual property in new market entries

New business models through change in valuation ideas Ensure competitiveness

Product Complexity

Greater variety in products and product structure

Custom variants

Complex parts and assemblies

High quality products

Time-to-Market

Dramatic reduction of product lifecycles and development phases

High influence of cost impact in early development phases

Product Compliance

Compliance
Product liability
Law / regulations

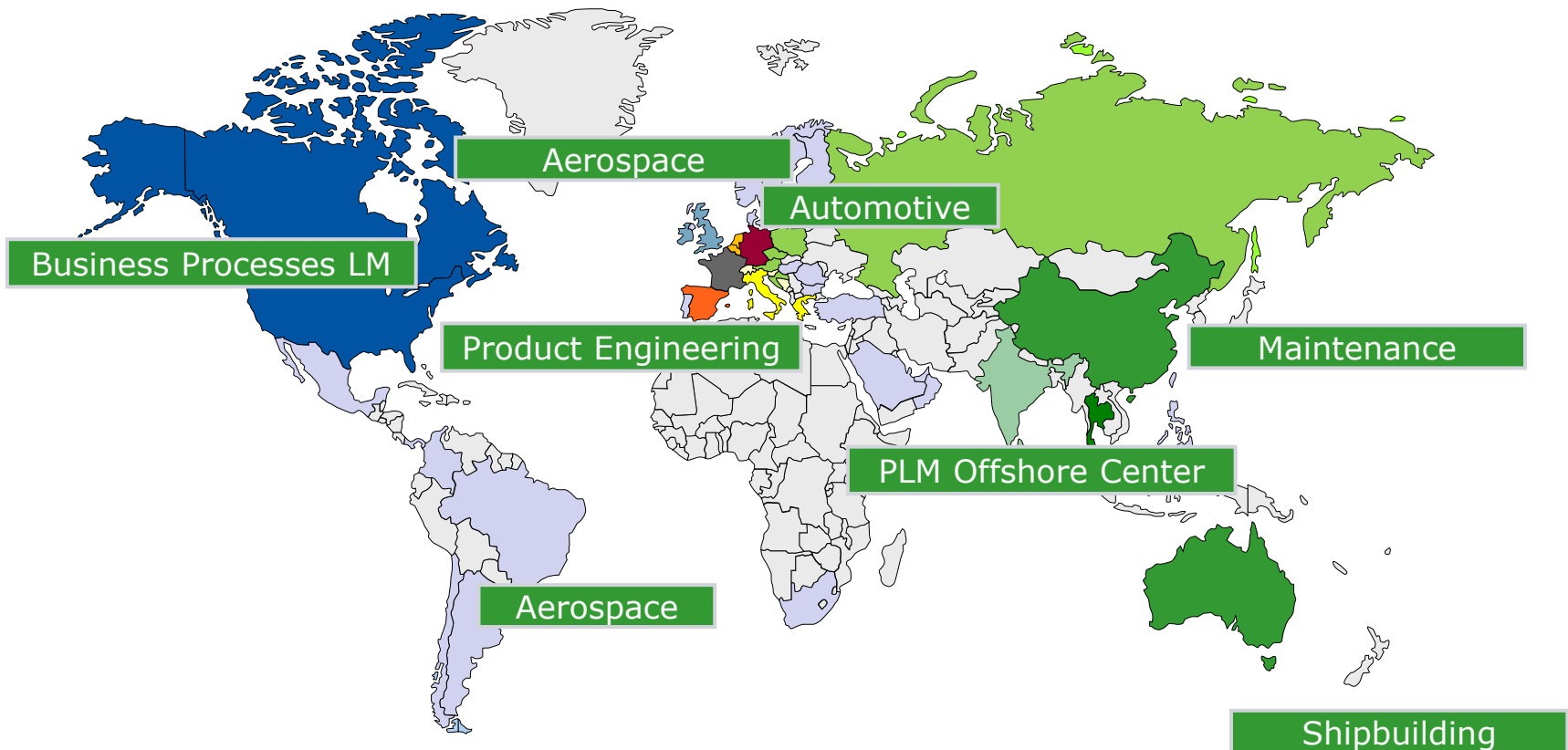**Global Collaboration**

Time-to-Market

Innovations

Product Compliance

Product Complexity

Atos global PLM Competence and Presence

Atos PLM revenues across all service lines: > 100M Euro

450+ dedicated consultants worldwide led by PLM GCC (Munich)

Aerospace

Automotive

Business Processes LM

Product Engineering

Maintenance

PLM Offshore Center

Aerospace

Shipbuilding

Atos

The role of Product Lifecycle Management

A new vision

► PLM is not just a software product

► It is a new way of looking at the manufacturing value chain

    ► A single, integrated cycle of activities

    ► From initial concept right through to retirement and replacement

    ► Enabling efficient collaborative working at every stage

    ► Improving the way the entire business operates

Beyond the product lifecycle to include other strategic areas:

► After-sales service lifecycle management

► Technical documentation

► Software engineering

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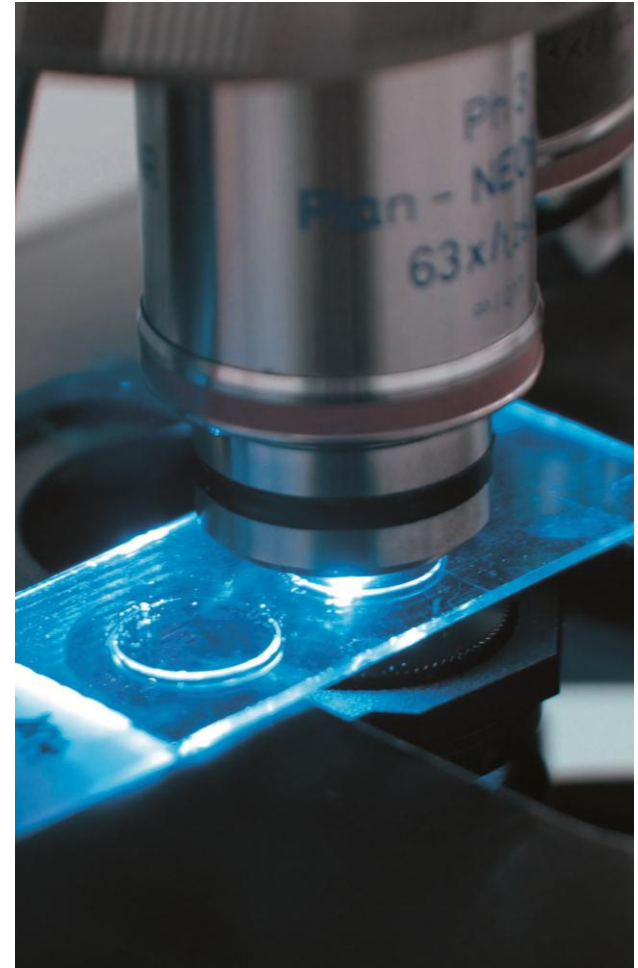
The role of a system integrator is to take the client through the « PLM journey »
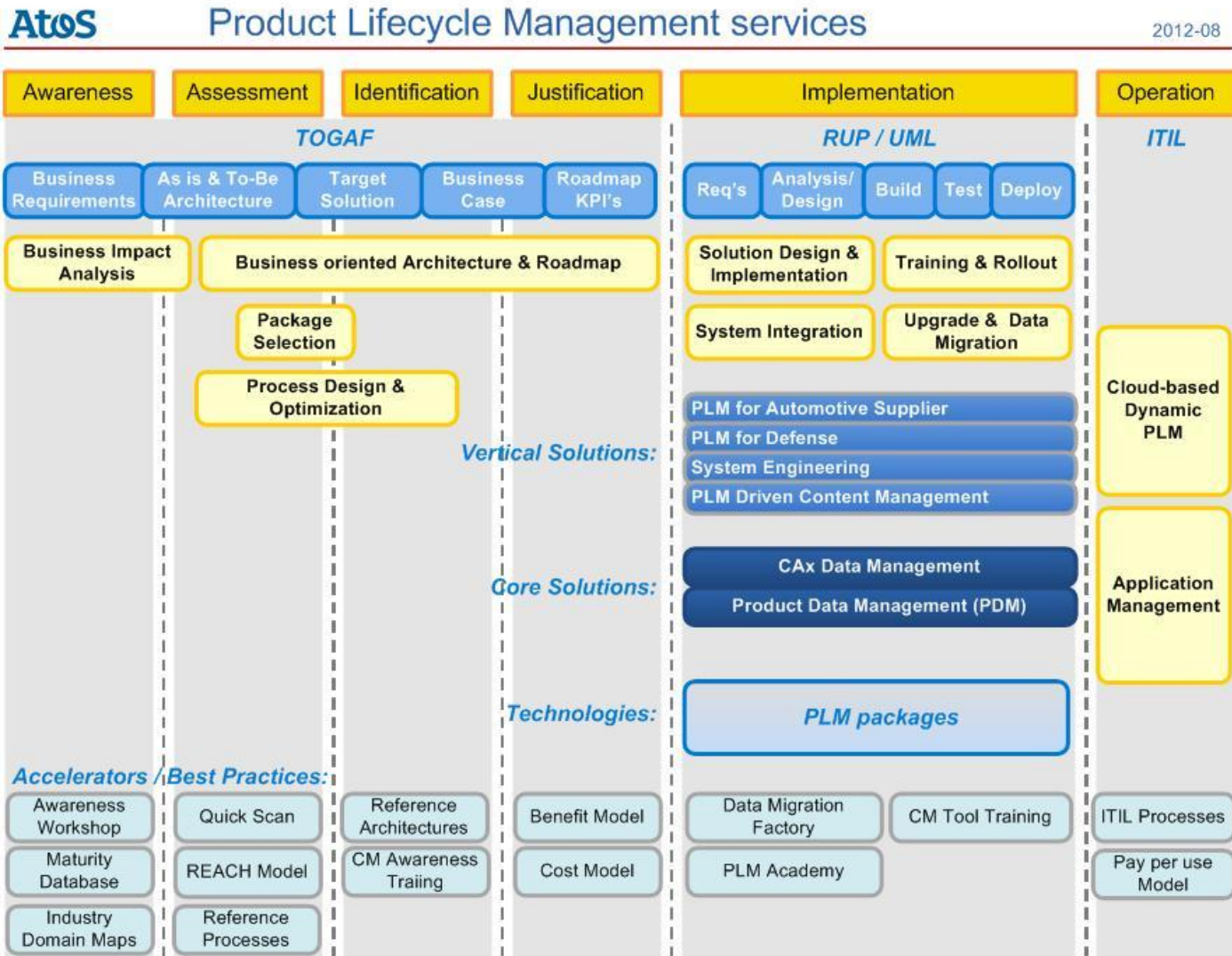
Consulting around:
- Awareness
- Processes alignment
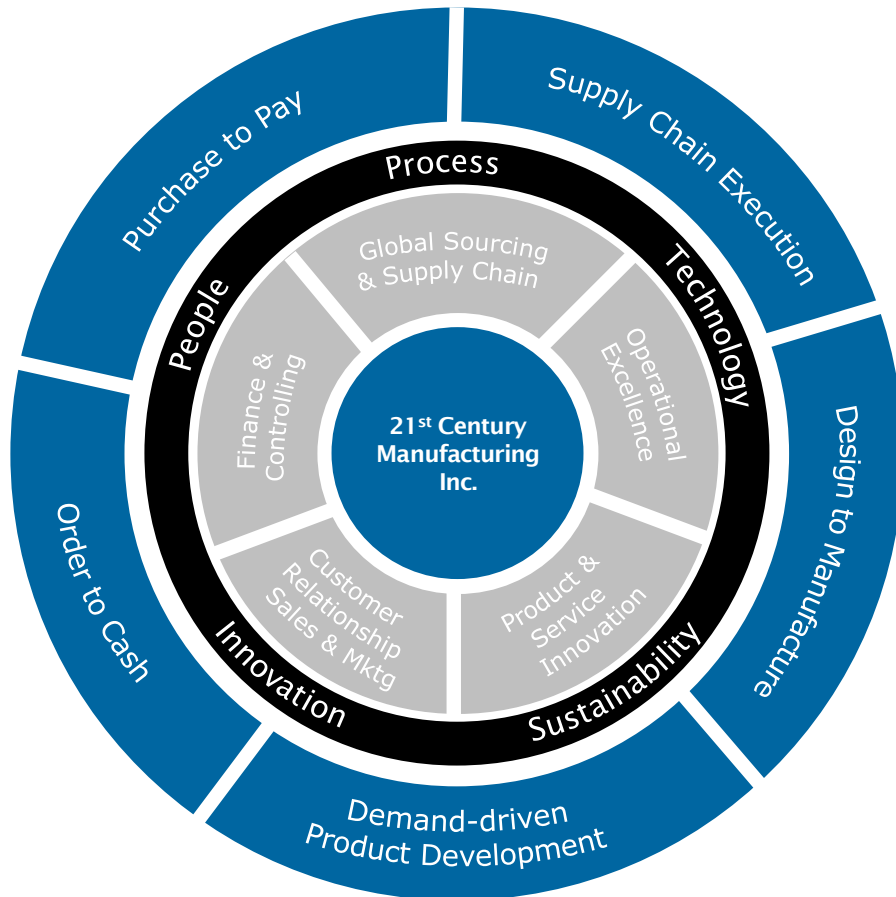- Solution selection
- ROI
- IT landscape

Implementation:
- Design and customization
- Training
- Go-live
- Integration

Operation:
- Post go-live
- Application management

Systems Integration & Enterprise Collaboration
An effective PLM vision and strategy is a must-have

Facilitating, Supporting and Implementing the integration of processes, organizations & data is the key role of Systems Integrators

Product Design is more and more exiting the R&D laboratories to be fully integrated into the enterprise, sharing processes with:
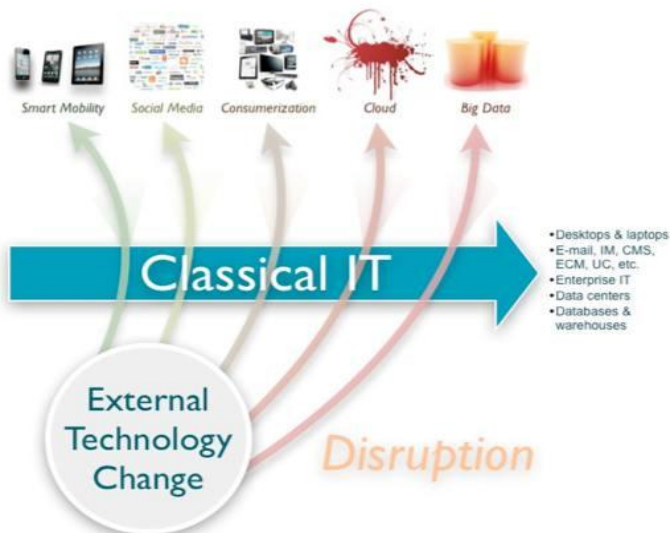- **Manufacturing / Plant Management**
- **Sourcing & Procurement**
- **Sales & Marketing**
- **Finance for costing purposes**

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PLM is in the middle of the "technology disruption"

Cloud

Social Media

Big Data

Smart Mobility

Readiness / Maturity

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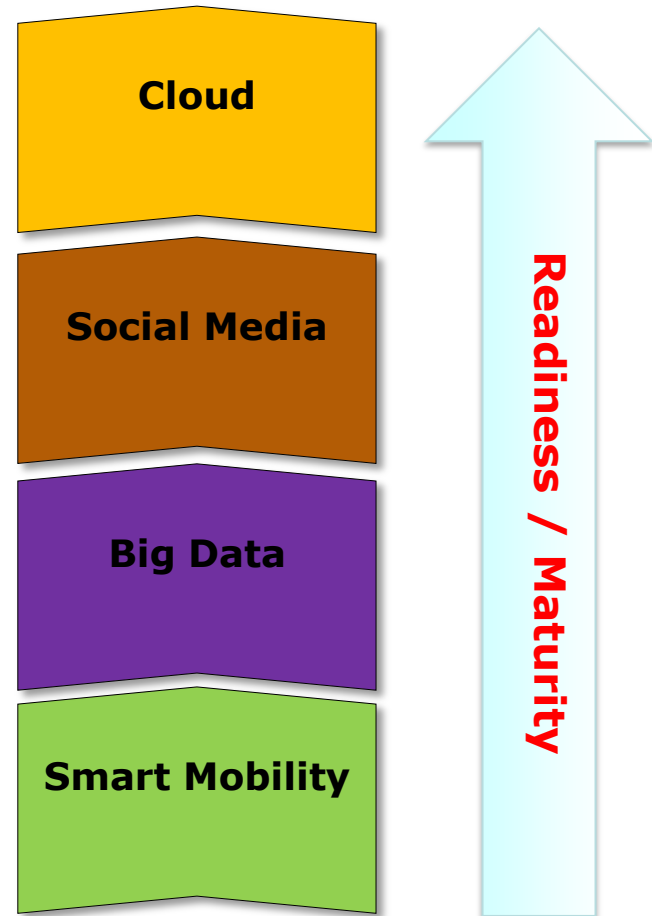
PLM portfolio roadmap is fully integrated into the Group strategy

▶ Cloud: Industrializing Dynamic PLM

▶ Bluekiwi acquisition: Social Enterprise Systems collaboration

▶ Siemens strategic partnership:
  – Supplier Connect
  – Greenfield / Brownfield

PLM at the heart of the new workplace: integrating social media, cloud and other IT disruption factors

Product lifecycle management (PLM) is once again extending its footprint beyond traditional boundaries, says **Luca Benporath**, Atos vice president global PLM

Your business technologists. **Powering progress**

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Positioning of Cloud-PLM Service

X

possible

Custom PLM on Premise | Custom PLM Outsourced

Dynamic PLM Flexible Standard

Cloud PLM Standardized

Price per User
All inclusive SLA
Resource scalability (virtualization)

Standardization

Client traditional

Virtual Private Cloud

Customer Private Cloud
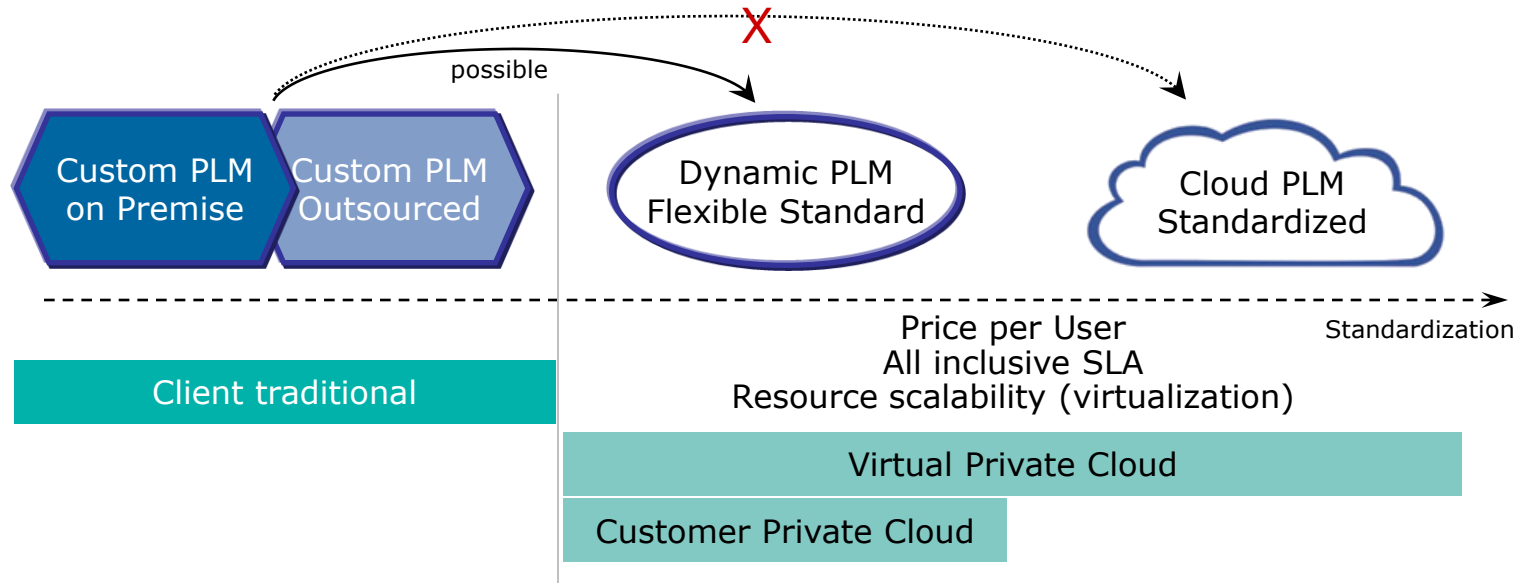
► Cloud PLM Service is matching the individual demands of complex PLM processes with the strength of Cloud Computing
► Cloud PLM Service is a framework that can be adopted to customer specific architecture and security demands

Dynamic PLM is the Atos cloud-based PLM platform

Characteristics:

▶ Pay per user

▶ Operation at Atos global production centers, remote access and mobile support

▶ Service desk and application management ITIL-compliant and based on SLAs

▶ Fast and reliable due to local cache servers if required; Scalable and flexible to satisfy changing business needs

▶ Openness for customer specific configuration and integrations (CAD, ERP, legacy applications, etc.)

Client Benefits:

▶ Cost flexibility by pay-per-user pricing model to include third parties in the network

▶ Reduced capital expenditure (CapEx) by the Cloud business model.

▶ Ready availability of infrastructure and services significantly reduces duration and risks of PLM implementation projects.

▶ Reliability and service quality due to standardization on proven and certified technology and global bundling of skills and resources.

▶ Enter the PLM landscape for non-discrete manufacturers

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Atos Distinctive Assets

| Awareness | Assessment | Identification | Justification |

TOGAF

Maturity Scan
Business maturity assessment developed with University Eindhofen

Business Impact Analysis
Best practice methodology to evaluate improvement levers by PLM and derive actions
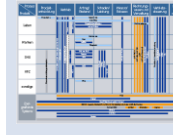
Architecture & Roadmap
Best practice methodology to define PLM/ERP architecture and program roadmap

Vertical Solutions:

PLM driven Content Management
Best practice solution to integrate technical documentation and engineering based on standard PLM platforms

PLM for Defense / AMPS
Deployable logistic and asset management solution integrated with PLM based maintenance, repair and overhaul system

Security solution /DirX
Integrated enterprise Identity and Access Management Solution for PLM

Automotive Supplier solution
Template based Automotive supplier solution including APQP processes and integration to downstream systems

Dynamic PLM Service, PLM in the cloud
Scalable on-demand PLM environment, consisting of platform and services on a user-based price

Automotive BoM / ERP Integration
Integrated Bill of material solution to deli-ver manufacturing BOM to enable planning and forecasting in the ERP system

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PLM is a Global Key Offering at Group level
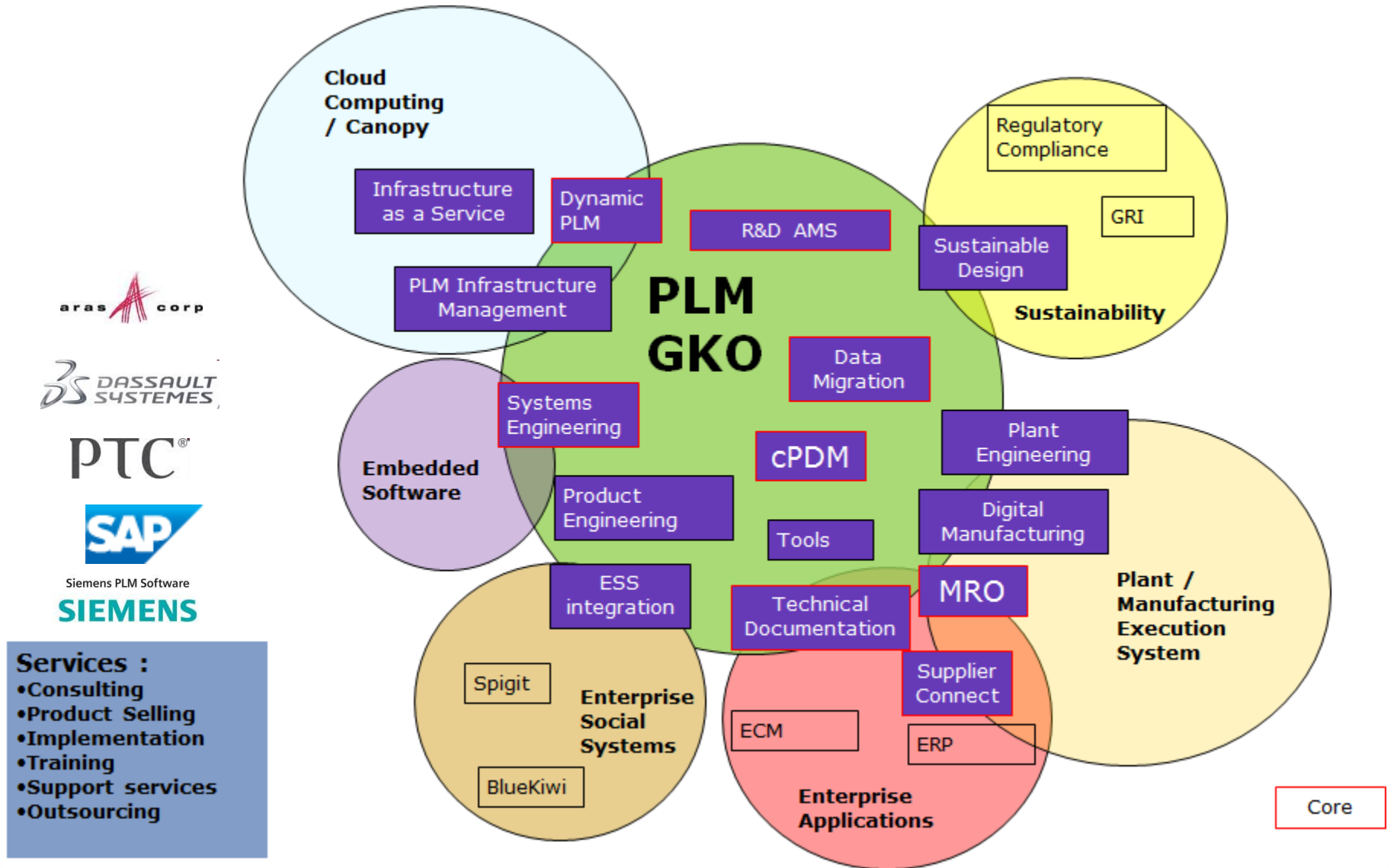
Powering progress for our clients

Automotive

DAIMLER · Continental · BorgWarner · Renault · MICHELIN A better way forward · Volkswagen · Audi · IAC International Automotive Components · PEGUFORM · PATAC

Aerospace & Defense

Fokker · THALES · CASSIDIAN AN EADS COMPANY · norma · EMBRAER · AIRBUS AN EADS COMPANY

Machinery & Discrete

POCLAIN HYDRAULICS PH · ASML · Blohm+Voss · SIEMENS VAI · B/S/H/ · OSRAM Opto Semiconductors

High Tech & Electonics

FCI · SIEMENS · PHILIPS · FUJITSU · océ · WINCOR NIXDORF

Other sectors

Schlumberger · Shell · Navy Royal New Zealand Navy · Australian Government · Bayernland Natürlich Köstliches aus Milch. · AWE · SWAROVSKI · DMS MARITIME · CSR

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► PLM @ Atos

► **The partnership with Siemens**

► Context & Market challenges

► The PLM Market: current status & future trends

► Conclusions

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From partnership to writing history

▶ Siemens AG is the largest customer of Atos with the largest outsourcing contract signed with Atos for 7 years

  ▶ 200 countries

  ▶ 400,000 employees using daily the services

▶ Siemens and Atos have signed an agreement to jointly go to market

  ▶ Atos is the single IT services partner of Siemens One

  ▶ Atos and Siemens have committed to co-invest in R&D projects in various domains

  ▶ PLM joint G2M initiative on specific vertical solutions

▶ Siemens is a 15% shareholder of the Group, showing its commitment and trust in this partnership

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Siemens PLM Software and Atos
Combine Power Products and Power Services

Atos and Siemens PLM partnership has been reinforced by SIS acquisition

Siemens PLM Software
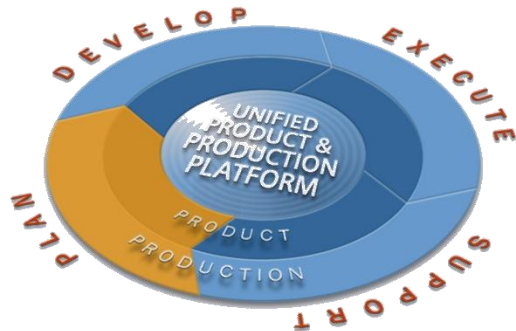
POWER products by Siemens

Atos

POWER services by Atos

Mastery of core processes & integrations
Global coverage of service and support
Innovation leaders:
Strong portfolio alignment
Broad industry knowledge

Atos

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Industry invests billions to keep pace in the increasingly competitive market

Typical business initiatives driving PLM
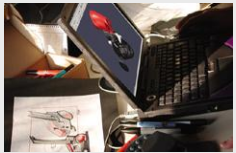
NEW PRODUCT DEVELOPMENT
Integrate people & processes & technology to rapidly bring customer driven innovations to market

EXTENDED ENTERPRISE
Connect all value chain members, including partners, suppliers and customers, to optimize product returns

CAPTURE INTELLECTUAL ASSETS
Capture and reuse product & process knowledge to improve productivity and optimize investments

COMPLIANCE & SUSTAINABILITY
Manage processes & records to ensure adherence to government, industry and international regulations

DESIGN ANYWERE/ BUILD ANYWERE
Organize, manage & secure critical product & process data to leverage information across enterprise
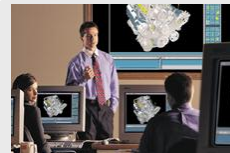
COMMONIZATION & REUSE
Maximize reuse of products & processes with common development platforms & manufacturing operations

MANUFACTURING EXCELLENCE
Increase manufacturing flexibility & performance by integrating product & process design with production

MECHATRONICS
Design and evaluate complex products that include mechanical, electrical & software elements

REDUCTION OF IT COMPLEXITY
Consolidation, harmonization and refreshment of PLM IT Landscape

MERGERS AND ACQUISITIONS
Transforming business and IT to a future operating model with respect to all dimensions

Which business drivers are pushing our clients to pursue PLM strategy?

▶ Being in line with strategic ambitions:
  – Shorten time to market
  – Increase brand equity and customer intimacy
  – Demonstrate adherence to sustainability

▶ Boost Innovation across the whole enterprise

▶ Turn product complexity into ease of use
  – Increase use of embedded software
  – Include product after-sales and end-of-life into the cycle

▶ Increase collaboration and align R&D to the « social enterprise » paradigm

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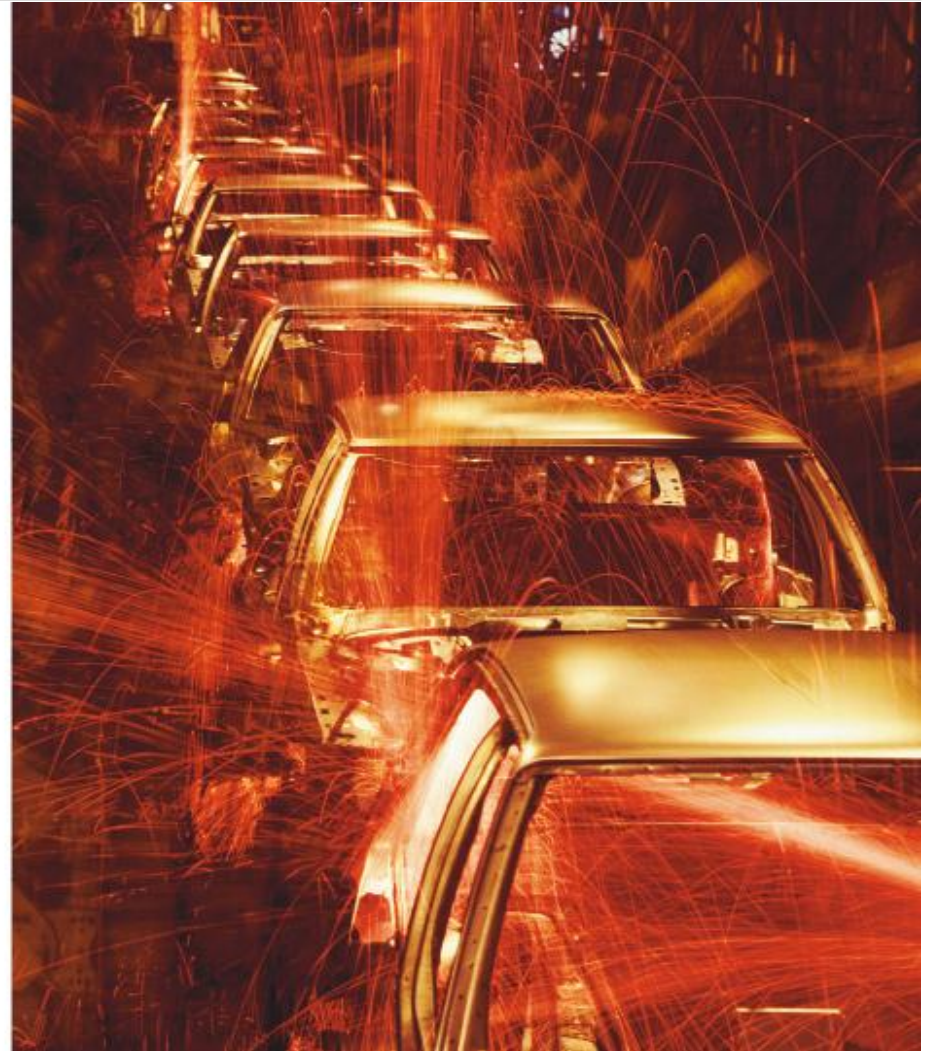
Reducing R&D investments is just <u>not</u> an option for our clients

Exhibit 4

Adverse effects

% of respondents eliminating all R&D activities or reducing R&D budget in 2009,[1] n = 165

Potential adverse effects as a result of eliminating or reducing R&D budget

Delay of new/improved products leading to reduced price/margin	35	Damage to reputation (eg, loss of credibility as a supplier)	15
Delay of product launches	33	Inability to complete cost reduction initiatives	14
Falling behind competitors in technology	28	Damage to company morale	14
Loss of R&D talent	25	Reduced ability to provide technical services to customers	10
Lack of new/improved products, leading to loss of market share	25	Loss of funding/grants	5
Loss of core knowledge	19	No potential adverse effects	4

[1]Respondents who answered "other" or "don't know" are not shown.

Source: McKinsey Global Survey – R&D in the Downturn (2009)

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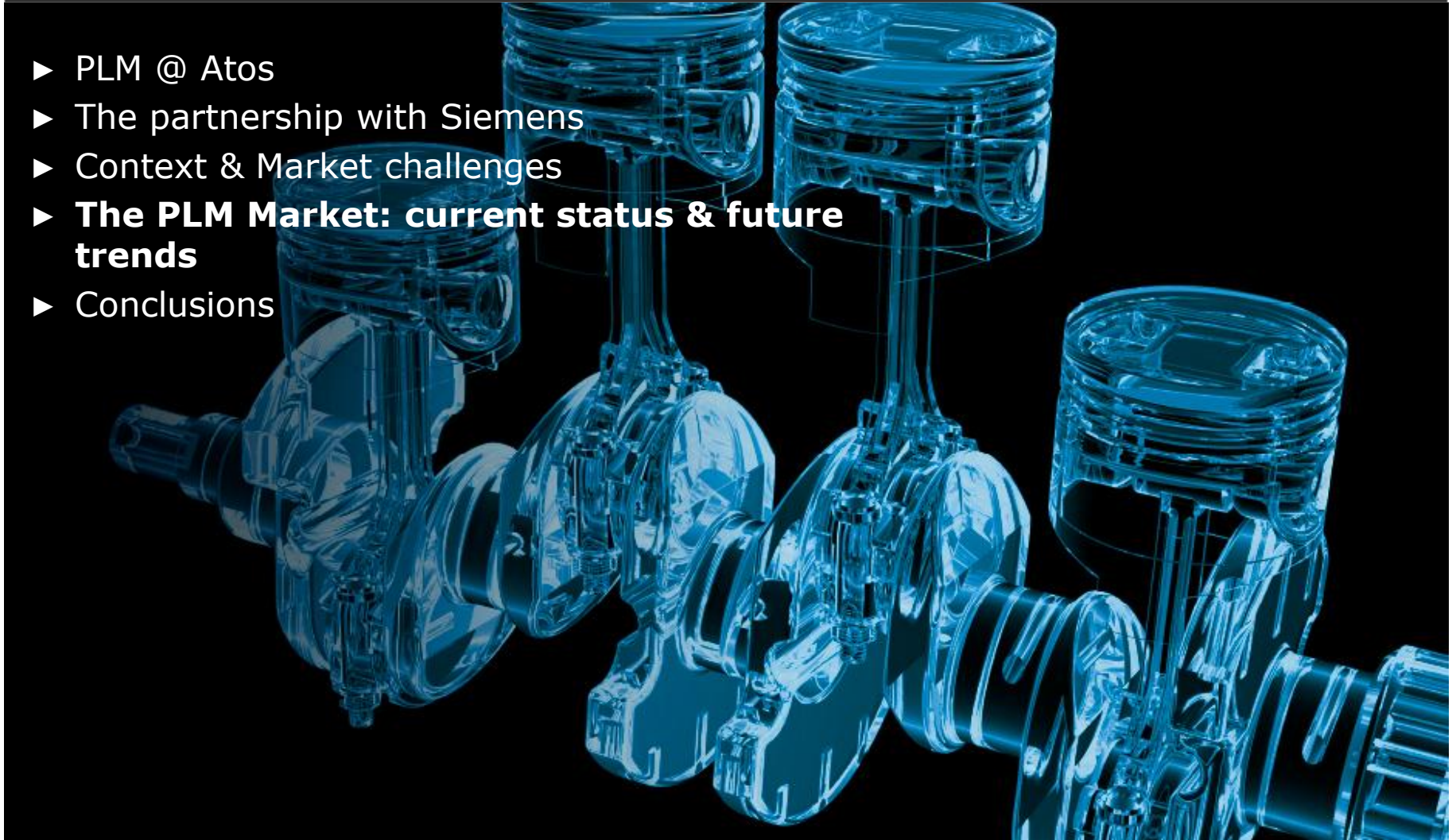- ▶ Context & Market challenges
- ▶ **The PLM Market: current status & future trends**
- ▶ Conclusions

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PLM Market over the last 12 months

▶ Global economy still not completely recovered
- Investments in PLM still growing but not in a uniform way and with different degrees of maturity in the different market segments

▶ Major global PLM initiatives based on processes harmonization & one single solution selection still happening

▶ The software vendor market going into two main tendencies:
- Increasing the number of vendors entering the PLM territory
- Increasing the number of acquisitions

▶ The software providers market is still very much consolidated into three categories:
- Traditional leaders: Dassault Systemes, PTC, Siemens
- ERP vendors: SAP, Oracle
- Niche / Emerging: Autodesk, Aras…

PLM Market results*

- Overall PLM revenues were up*
  - Comprehensive PLM up 11.3% to $33.3 billion
  - Mainstream PLM grew 12.1% to $21 billion
- cPDm growth higher than forecast
  - Up 9.9% to $11 billion
  - Solid growth in Focused Applications
  - Services grew slower than software, 7.3% and 13.6% respectively
  - Software growth should power services "wave" over next few years
- Digital Manufacturing still growing slowly
  - Up 10.2% to $550 million
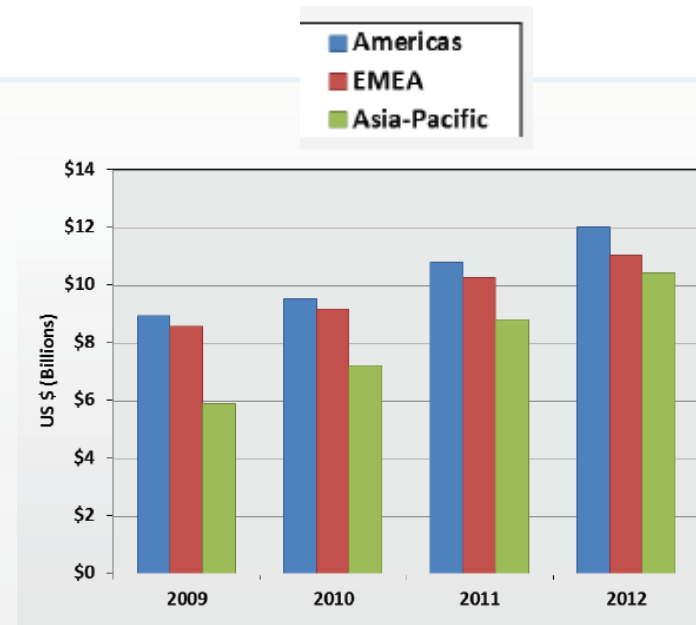
* Source: CIMData market analysis 2012 (released april 2013)
** Mainstream excludes Electronic Design Automation & Computer-aided software engineerng

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PLM Growth forecast*

- Overall PLM growth will moderate

- We expect growth in major sectors to continue more slowly
  - cPDm will continue to grow
  - Tools growth will be solid, driven by S&A
  - Digital Manufacturing will continue moderate growth

Area	2013	5 Year CAGR Forecast
Mainstream PLM	8.3%	8.5%
Comprehensive PLM	8.7%	8.9%
cPDm	8.54%	8.53%
Tools	8.8%	9.1%
Digital Manufacturing	7%	7.5%

* Source: CIMData: 2012 market analysis (released april 2013)

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Overall: PLM market is healthy and growing

▶ **Reducing R&D spend is not an option** to stay competitive for our clients

▶ **Investments** in full scope PLM can reach **several hundred millions Euro**

▶ Global initiatives **driven** directly **by CEO / CIO**

▶ On average > **8,5% market growth** *

▶ **Higher margins** than traditional IT services
  – Demand stronger than supply
  – Big size projects ongoing and kicking-off
  – Scarse number of engineers available
  – Booming for BRIC countries expected in a few years
  – Still growing in EU and North America

▶ **Service providers** market still fragmented but with some **clear leaders (IBM, Atos, T-Systems…)**

▶ Increasing presence into **non-traditional PLM sectors** (CPG, Pharma, Retail, Oil & Gas, Chemical…)

* Source: CIMData 2012 market analysis
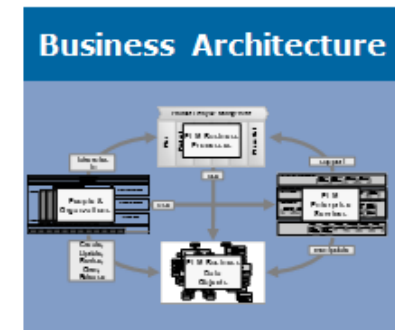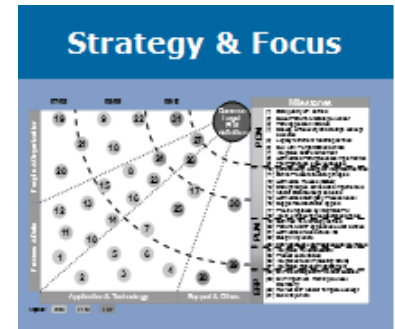
Strategy & Focus

Business Architecture

Roadmap

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Questions?

www.atos.net

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