Achieving Real Business Value From IT Investments

Jan Duffy
Senior Analyst, IDC

IBM CIO SOA Summit
July 12, 2007

IDC

Analyze the Future

Agenda

1. What Executives Want From IT

2. The Changing IT Landscape

3. The Implications for CEO/CIO Agendas

4. Achieving Flexibility: The Five Rights

5. Conclusions

6. Q&A

IDC
Analyze the Future

What Does the Business Want From IT?

1. Deliver more high business value services

2. Make IT more dependable and secure

3. Understand our business better

4. Speed up (business) project delivery

What Does Business Want From IT Suppliers?
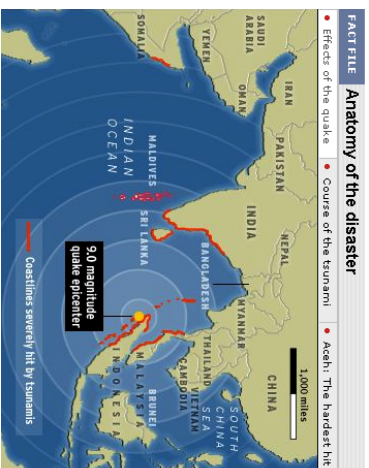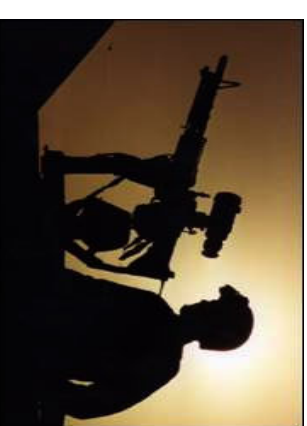
1. Very competitive pricing

2. Salespeople who understand our industry and business

3. Products and service designed for our industry

4. Clear description of the business case for their offerings

It is Also Difficult When So Much is Happening at the Macro Level ...

Google's Oregon Complex

- 30-acre campus located near the Columbia River in Oregon provides access to cheap hydroelectricity and to a fibre-optic artery built to handle 640 gigabits per second that connects Asia to the US

- An estimated 450,000+ servers and 200 petabytes of hard disk storage and four petabytes of RAM (a petabyte = 1 million billion/10^{15}/1 quadrillion bytes)

IDC
Analyze the Future

Toyota Showroom in Second Life

Toyota has entered the virtual world as the first automotive advertiser, dropping its Scion all around the grid of Second Life so users could drive it around, interact with it and of course customise it prior to purchase.

Second Life stats
July 8, 2007:
Total residents: 7,899,261
Logged in last 60 days: 1,763,640
Online now: 43,254

IDC
Analyze the Future

- All IP, Ethernet backhaul for better performance
- 100,000 network elements eliminated
- CO switch complexes now office buildings

And it's Difficult When the Sand Continues to Shift …

Information Explosion

Device Explosion

Transaction Explosion

Mayhem Explosion

IDC
Analyze the Future
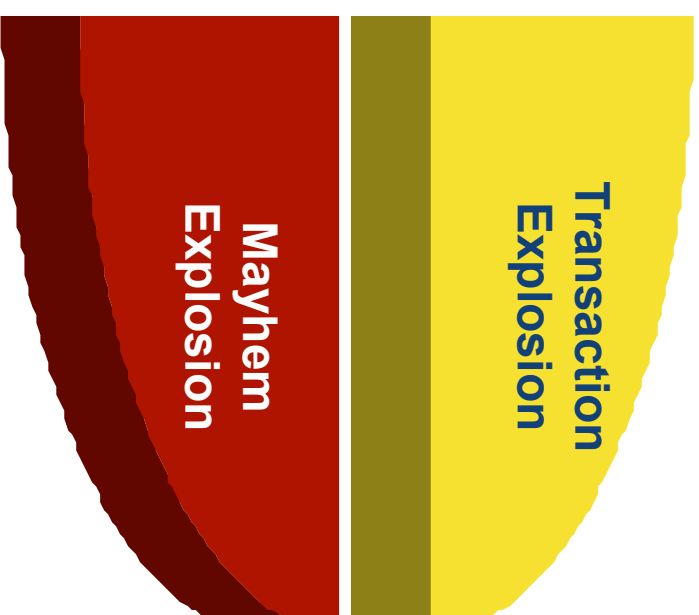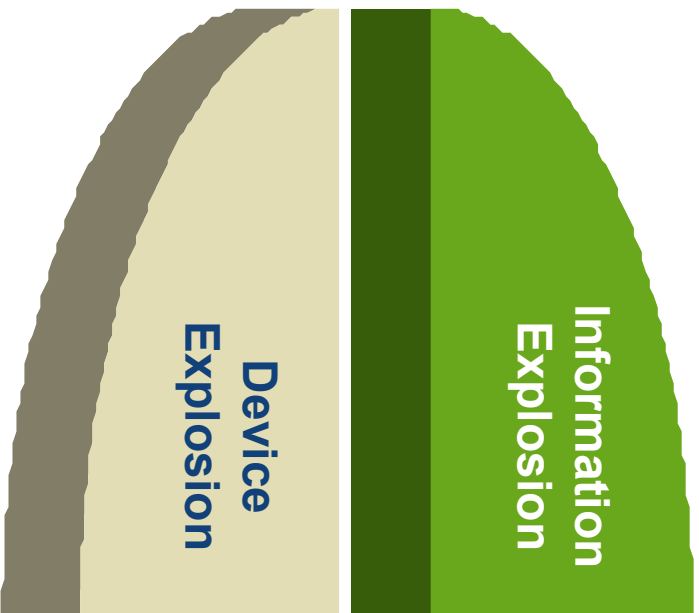
Information Created, Captured and Replicated

6x growth in four years

2006
161 exabytes

2010
998 exabytes

IDC
Analyze the Future
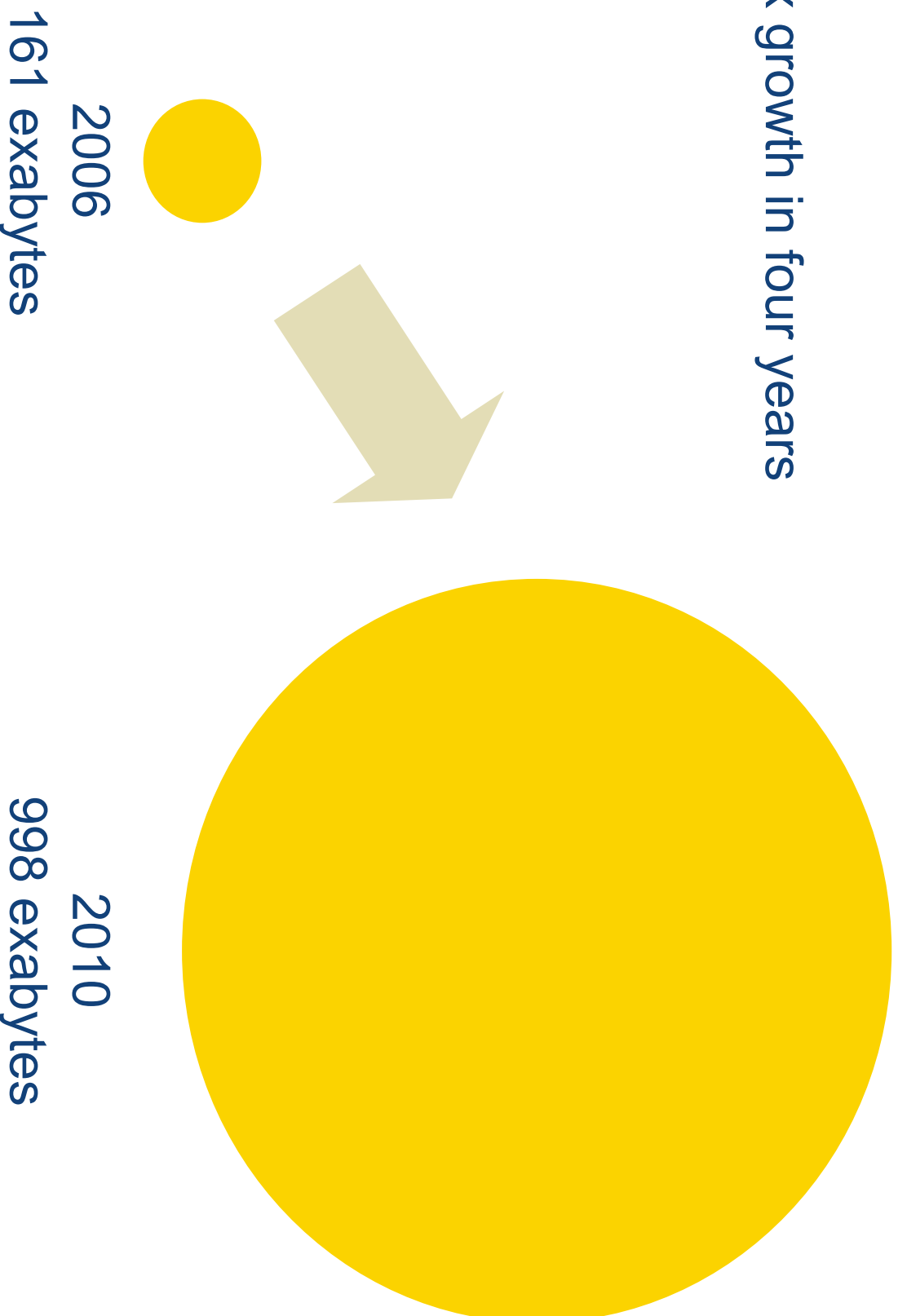
The Information Explosion: 988 Exabytes of Digital Data Will be Generated in 2010

IDC
Analyze the Future

Of the 988 exabytes 692 will be user-generated* content

Of the 988 exabytes 859 will be touched by an organisation**

*Consumers and workers creating, capturing or replicating personal information

**Transported, hosted, managed or secured
(Exabyte = 1 quintillion/10^{18})

2x Growth in Worldwide Installed Device Base

- IDC estimates that by 2010:

  – The number of camera phones, cameras and PCs in use will reach almost 2 billion

  – There will be 500 million new Internet users

  – There will be 600 million new mobile phone users

  – IP networks will be expanded — voice, video, building automation

  – New devices — RFID, sensors, machinery, surveillance will become ubiquitous

Consequence: Between 2007 and 2010 IT infrastructure and architecture increasingly become business issues

Analyze the Future

IDC

Number of Internet commerce transactions and related accesses

2005

24 billion/year WW

Consequence: IT increasingly in the direct line of company revenue, service and customer experience

Source: IDC Internet Commerce Market Model V11, March 2007

IDC
Analyze the Future

The Mayhem Explosion

- The number of reported IT security vulnerabilities continues to climb

- Attacks are more frequent and increasingly sophisticated

- Hacker motivations have changed

- Development of new organisational information infrastructures will be required

- Mandatory reporting is coming

Consequence: IT will be required to spend more time in the boardroom

IDC
Analyze the Future

Pervasive Computing and the Exploding Network Edge
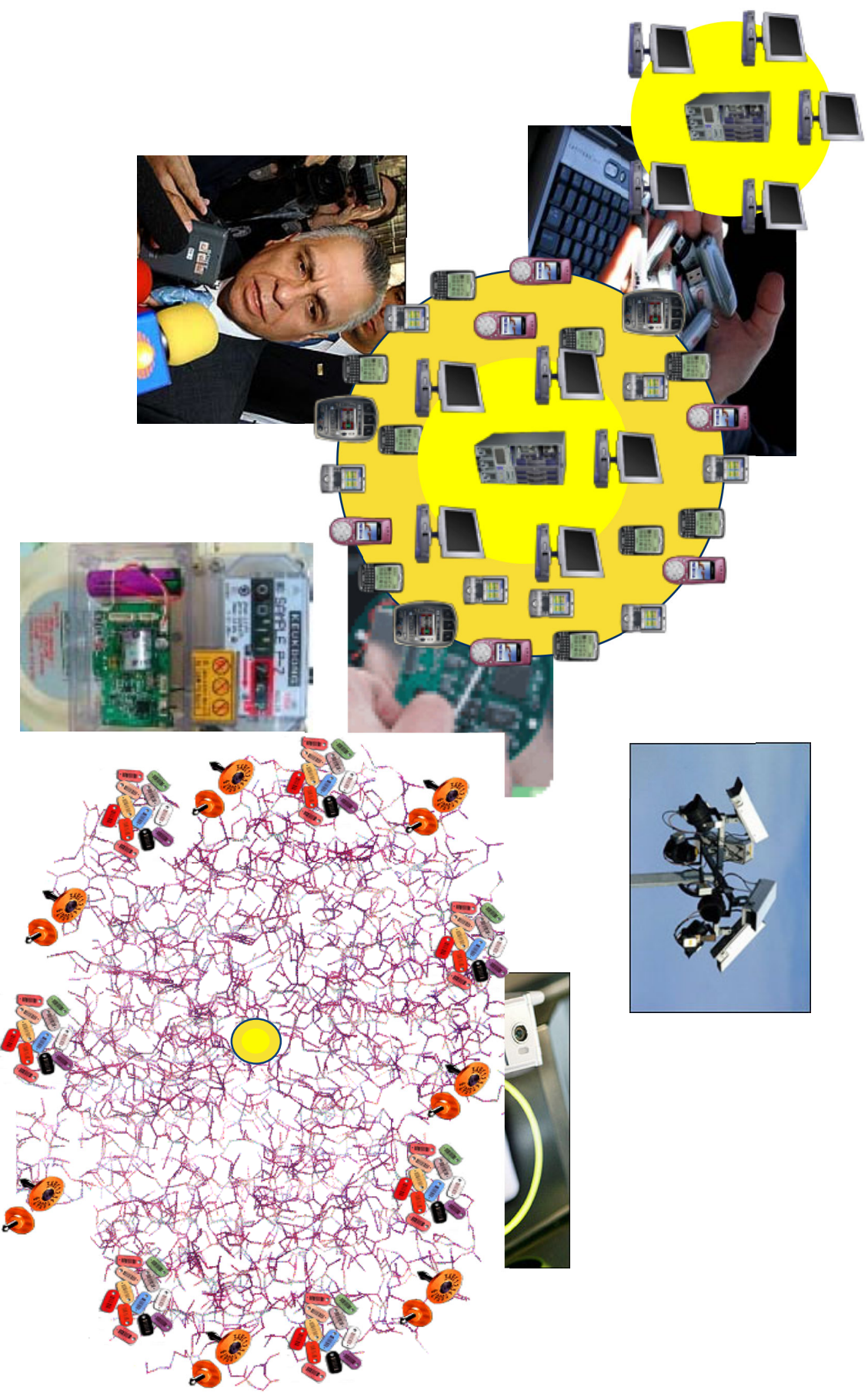
Implications for CEO/CIO Agendas

- Customer-driven markets
- Security and information protection concerns
- Regulatory/legislative pressures
- Internal organisational conflict
- Need for silo-busting change agents
- Global drive for competitive advantage
- New efficiency and productivity pressures
- Contingency pressures
- Dependence on IT
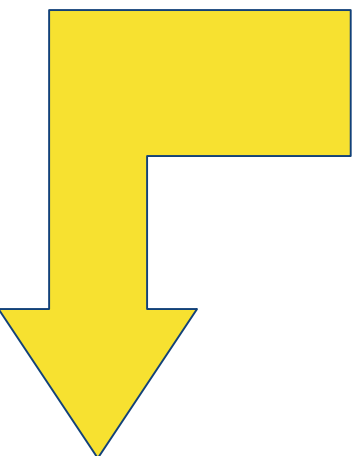
- Complex cross-functional systems and processes
- Significant increase in transactions
- Pressure to respond quickly
- Increasing compliance mandates
- Architectural quandaries
- Increased user involvement
- Process ownership issues
- Enormous security challenges
- Skills and staffing issues

IDC
Analyze the Future

IT Applications Struggle to Keep Up ....

- Application-oriented architecture
- Suites replace standalone apps — ERP, CRM, SCM
- Client/server architecture

- Transactional
- Mainframe-based

- Web-enabled then Web-

- Basic collaboration applications
- Enterprise application integration tools

- Move from horizontal to vertical (logistics)
- Batch processing

- Modularity
- Reusable applications

Organisations that innovate by how they operate

- Automation of mechanistic processes

- Intelligent processes

Vertical applications	Application suites		Web-based services/ applications		
1980	1985	2000	2003	2007 ...	
			SOA/BPM	Flexible enterprise	

- Reengineered processes
- Hard-coded process change
- Massive organisational change

- Continuous process optimisation
- Ability to dynamically adjust business rules
- Event-driven processes

... the potential discontinuities
involve risk

Flexibility
requires
participation
from everyone
in the enterprise

drive mutual
engagement and
ultimately mutual
commitment

Leadership and
mutual
understanding
drive mutual

challenges
faced by the
enterprise

Process
alleviates the
most pressing

Technological
excellence is
essential for
reducing
processing costs
and improving
efficiency

IDC
Analyze the Future
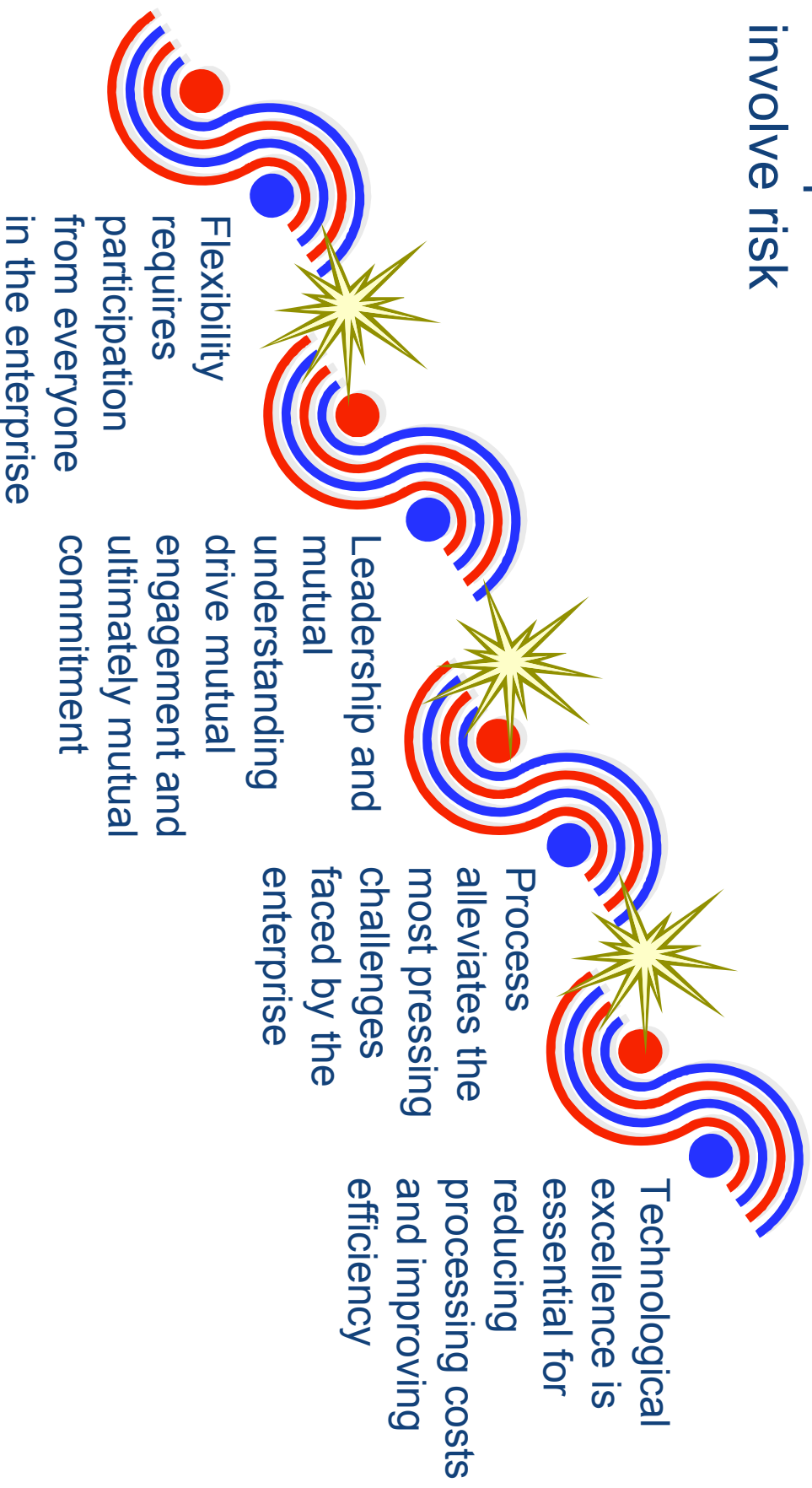
Achieving Flexibility: The Five Rights

✓ The right reasons

✓ The right approach

✓ The right resources

✓ The right tools and techniques

✓ The right partners

IDC
Analyze the Future

The Right Reasons

✓ There is a desire for profitable, incremental change

✓ Line-of-business and IT executives mutually agree on the need to be flexible

IDC
Analyze the Future

The Right Approach

- Think big, start small

- Every organisation has a different starting point, most important first step is to understand where you are

- Develop a clear understanding of your current situation using a pre-assessment tool similar to the one IDC asked you to complete prior to this event

- Continuous improvement is at the heart of achieving incremental profitable growth — plan to fine tune your applications and processes on a regular basis

- Process improvement and related application development are iterative — there is no such thing as a "finished" process

IDC
Analyze the Future

The Right Resources

- Executive sponsorship is needed for any major change initiative; achieving real value from IT is no different

- Subject matter experts for each area of the business

- Project managers who are schooled in business and in IT

IDC
Analyze the Future

The Right Tools and Techniques

✔ The product/tool landscape is changing rapidly

✔ Service-oriented architecture is a significant contributor to business flexibility

✔ Ensure there is a robust development and implementation methodology as well as a tool

✔ Investigate the use of predeveloped foundational models for vertical and/or horizontal processes

✔ Validate your choices using proof of concept

IDC
Analyze the Future

The Right Partners

✓ It's important that your relationship with your vendor has the right chemistry

✓ Vendor commitment to SOA and intelligent business process management must be strong

✓ Supplement existing skills with an integrator if necessary

IDC
Analyze the Future

In Conclusion ...

- Profitable growth cannot be achieved just by "doing more of the same". Staying ahead of the pack requires an organisation to continue to change at a steadily increasing pace.

- Business flexibility is a key element of any growth strategy, but it is constrained by IT solutions that are specifically aligned with a single (often linear) process.

- Business and IT must be considered as interdependent entities: one cannot succeed without the other.

- Without complete commitment to the principles espoused in an enterprise architecture, it is unlikely that IT and business alignment can ever be achieved.

- Without the will to change, no tool, technique or technology can make it happen, and without change it is unlikely that you can achieve maximum business value from IT investments.

IDC
Analyze the Future

Questions?

jduffy@idc.com

IDC

Analyze the Future