

Bridging the Gaps Between People, Applications and Systems

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About the Author

- Shane Pearson is Vice President, Marketing and Product Management at BEA Systems. Prior to his current position, Mr. Pearson has held several positions at BEA including Vice President, Platform Product Management, and Group Product Manager for WebLogic Portal and WebLogic Workshop. Previously Mr. Pearson has held roles in product management and consulting at Vignette Corporation, and SAP AG.

About BEA Systems, Inc.

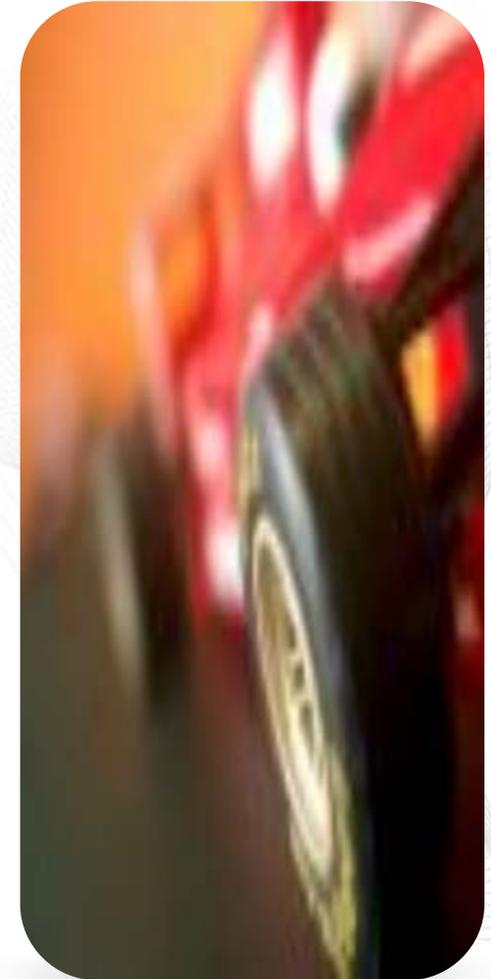
- BEA Systems, Inc. (Nasdaq: BEAS) is a world leader in enterprise infrastructure software. BEA's SOA 360° platform is the industry's most unified SOA platform for business transformation and optimization, in order to improve cost structures and grow new revenue streams.

Agenda

- **Key Challenges for the Enterprise**
- The Promise of Building an SOA with BPM and MDA
- Applying “The Long Tail” to Enterprise Software
- What’s Next

Business Drivers and Challenges

- Driving new revenue streams through business transformation and strategic differentiation
- Optimizing operational efficiencies
- Reacting more quickly to changing market dynamics and competitive threats
- Delivering quality customer service
- Achieving real time access to information to support decision making
- Complying with regulatory and privacy mandates



The Modern Business Worker

Style of work:

Ad hoc,
Collaborative,
Content-rich

Complex work processes:

move across
data
stovepipes



Information overload:

challenge
finding what
and who

Dynamic, urgent activities:

supported by
rigid enterprise
tools

Common Business/IT Interaction

- Broken processes, silos of data driven technology adoption
 - ▶ Customer relationship management
 - ▶ Enterprise resource planning
 - ▶ Supply chain optimization
- Business use technology to
 - ▶ Communicate requirements
 - ▶ Model processes
 - ▶ Support ad hoc and diverse needs
- Emerging business tools must be
 - ▶ Flexible: easy to get data in and out
 - ▶ Adaptable: support expandable set of needs
 - ▶ Intuitive (simple): minimal training required

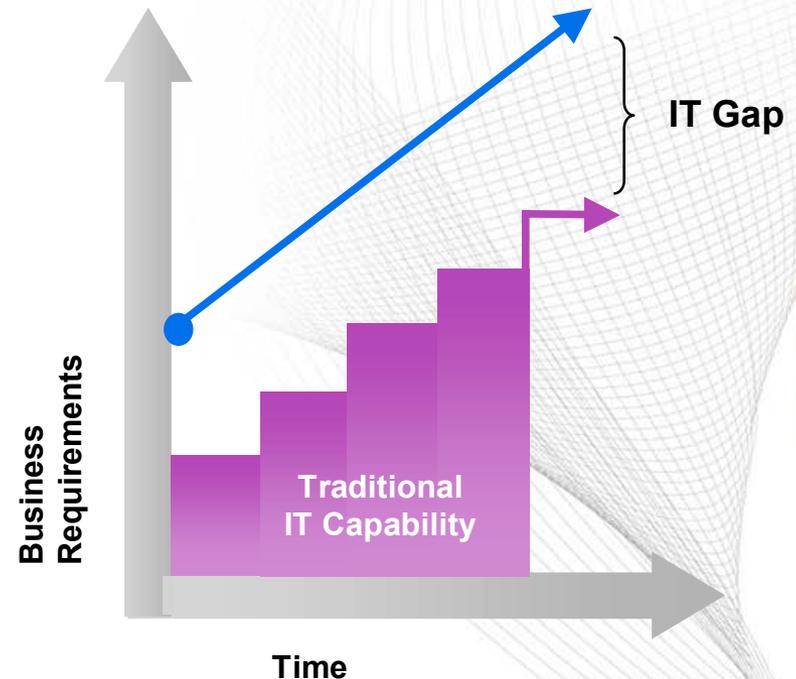
Key drivers of broader business participation*

Home broadband penetration >50%

>50% of surveyed enterprise decision makers not satisfied with IT's ability to drive innovative new business practices

IT Drivers and Challenges

- Reacting more quickly to the needs of the business
- Delivering a more flexible and agile IT architecture
- Lowering IT development, integration, and maintenance costs
- Achieving asset visibility and reuse
- Developing composite applications and processes



Current IT landscape

- Challenges

- ▶ Modernize legacy
- ▶ Make existing systems work better
- ▶ Encourage flexibility, but maintain control

- Major Themes

- ▶ Move to SOA
- ▶ Target extended-enterprise challenges
- ▶ Streamline IT operations (utility computing, hosting, outsourcing)

Legacy systems dominate IT spending*

80% of enterprise IT budgets go to operations and maintenance
40% more spent in 2006 than 2005 to replace legacy systems

* Source: Forrester North American 2006 Enterprise IT Spending Outlook

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The Promise of SOA

SOA Benefits Differ from Traditional IT Benefits

Traditional IT Initiative

SOA

Goal:

- Meet a specific business need at a specific point in time
- Meet short term needs in the context of longer term planning and reuse

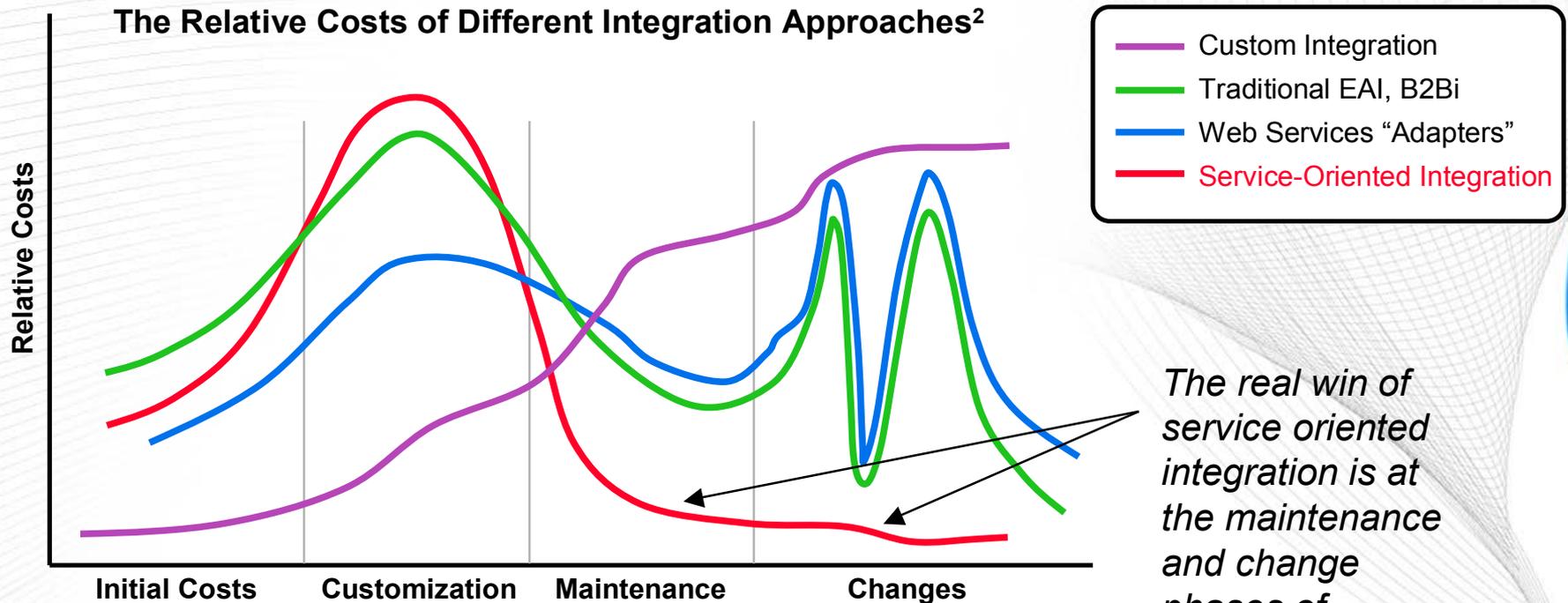
Timing:

- Materialized at the very end of the project
- Harvested as you progress project by project

Benefits:

- Deliver on the needs of the business at a specific point in time (possibly after business needs have changed)
- Better business/IT alignment, increased agility, reuse, lower IT costs

An SOA Approach Brings Dramatic Reduction in Integration Costs by 30%¹



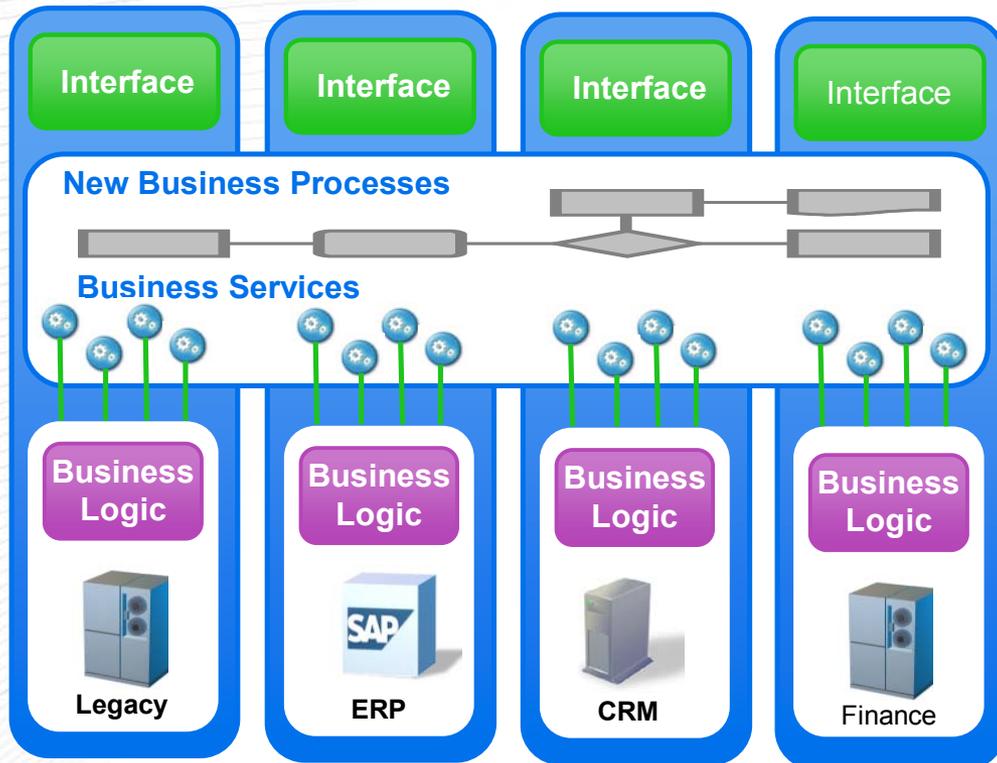
The real win of service oriented integration is at the maintenance and change phases of integration

1 - "Integration in a Service Oriented world," Ken Vollmer & Mike Galpin, Forrester, 2004

2 - "Understanding the real costs of integration," Ronald Schmelzer, Zapthink, 2005

Evolving to Service-Orientation

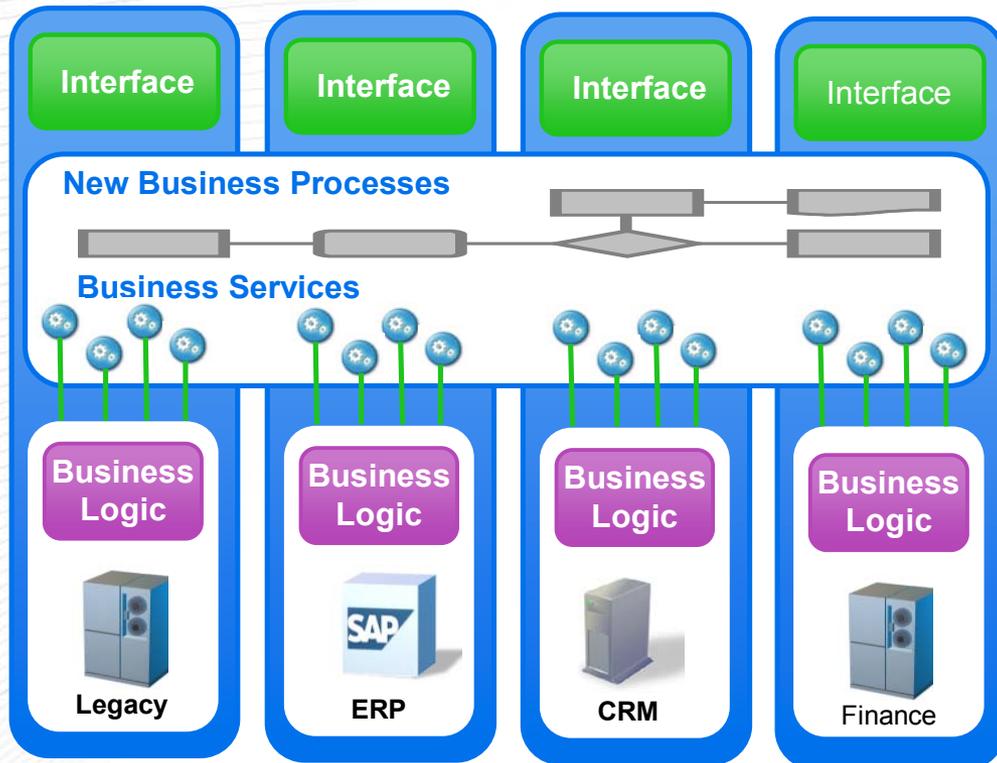
Requires New Infrastructure to Address Challenges



- Service Infrastructure factors out complexity and supports re-use
 - ▶ Security
 - ▶ Integration
 - ▶ Data Access
 - ▶ Process
 - ▶ User Interaction

Evolving to Service-Orientation

Requires New Infrastructure to Address Challenges



- Service proliferation drives the need for
 - ▶ Simplified management
 - ▶ Comprehensive governance
 - ▶ Ease of search and discovery
 - ▶ Ease of composition and change

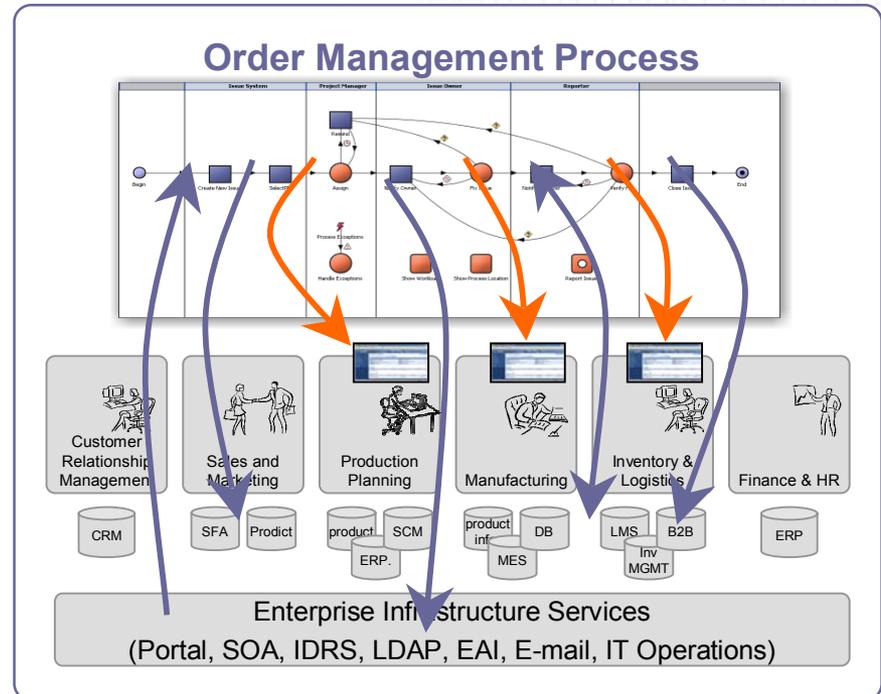
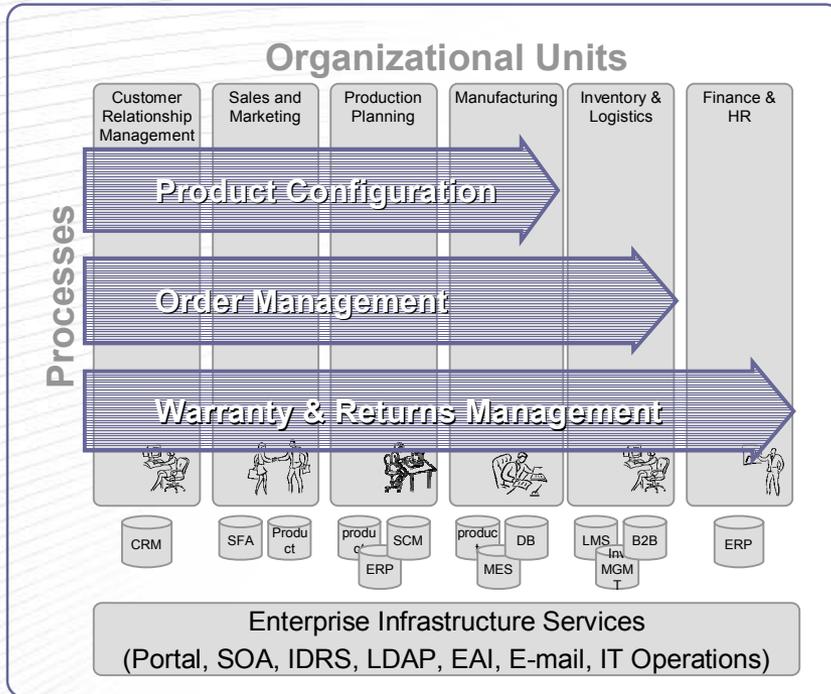
The Promise of MDA

- The MDA is a new way of developing applications and writing specifications, based on a platform-independent model (PIM) of the application or specification's business functionality and behavior. A complete MDA specification consists of a definitive platform-independent base model, plus one or more platform-specific models (PSM) and sets of interface definitions.

* From http://www.omg.org/mda/faq_mda.htm#cross%20platform%20interoperability

The Promise of BPM

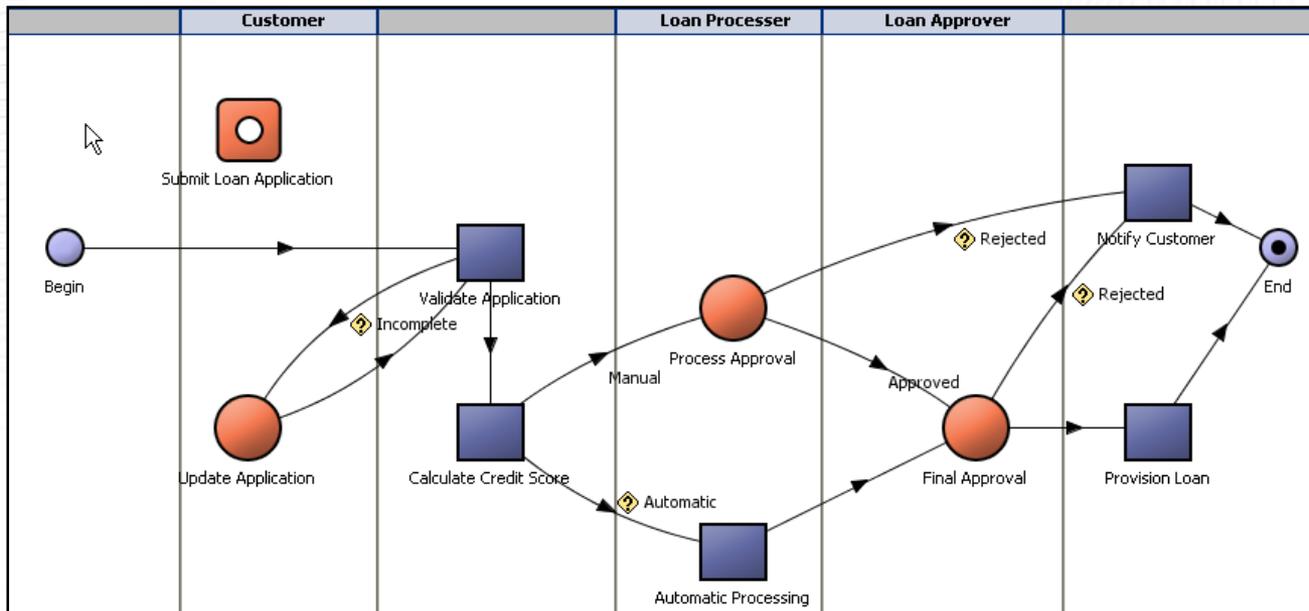
BPM is More Than Orchestration



The Business thinks primarily in terms of **business process, business activities, business rules and business events, not services**

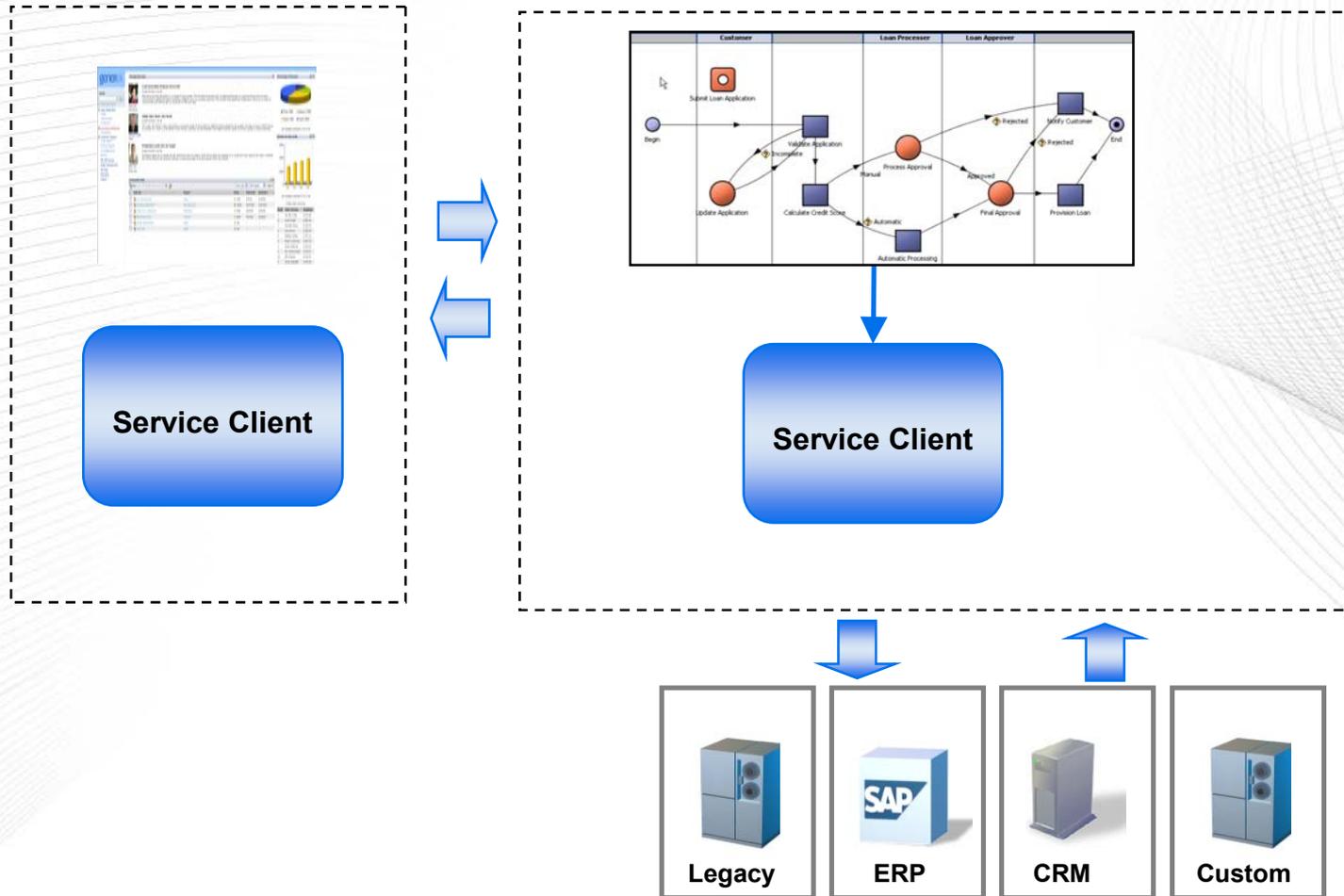
SOA and Business Processes

The Business Process as Service



SOA and Business Processes

The Business Process as Service



The SOA-BPM-MDA Value Chain

- SOA

- ▶ Re-usable services that can be discovered, versioned, managed, reused and be run-time platform independent

- BPM

- ▶ Re-usable processes that can be discovered, versioned, managed, reused and be run-time platform independent

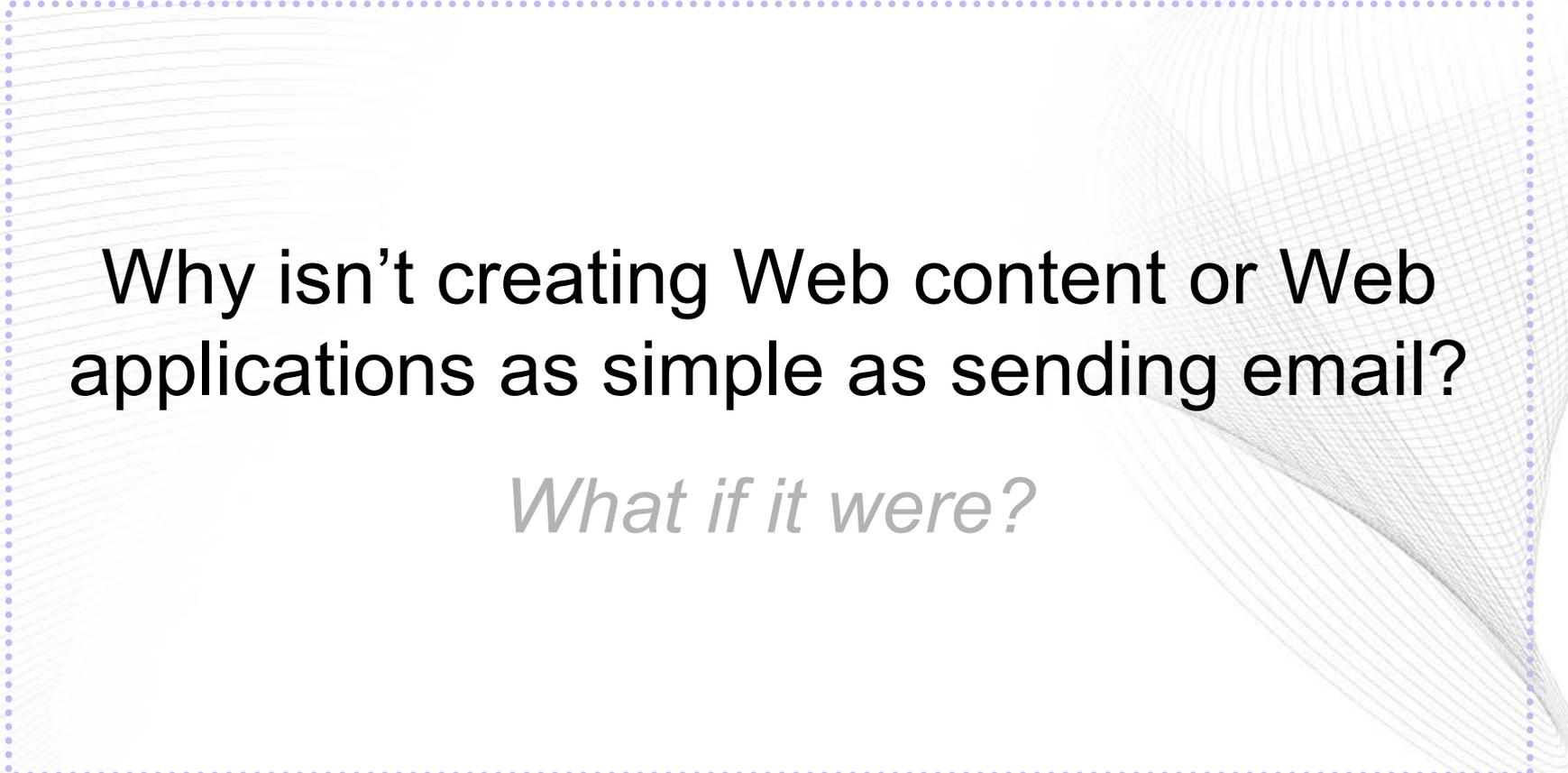
- MDA

- ▶ Applications based on a platform-independent model (PIM)

The SOA+BPM+MDA Value Chain supports both an architecture and methodology that better aligns to current and future business needs

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Why isn't creating Web content or Web applications as simple as sending email?

What if it were?

The Changing Web

Circa 2000

Britannica Online

Editable only by editors: 100K articles



Yahoo! Groups

Explicit and formal communities of interest



Today

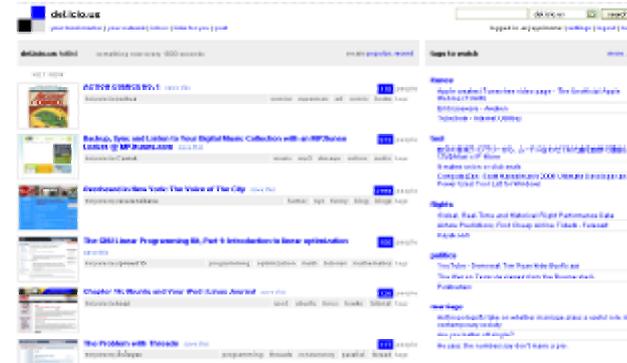
Wikipedia

Editable by anyone: 100K creators, 1.2M articles



del.icio.us

Informal and implicit communities of interest



What has Changed?

Web 2.0 Technologies, Services, Interactive, Social

- Knowledge is pulled in, everyone can participate and contribute
- Rich Client, Ajax: interactive desktop-like applications on the Web
 - ▶ Democratization: architecture of participation
 - ▶ Two-way interaction: instant and available feedback
- Information is discoverable, tag-able and can be delivered anywhere to users with defined interests

The Long Tail



Consider this...

Books

- Amazon: 3,000,000
- Barnes & Noble: 130,000

Amazon sells more obscure books to single buyers, than all the best-sellers combined

Music

- iTunes: 1,000,000+
- Tower Records: 50,000

Every song in the iTunes catalogue has been purchased at least one

Movies

- Netflix: 35,000
- Blockbuster: 3,500

The volume of low-popularity movies on Netflix exceeds the sales volume of blockbusters

The Long Tail in Enterprise IT

\$

Greatest
% of IT
budget

Built by IT, using core enterprise systems

- Inventory management
- Customer relationship management
- Demand and supply chain

One offs, or built by business using email and desktop tools

- Responding to rfps
- Inventory outage planning
- Collaborating on sales forecasts

Smaller
projects that
don't justify
big IT
investment

Specialized Needs

The Long Tail in Enterprise IT

\$

SAP has 12M users worldwide 30K customers representing 20% of potential users.¹

Oracle applications have 8M users worldwide.²

Organizations maintain an average of 3 enterprise systems.⁴

Microsoft Office has 400M users worldwide representing 98% of potential users.¹

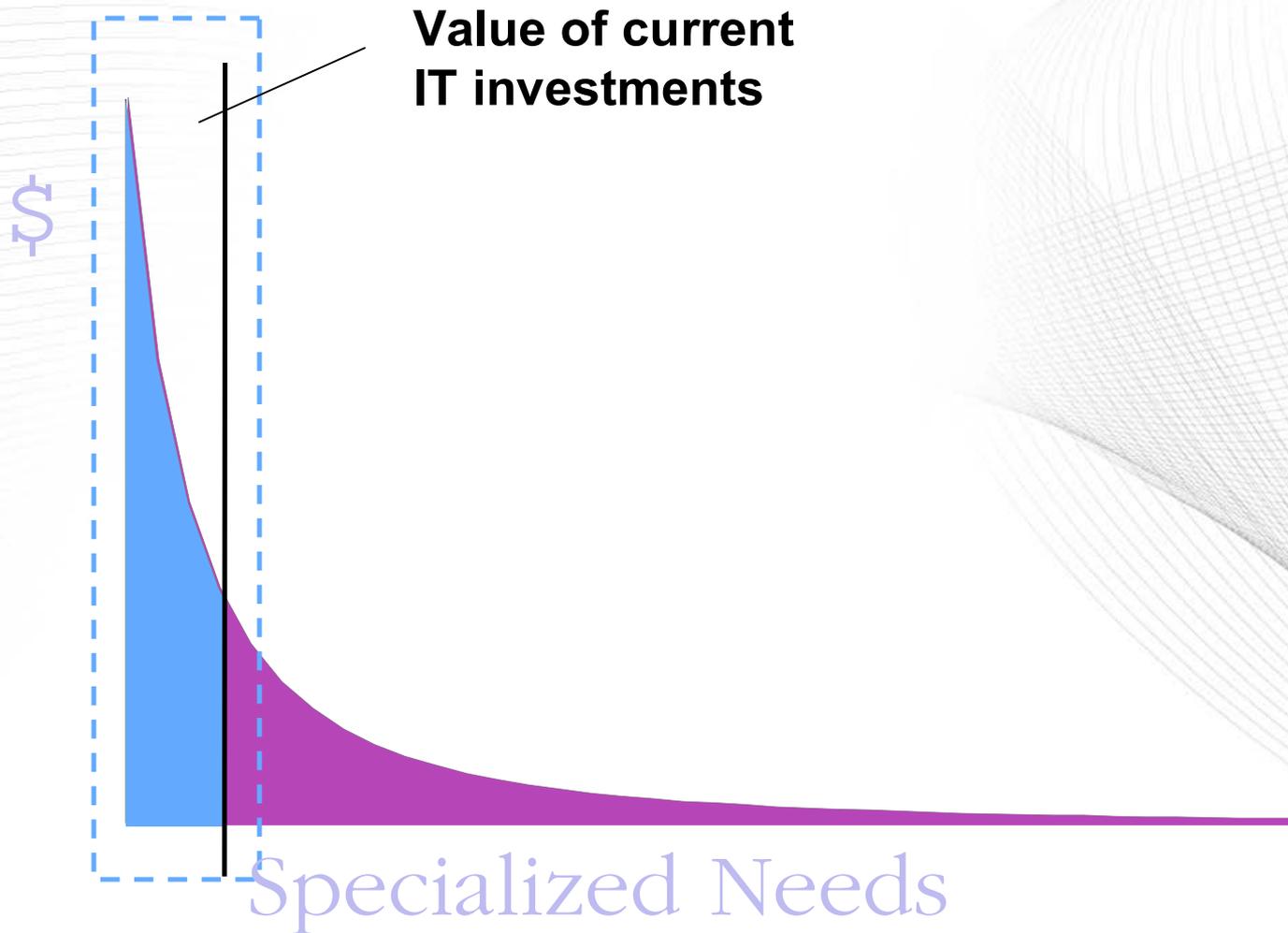
Microsoft Exchange has 140M email users worldwide.¹

Organizations maintained an average of 120 Web-based applications to address process requirements.⁴

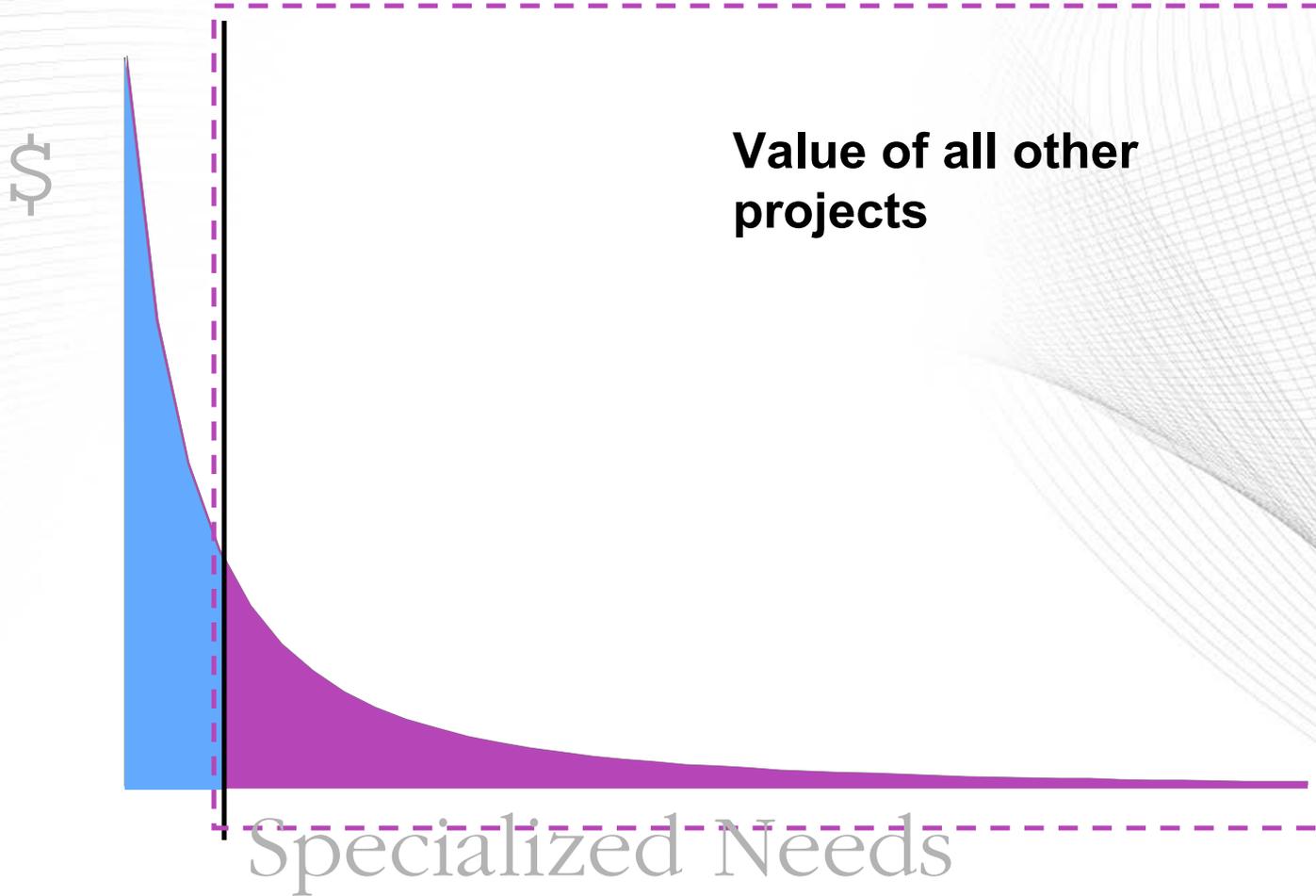
Specialized Needs

Source: ¹AMR Research 2005 View from SAPHIRE; ²Estimate based on Oracle-Peoplesoft combined market share from 2005 AMR Research report; ³AMR Research May 2006; ⁴Line56 Research on mid-large organizations

The Long Tail in Enterprise IT



The Long Tail in Enterprise IT



Traditional IT and Big Applications Do Not Work for All Needs

Traditional IT Applications

Planned, designed, then architected

Patient needs, permanent

Monolithic

Rigid features, planned in advance

Users part of planning

Complex features, underused

Situational Applications

Spontaneously created

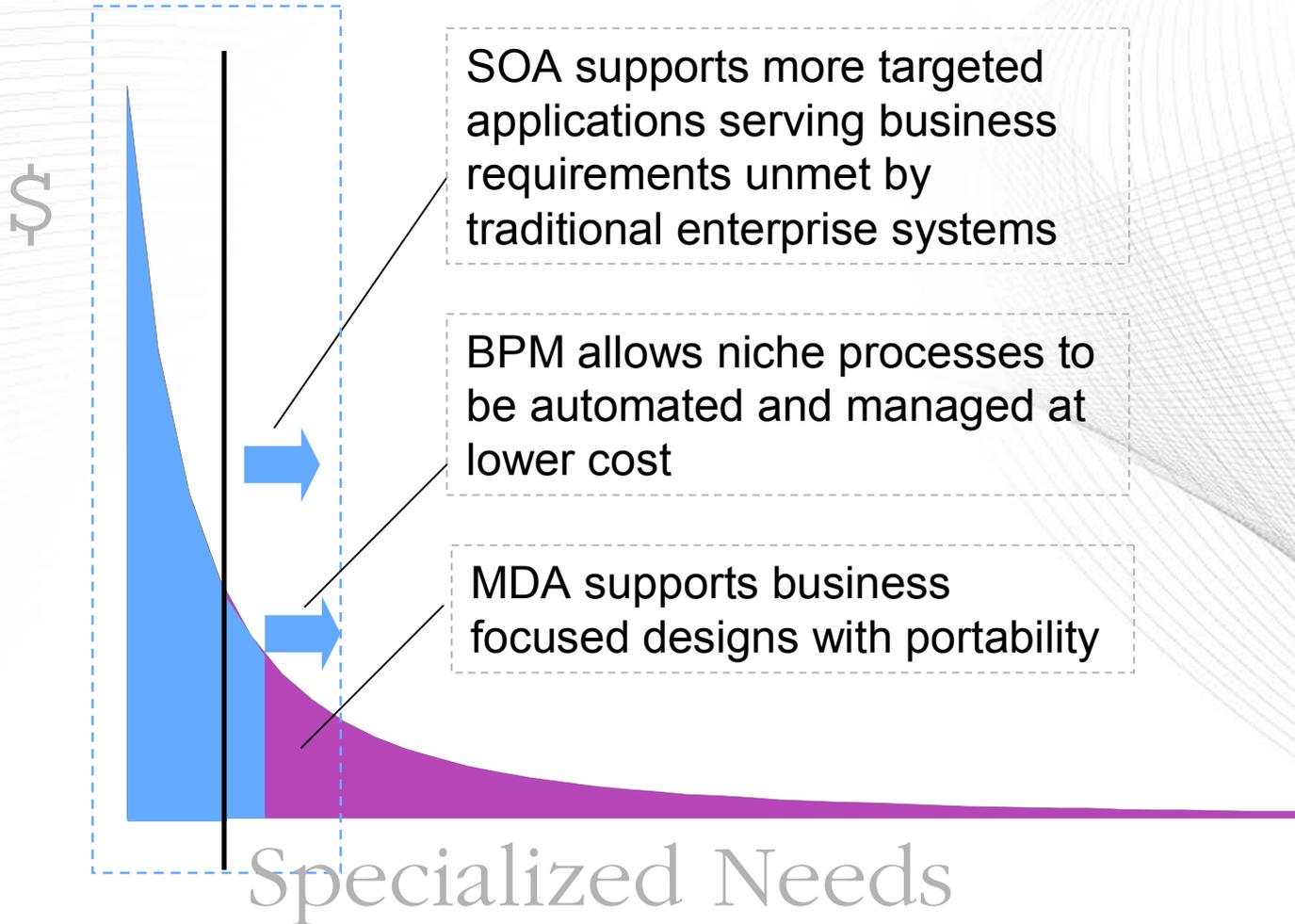
Urgent needs, situational

The same concepts that are "changing" the Web can be applied to the enterprise

Users part of creating

Simple features, overused

SOAs built with BPM and MDA begin to Address The Long Tail...



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What's Next

1

SOA + BPM + MDA Value Chain increases Business Alignment
Increased visibility and accountability of IT investments

2

Standards and Interoperability Continue to Evolve
Increased maturity of standards and interoperability increases adoption of SOA + BPM + MDA value chain

3

Situational Applications Bridge the Gaps
Modern tools allow broader class of users to leverage the SOA + BPM + MDA value chain to support new class of "long-tail" applications

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