

2009 **IMPACT**
IBM SMART SOA 高峰论坛 6.10 · 北京

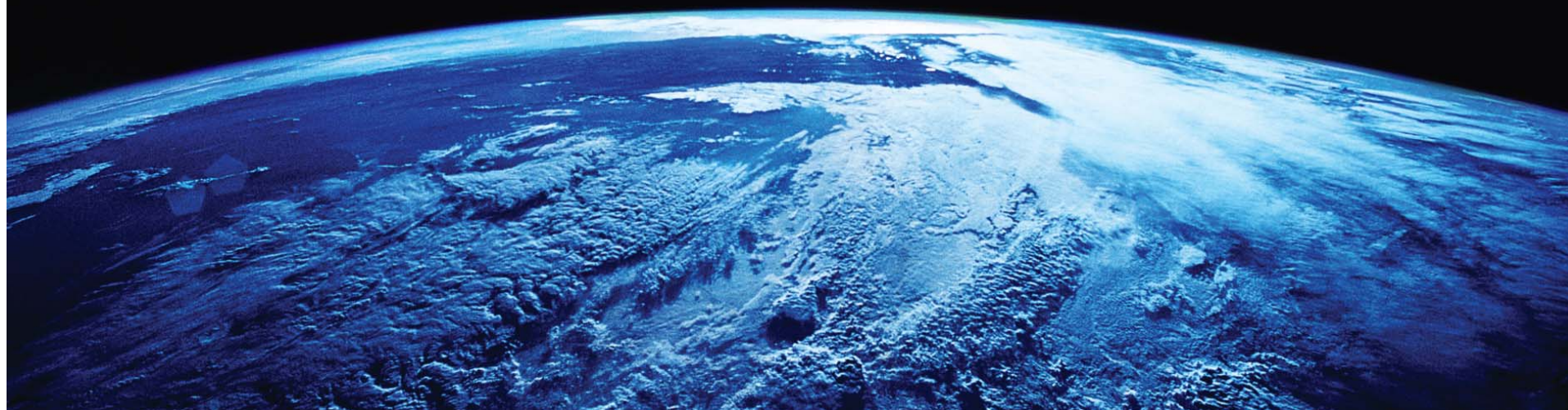


WebSphere®

Smart Work for Smarter Planet



智慧运作 · 赢未来



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IBM®

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助力运营商未来转型

*IBM服务提供商交付环境
框架 - SPDE*

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智慧运作 · 赢未来
Smart Work for Smarter Planet



内容



- 行业变革与挑战
- IBM SPDE助力运营商转型
 1. 加速服务创新
 2. 优化运营流程
 3. 差异化客户体验





行业界限变得越来越模糊... 与IT、互联网、传统媒体和消费电子交织在一起

融合和并购正在模糊行业的边界，降低了市场进入的门槛，“服务提供商”的定义得以扩展...

Convergence within Telecom

- Move to all IP networks
- Voice + Video + Data
- Fixed + Mobile

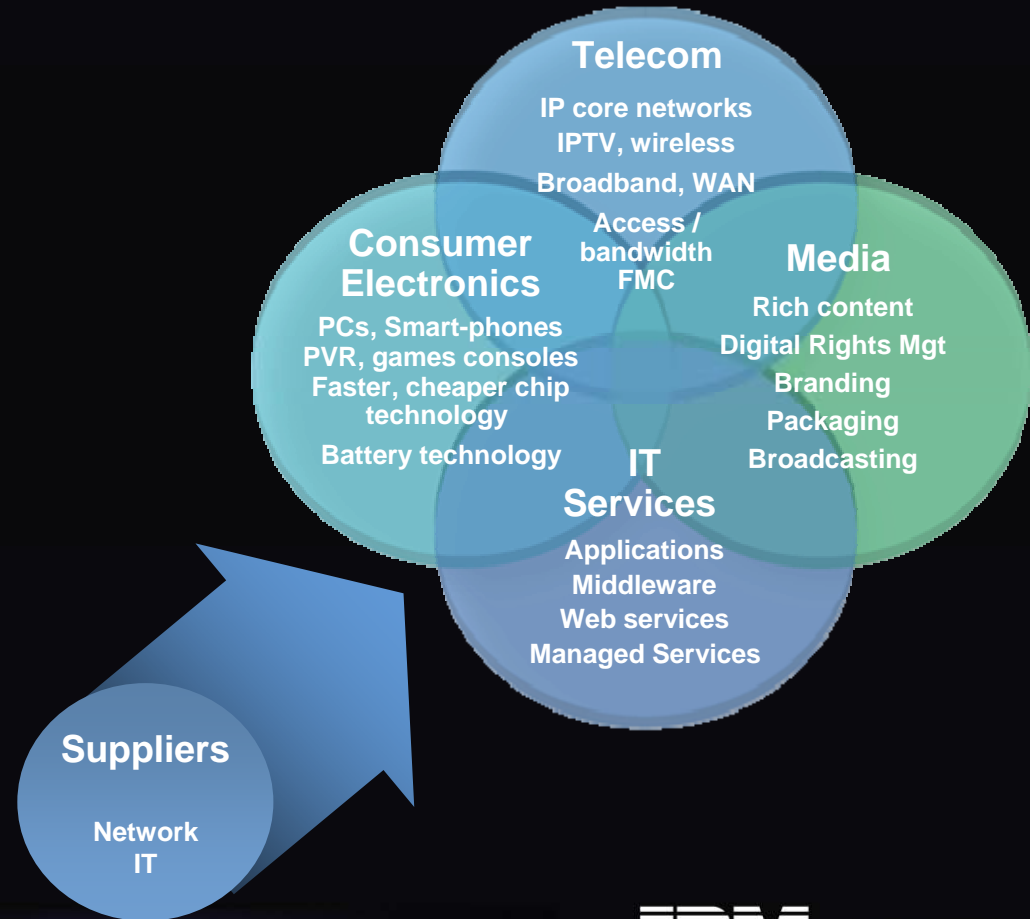
Convergence across Sectors

- Telecom + Information Technology
- Telecom + Digital Media
- Telecom + Consumer Electronics
- Emerging Standards
- Convergent Suppliers

Consolidation

- Mergers and Acquisitions continue
- Regional and Global Brands
- Virtual Operators

Converging Ecosystem





市场变化正驱使电信行业...

寻找新的商业模式和更加智慧的运作方法

Economic Issues

- Core product (Voice) is being commoditized
- Cost / complexity of new services

Widening Field of Competitors

- New market entrants from other industries
- Convergence Is spawning “Telemedia” Industry



Defend Market Share and Grow New Revenues

- Quickly / cost effectively roll out new products
- Move to lower-cost IP networks while maintaining service quality, brand image and profitability

Subscriber Expectations

- Demand for multimedia, services and content
- Quick to abandon underperforming services



再见了，“杀手级”应用!!!

“The reality is that there probably is **no killer application**, no silver bullet that the Telco's can latch onto to carry them into a 21st Century... Instead, there are probably hundreds - perhaps thousands - of niche applications... And the only way to find which of these work for you is **to try out lots of them, ramp up the ones that work, and discontinue the ones that fail.**”

Martin Creaner
President & CTO
TM Forum

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Create mobile / STB content	Enterprise LBS	Conferencing / Collaboration
Blogging / MicroBlogging	Emergency Alerts	Internet Mobilization
eGovernment	Co-branded Widgets	Enterprise mash-up enabler
Brewery finder	Enterprise Community	Coupons
Community Widget	Family Management	Community enabler
Asset Tracking	eHealth / Telemedicine	Bill management
Content search and display	Directory Services	Communication enabled business processes
Family Security	STB Widgets	Contests elearning
Taxi Finder	Call Management	Enterprise mobilization
Conferencing widget for social network		Converged Communications
Enhanced Voice		Family smart limits
Address Book Community		Ad Supported gaming



为了赢得市场，运营商必须创新以变得更加敏捷

Improve time to market
AND quality of value added
services



Lower operating costs
to drive profitability



Deliver converged voice,
video **AND** data services



Increase retention **AND**
drive new revenue



Monitor **AND** manage services
and user experience quality



Leverage existing
network infrastructure



Integrate services **AND**
connect with backend support systems





为了赢得市场，运营商必须创新以变得更加敏捷

Improve time to market
AND quality of value added
services

Lower operating costs
to drive

**Accelerate Product/Service
Innovation and Delivery**

Deliver converged voice,
video AND data services

**Evolve to Optimize
Operations**

Increase retention AND
drive new revenue

Monitor AND manage services
and user experience quality

**Differentiate the
Customer Experience**

Integrate services AND
connect with backend support systems

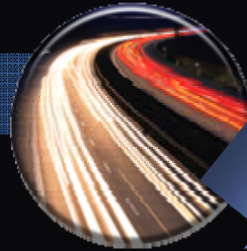


这需要新的业务能力

从创新到管理，端到端的服务生命周期使能和加速

Customer/Partner Management

Gain customer insight to deliver targeted/relevant offerings



Service Innovation

Online communities foster innovation for new services



Capabilities

Service Management

Improve quality and increase customer satisfaction



Service Creation

Bringing value added services to market more quickly



Service Execution

Deliver innovative services with greater speed and quality

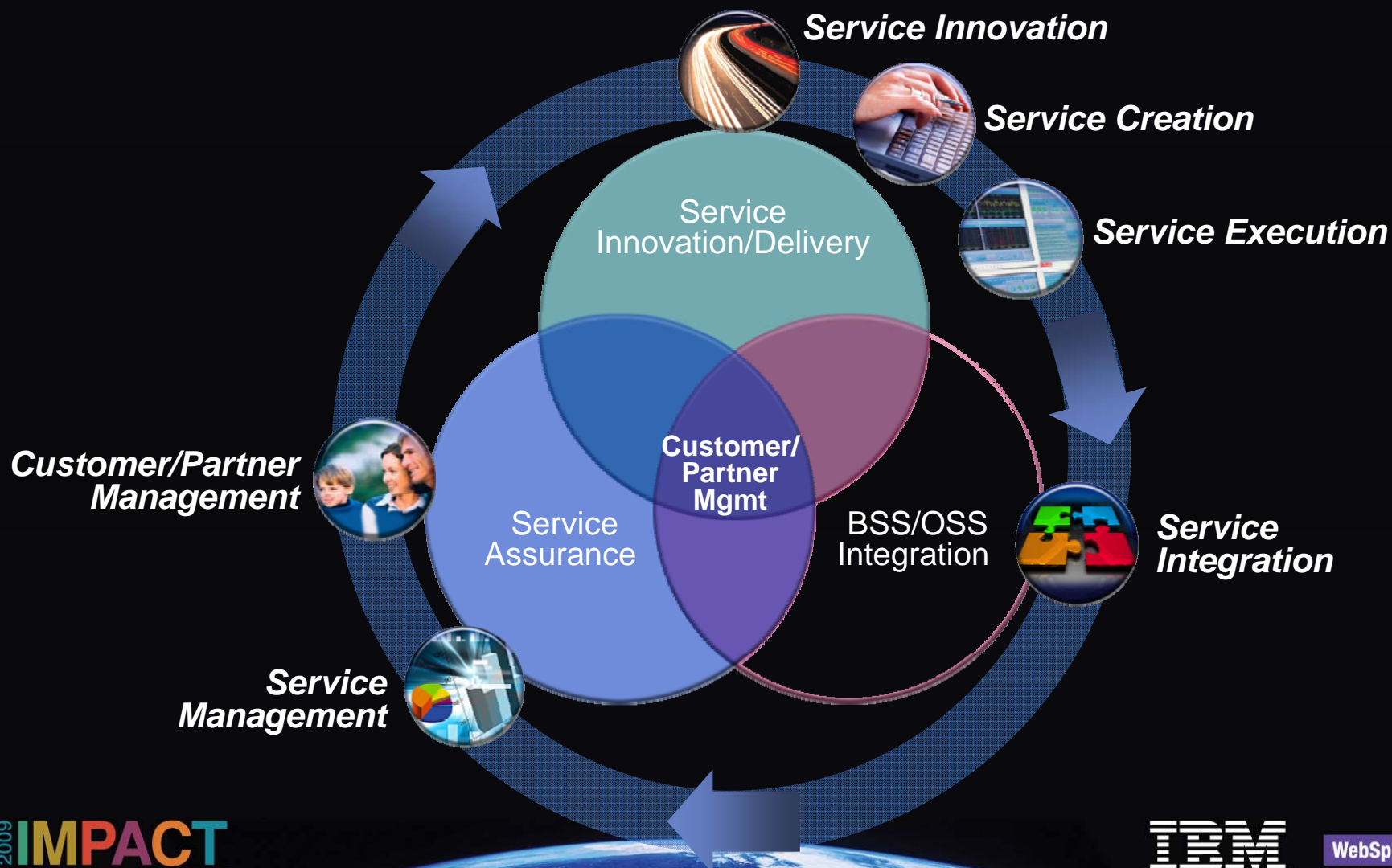


Service Integration

Integrate new services with fulfillment, assurance, billing and care systems (BSS/OSS)



需要一个框架来一致地交付这些新的业务能力
以支持更加智慧的运作和商业模式





内容

- 行业变革与挑战
- **IBM SPDE**助力运营商转型
 1. 加速服务创新
 2. 优化运营流程
 3. 差异化客户体验



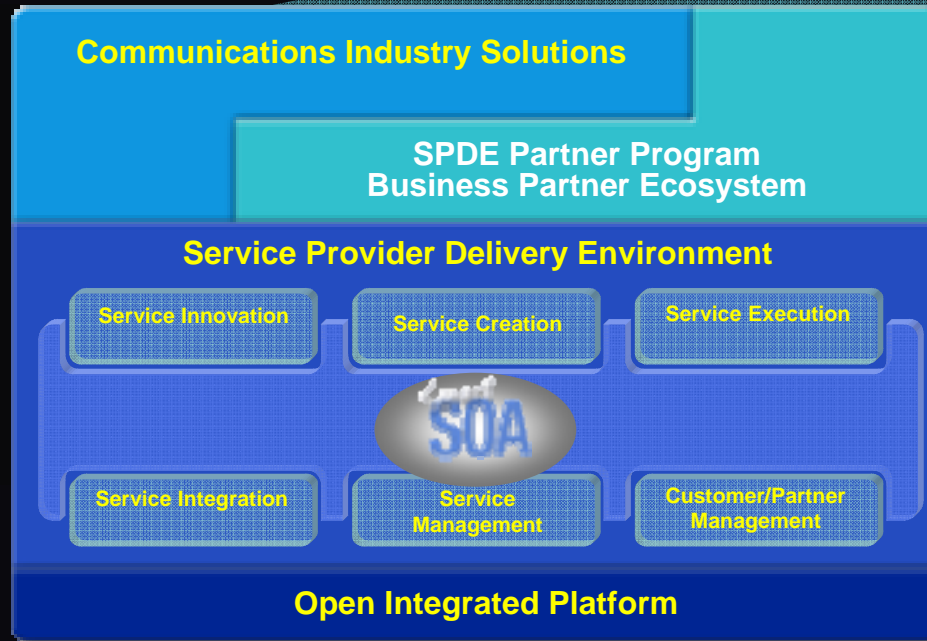
let's build a smarter planet





IBM电信解决方案战略

加速新业务能力的交付，让业务与IT对齐

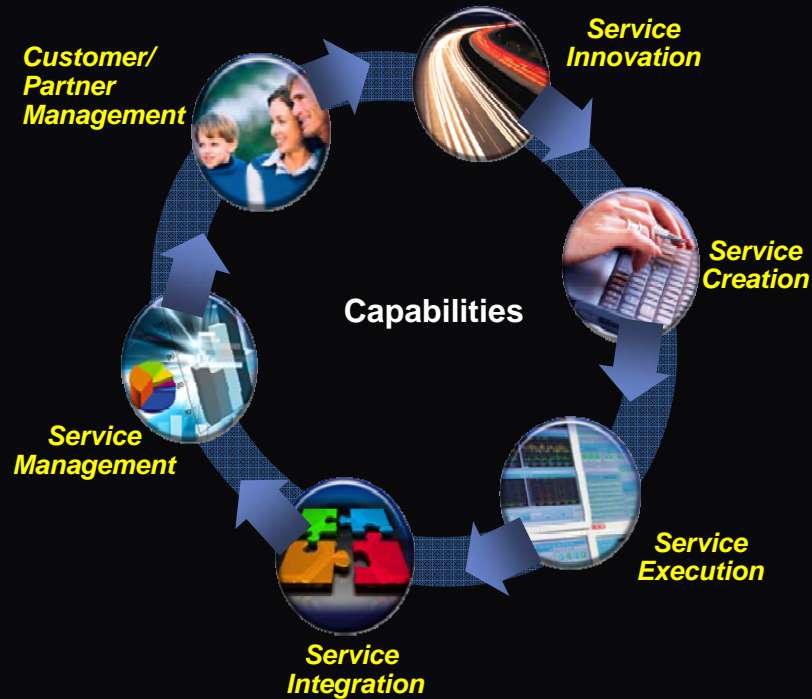


- Provide **solution offerings** based on industry assets, partners and best practices supporting new business models, the transformation of business operations and the acceleration of the end-to-end service lifecycle
- Provide a standards-based **industry framework** that creates flexibility, enables integration and provides a unified platform
- Provide a componentized, open-standards based **hardware platform and tools** across IT and Central Office with an integrated platform.



IBM电信解决方案战略

基于以下核心指导原则



- Horizontal Integration across business domains and functions (SDP – OSS - BSS)
- Foundation based on IT (SOA, Web 2.0, ITIL, etc.) and Communications Industry (eTOM, SID, NGOSS, IMS, SIP, etc.) standards
- Provides a common, consistent and network agnostic service platform
- Supports multiple service execution environments
- Network Abstraction and Exposure through standards-based network API's & web services
- Supported by loosely coupled SW components with telco extensions to leading SW products
- Adaptable and scaleable to handle industry evolution and convergence
- Supports an end-to-end view (the big picture)



IBM电信解决方案战略

SPDE - Service Provider Delivery Environment

Solution Offerings

Telco Solution

- Service Creation & Innovation
- Partner Integration
- Content Services Management
- Service Delivery and Portals
- Assurance Transformation
- Service Fulfillment Transformation
- Service & Network Lifecycle Mgmt
- Billing Transformation
- Business Intelligence
- CRM

IBM Assets

- Idea Factory
- Telecom 2.0 Widgets
- NGOSS Contracts
- Web Service Interfaces
- Triple Play Provisioning
- Unified Service Creation
- Telecom Web 2.0 / Mashups
- MediaHub
- Service & Network Assurance
- Telco Data Warehouse

Industry Framework

SPDE Framework

Industry Extensions

- | Service Creation | Service Execution | Service Integration |
|---|---|---|
| <ul style="list-style-type: none"> • Unified service creation environment for CSP • SIP model, coding & testing • TM Forum NGOSS; eTOM, SID, TAM | <ul style="list-style-type: none"> • WAS SIP App Server • IMS Connector • Presence Server • XDMS Server • Telecom Web Services Server • WESB Media Extensions | <ul style="list-style-type: none"> • WBSF and Telecom Operations Content Pack • eTOM Process Models |
| | | Service Assurance |
| | | <ul style="list-style-type: none"> • Netcool / Vallent • Maximo |

Key Components from SOA Foundation

- | Information Mgmt. | WebSphere | Rational | Tivoli | Lotus |
|---|---|--|---|--|
| <ul style="list-style-type: none"> • InfoSphere • Information Server • MDM Server • IBM FileNet • IBM Cognos • IBM Optim • Informix • DB2 | <ul style="list-style-type: none"> • Application Server • WID • Business Modeler • Business Fabric • Business Monitor • Process Server • Datapower | <ul style="list-style-type: none"> • RequisitePro • System Architect • Software Architect • Performance Tester • TUP • Asset Manager | <ul style="list-style-type: none"> • Access Manager • Identity Manager • Netcool • Vallent • Maximo • ITCAM | <ul style="list-style-type: none"> • Portal • WEMP • Connections • Mashup Maker • Expeditor |

Target ISV Ecosystem



IBM servers, IBM storage, IBM BladeCenter family, IBM iDataPlex

Carrier Grade

I/O Density

Open Standards

Flexible Storage

IT

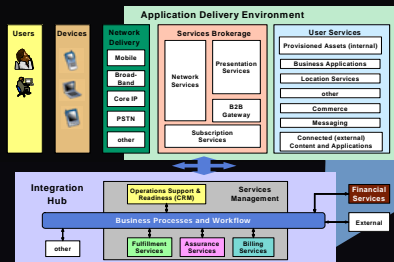
Common Platform / One Architecture

Telco



IBM服务提供商交付环境 SPDE Framework Evolution (2001 to today)

2001 – Framework introduction

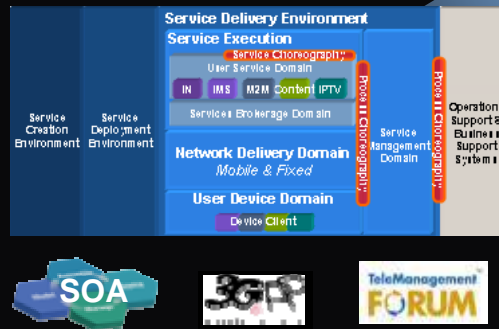


Early SPDE Solutions

- Mobile Data Services
- Subscriber Management
- Portal Management

2009 **IMPACT** eTOM Process Automation
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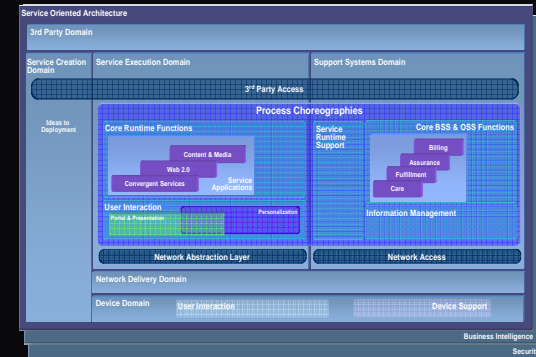
2006 – SPDE 2.0



SPDE enhanced with:

- Service Creation
- 3GPP IMS™ Enablers
- SOA
- TMF NGOSS

2008 – SPDE 3.0



SPDE expanded / enhanced:

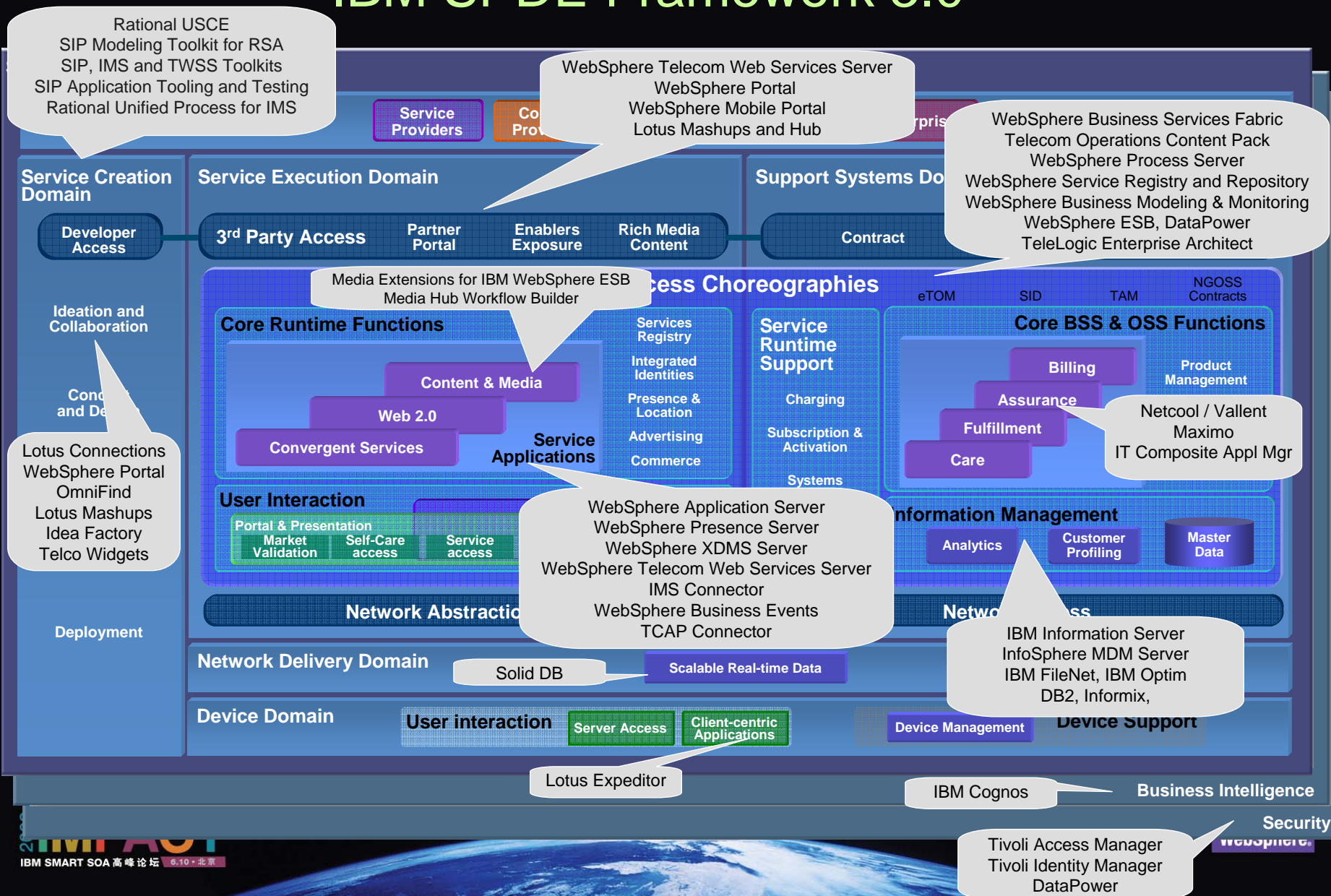
- Ideation, Service Exposure and Mashups via Web 2.0
- Dynamic SOA BPM
- Media Integration
- Info Agenda for CSP
- Service Assurance & Customer Experience Mgmt
- Business Intelligence
- Security Solutions



WebSphere



IBM SPDE Framework 3.0





助力电信运营商开启未来转型之旅...

Improve time-to-market, offer new services & reduce costs



Accelerate Service Innovation & Delivery

Service Innovation Ideation and rapid refinement of new services

Service Design/Creation Rapid creation of revenue generating services

Service Execution Assemble and deliver value added services quickly

Service Exposure Provide reliable, controlled, third party access to core network resources



Evolve to Optimized Operations

Dynamic Process Integration Streamline integration of OSS/BSS processes

Information Management Optimize business and operational information



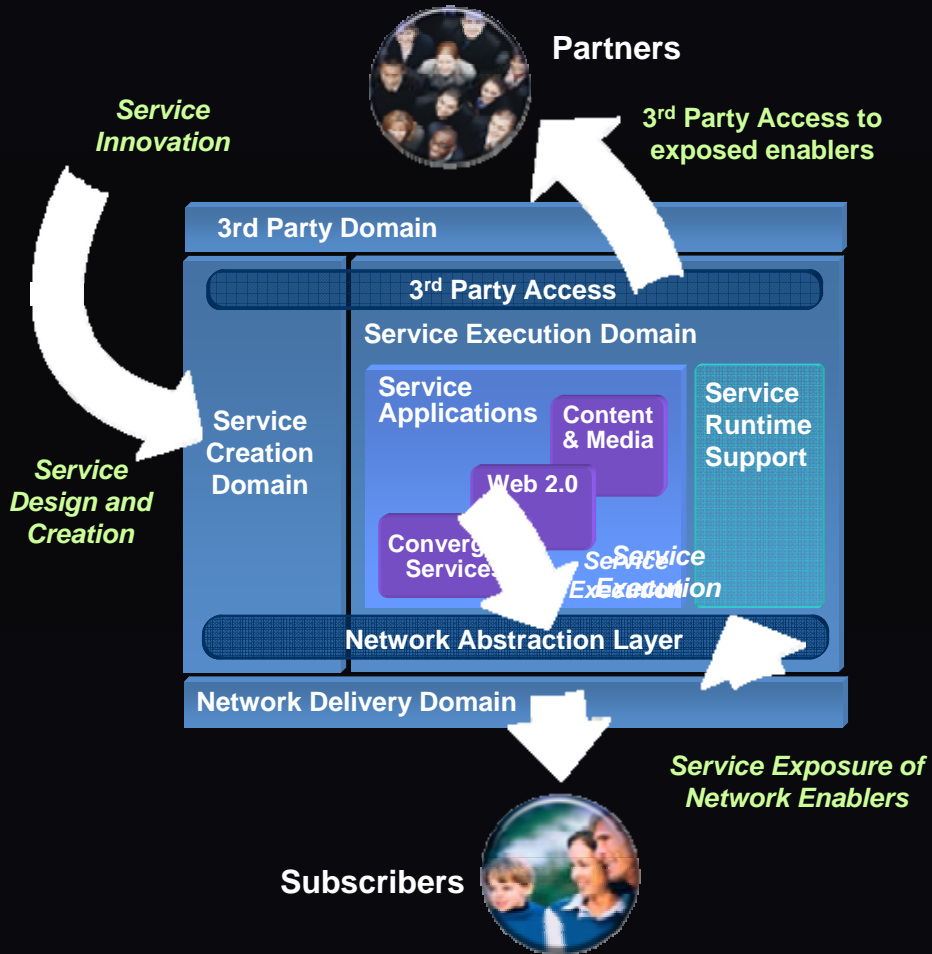
Differentiate the Customer Experience

Service Management Provide end-to-end service quality to ensure customer satisfaction



加速服务的创新和交付

扩展创新的渠道，缩短从开发到交付的周期



Service Innovation

- Leverages IBM's broad range of initiatives with Web 2.0 for a more dynamic & connected "ideation" process

Service Design and Creation

- IBM Rational-based Industry solutions for building IP-based converged communications applications

Service Execution

- Enhanced WebSphere execution platform provides common SOA-based platform for "carrier-grade", composite service applications, leveraging presence, voice, media and IT enablers

Service Exposure

- Secure, industry-standard Web service exposure of telecom network capabilities and connections into Web 2.0 world



采用Web 2.0将电信服务扩展到社交网络应用



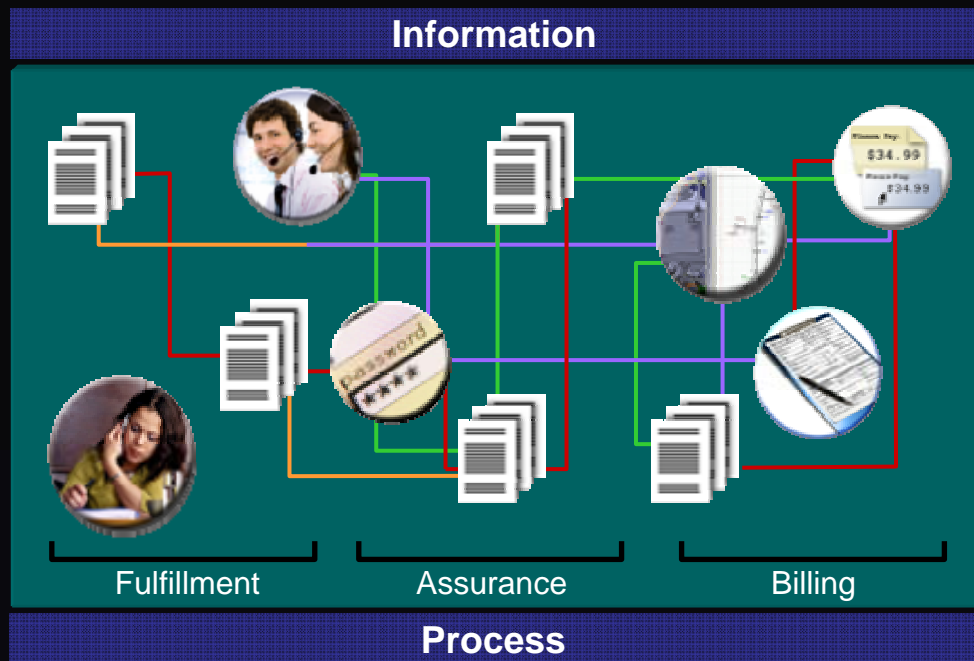
- Web 2.0 exposes core telecom capabilities: SMS, Call Control, Presence and IMS network services to internal employees and external users
- Sponsored a university contest to develop next generation applications (ex. Karaoke music service)
- Generating new and market leading revenue streams



优化运营流程

采用SOA提升业务流程的柔性，释放信息的战略价值

Order to Cash



• Dynamic Process Integration

- SOA-based integration of Business / Operational Support Systems (OSS/BSS)
- WebSphere Business Services Fabric provides dynamic service selection based on content, context and contract
- Telecom Operations Content Pack providing **150+** pre-built business services for billing, fulfillment and assurance
- Industry standards based on TM Forum standards (eTOM processes, SID data model, TAM, NGOSS contracts)

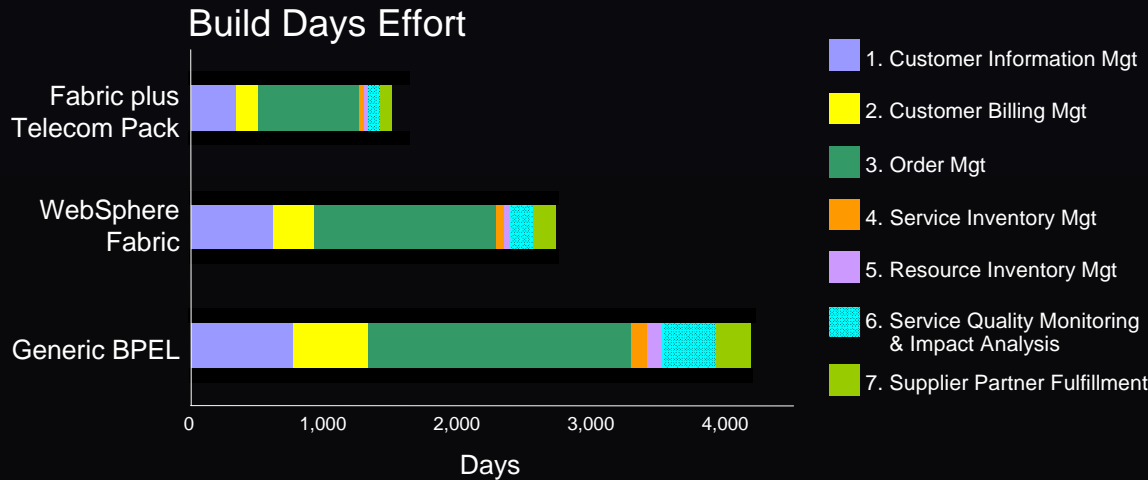
• Information Management

- Manage information over its lifetime and use it as part of business processes
- Optimizing information using Master Data Mgmt, Information Integration, Content Management and Business Intelligence



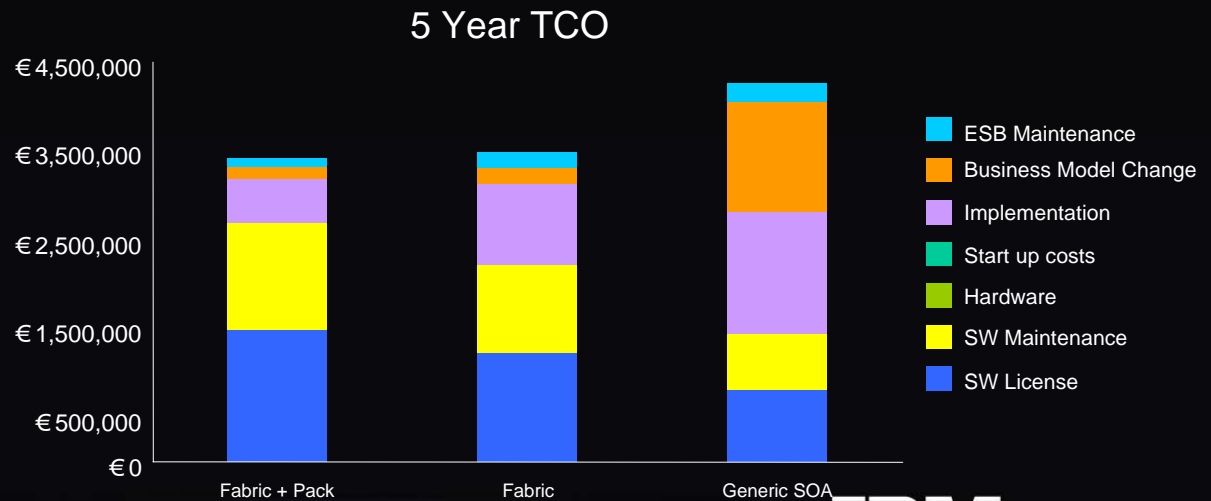
采用WBSF+TOCP的显著商业价值

From Mobile Service Provider's Business Value Assessment



**Accelerate
Time to Value
for Initial Build
by 64%**

**Reduced 5 year IT
Total Cost of
Ownership by 19%**





差异化客户体验

提升服务质量，关注每一个客户的价值

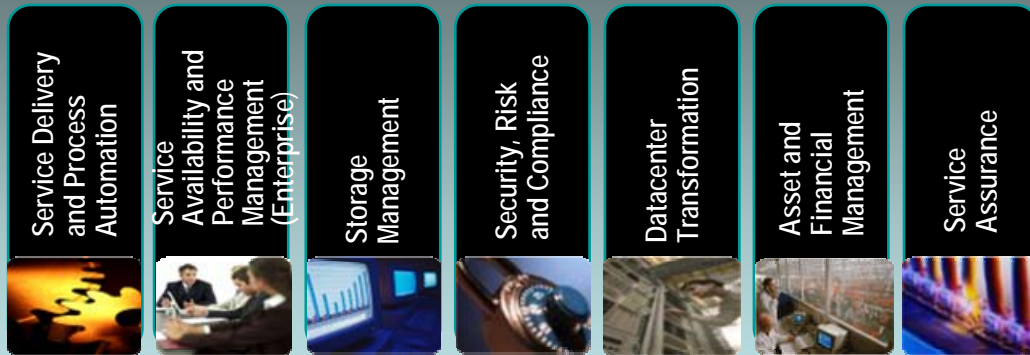
IBM Service Management for CSPs

Best Practices, Methodologies and Services

Accelerators

Service Management Platform

Contextually Linked Portal



Federated Data Repository

Visibility

Control

Automation

Partners

IBM Service Management Leadership

- Leverages IBM's acquisitions of Micromuse (Netcool) and Vallent
- Selected by over 1000 service providers worldwide
- Leading products ranked first in class by analysts
- Massively scalable, carrier-class, 100M events per day

Visibility

- True, real time end-to-end visibility of network infrastructure and performance, service quality and the customer experience

Control

- Consistent Platform on which to build delivery of next generation services

Automation

- Integrations across our service management portfolio and with other OSS/IT systems
- Comprehensive monitoring across any type of network... wireless, wireline



采用CEM实现结合实际客户体验的客户关怀



Hi, Molly O'Sullivan in Cork, we're having problems with our new VOIP service and my daughter has had problems today with her 3G HSPA service !



Katie

Hi Molly, we are having some VOIP problems in your region which have affected you, we are working on resolving this – we had congestion problems today with 3G when all the kids downloaded the new “Irish Idol” videoclips – these are resolved now Please check your web service portal for the status on all your services - Apologies for the disruption ☺



如果您刚好醒过来，请记住...

IBM SPDE is an IBM software enabled communication industry framework which was selected by over 1000 CSPs worldwide to address the key imperatives of the global Communication Industry.

- **Focused on:**
 - Service lifecycle from innovation through management
- **Accelerates:**
 - Delivery of revenue generating services cost-effectively
- **Supports:**
 - Evolving business models with business partners ecosystem

**Industry
Solutions
and SPDE
Framework**



**SPDE
Business
Partner
Ecosystem**





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