Java and .NET: You Can't Pick a Favorite Child

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The Big Picture

80% of large mainstream IT organizations rely on both .NET and Java technologies

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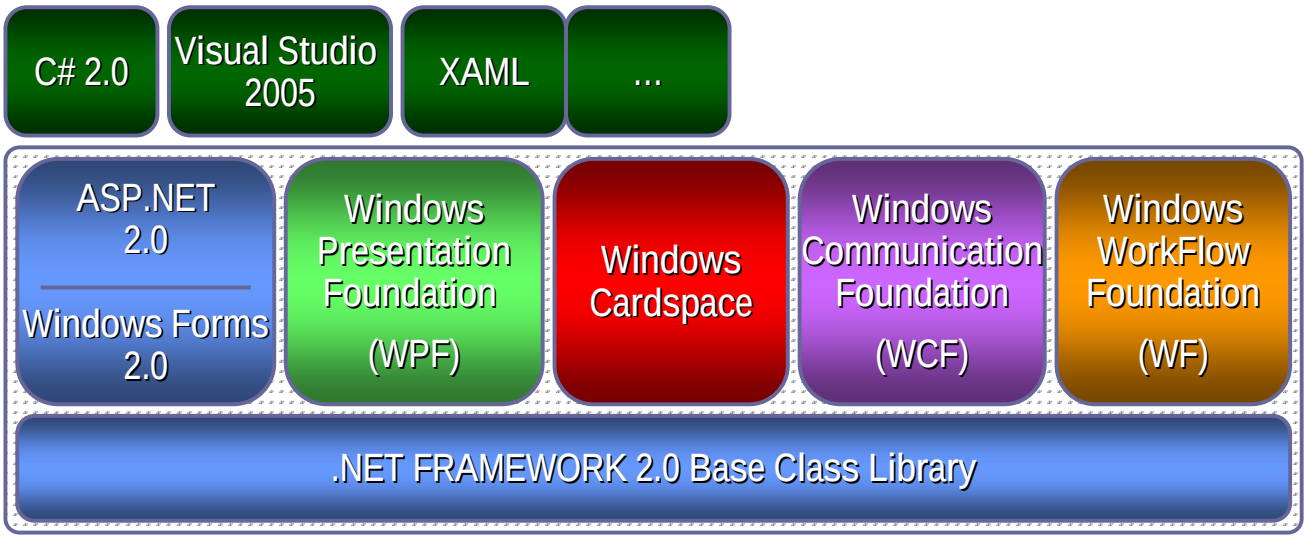
Microsoft .NET 3.0 Emerging Now



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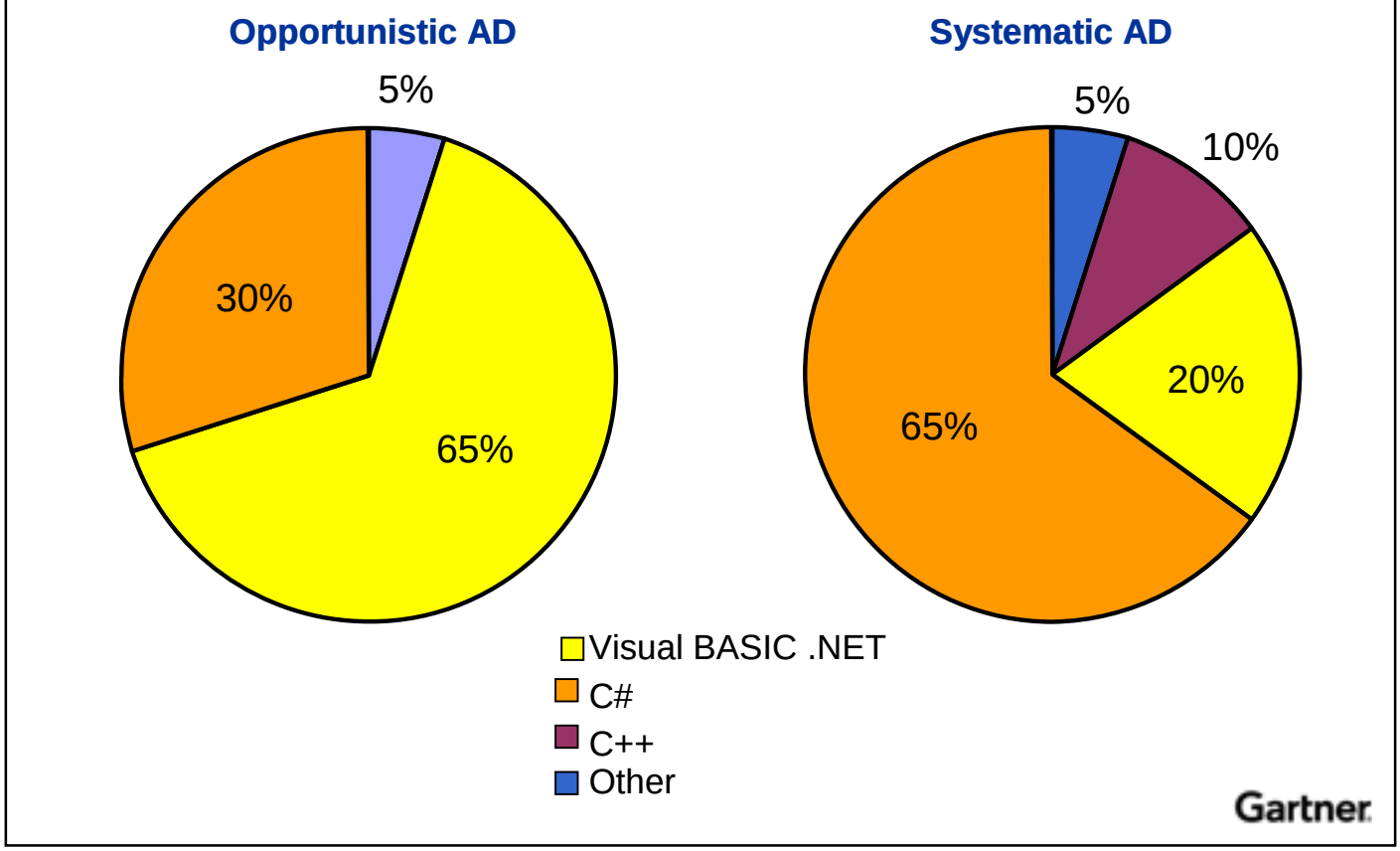
.NET Programming Language Market Share Through 2010



Microsoft and Open Source: Mixed Messages

- The increased competition resulting from the proliferation of OSS has been constructive for the industry as a whole (MSDN).
- Linux is a cancer that attaches itself in an intellectual property sense to everything it touches (Steve Balmer)

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The Open Source .NET Equation

- Supported By Microsoft?
  NO WAY, NO HOW!
- However, over 400 developers have delivered an independent open source implementation of .NET.
- Mono currently supports 90%+ of .NET Framework 2.0 API's.

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Novell and Microsoft: A Match Made In Heaven Or Hell?

1. **Sales Collaboration**: 5 year deal wherein Microsoft resells SUSE Enterprise Linux
2. **Technology Interoperability Collaboration**
    1. Virtualization interoperability
    2. Document format interoperability
    3. Mixed environment management interoperability
3. **Intellectual Property Agreement**: Neither Microsoft or Novell will sue each others customers over IP infringement issues.

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Java ~~2~~ Enterprise Edition Version 5: Focusing On Simplification

- Source Code Annotations Instead of Deployment Descriptors
- Simplified EJB Software Development
- Use Dependency Injection to Access Resources
- Java Persistence API Model
- Simplified Web Services

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The Open Source Java Equation

- Sun has recently open sourced most of the core JDK and virtual machine.
- Apache's Project Harmony is well under way to provide a truly independent implementation.
- Sun retains control over the "Java" trademark and compatibility test kits.

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Are 64-Bit Applications In Your Future?

- Both Java and .NET Support 64-bit OS Architectures Today.
- Real world feedback shows typically 5% or less performance improvement for today's applications running under a 64-bit runtime.
- However 64-bit provides access to much larger memory addresses (16 TB vs. 4G)
- 64-bit provides a more efficient runtime engine for computationally intensive applications.
- 64-bit can provide a mechanism for next generation application designs.

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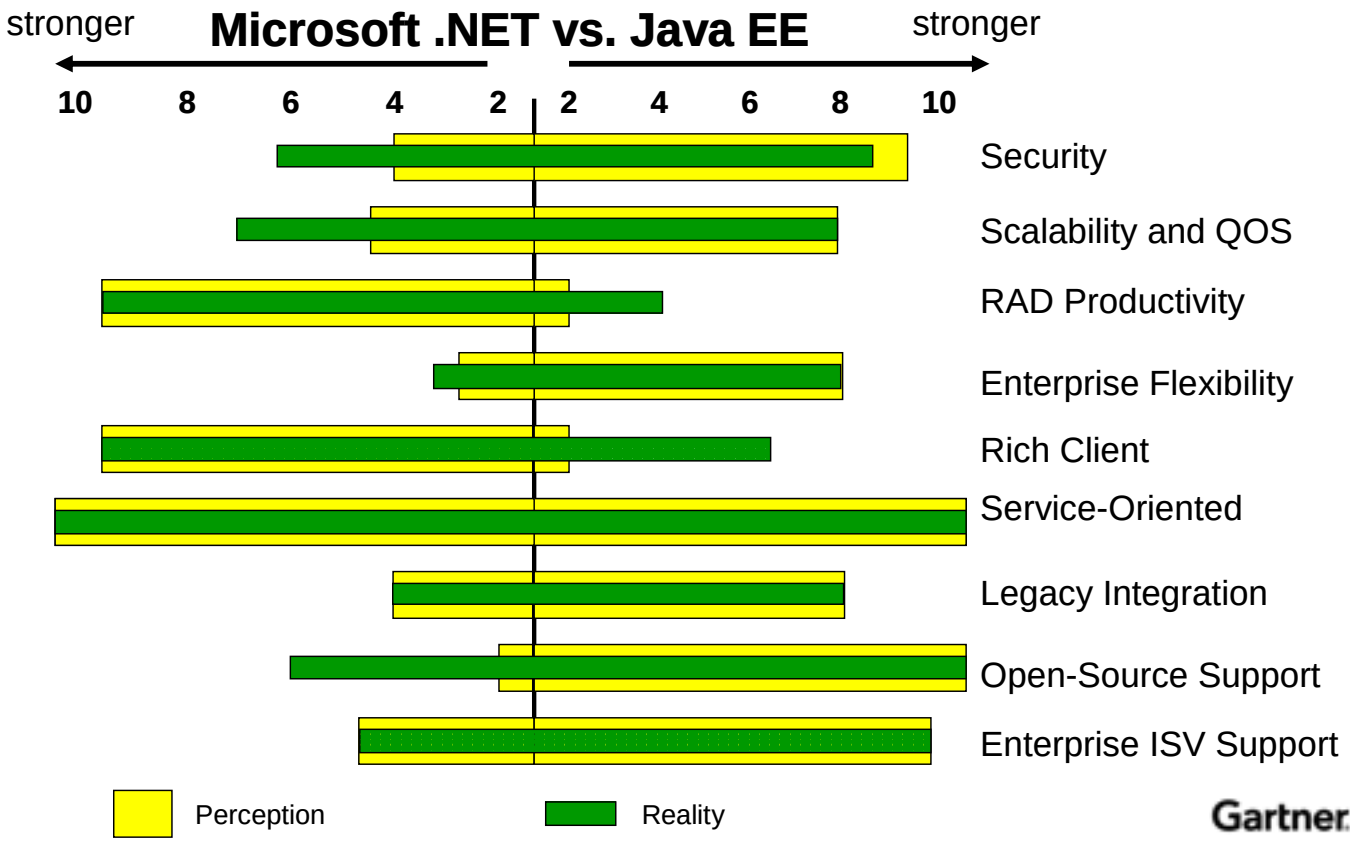
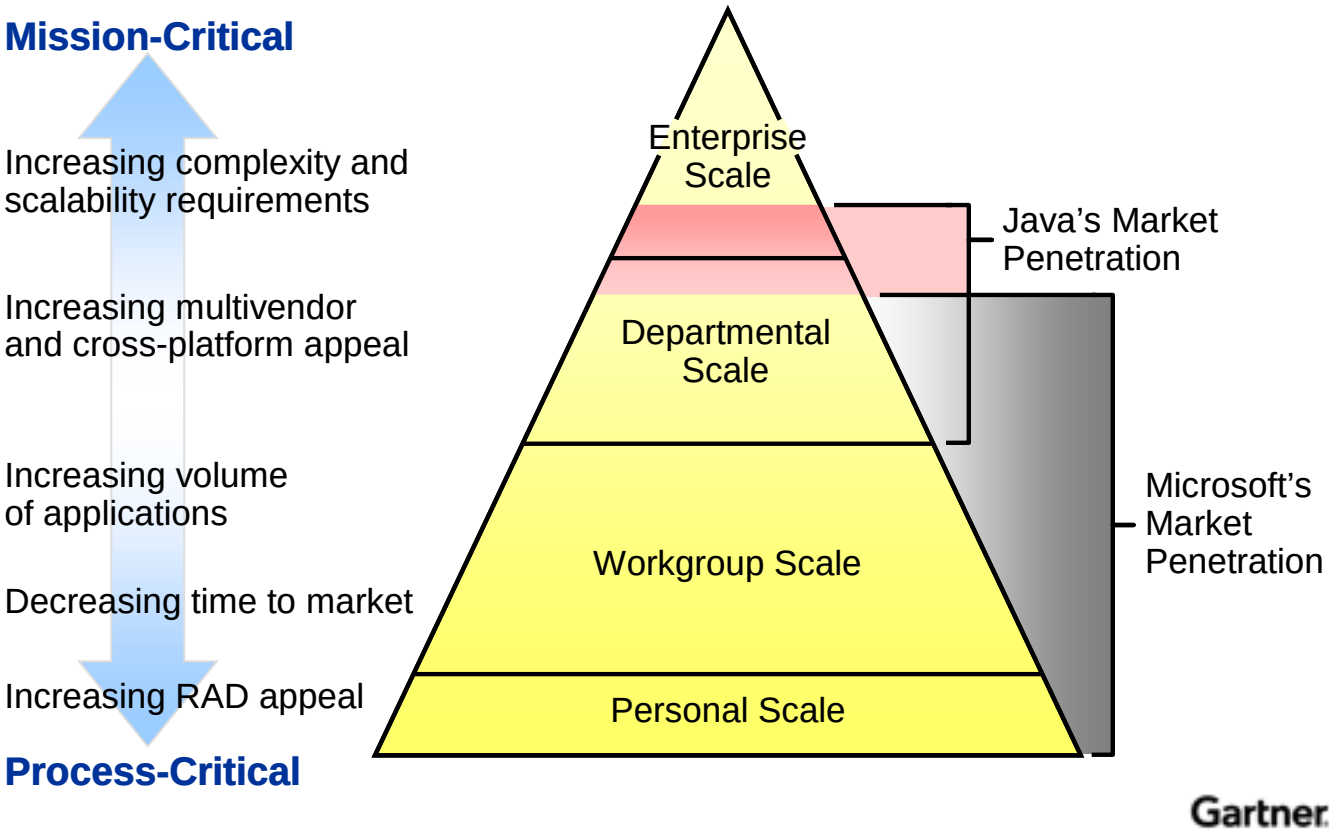
A Technology Reality Check



Market Segmentation



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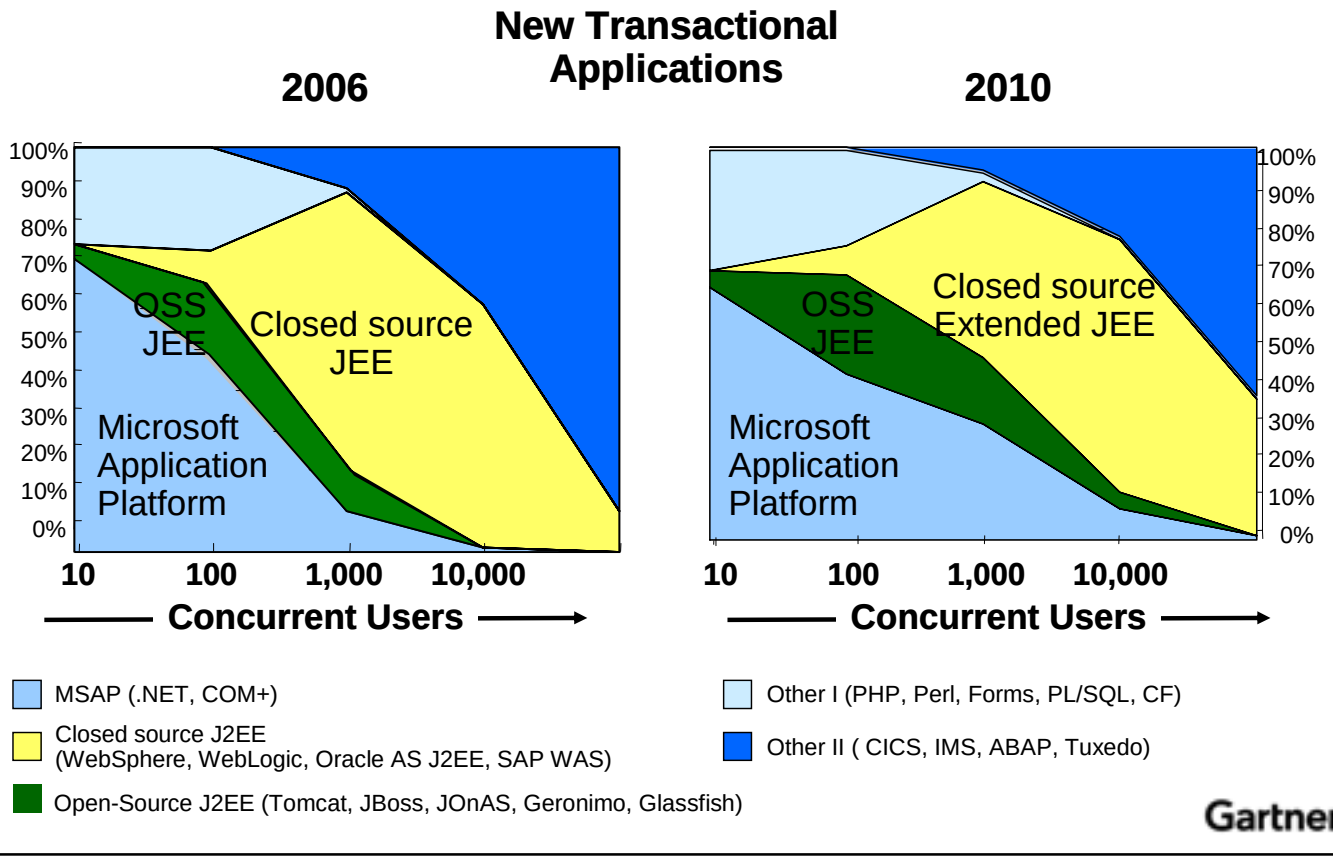
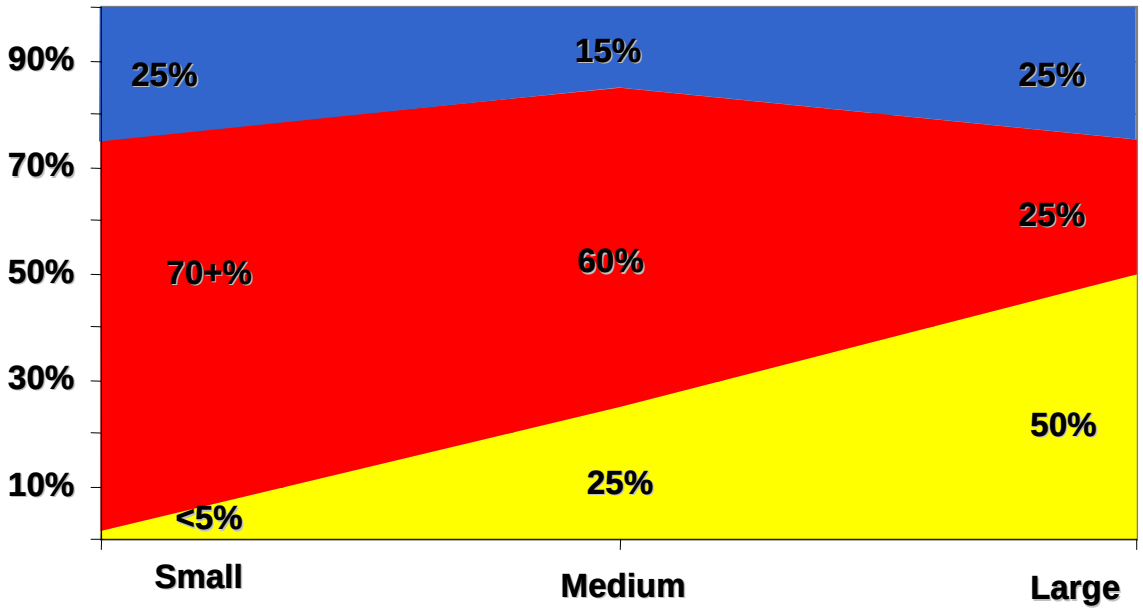
The OLTP Gap Is Closing



Typical AD Platform Commitment Trends By Organization Size



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Differences Are Technical And CULTURAL

	Java	Microsoft
 Technology	Designed to be generally consistent across a great number of platforms.	Designed to fully exploit the synergy of a single integrated platform.
 Process	Heavily influenced by systematic development processes from OO environments.	Heavily influenced by opportunistic development processes from RAD 4GL environments.
 Organization	Historically leveraged by centralized and highly trained IT staff exclusively.	Historically leveraged by decentralized business unit developers.

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Microsoft's March Into BIG Enterprise AD

Mission-Critical

Increasing complexity and scalability requirements

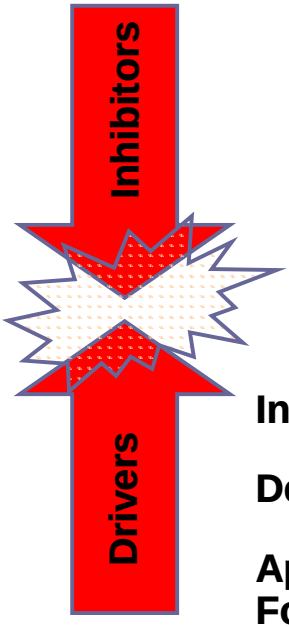
Increasing multivendor and cross-platform appeal

Increasing volume of applications

Decreasing time to market

Increasing RAD appeal

Process-Critical



OS Platform breadth limitations

Sins of the father perceptions

Enterprise ISV Support

Culture and Politics

Proprietary Lock in

Increasing Quality of Service

Developer Productivity

Application Lifecycle Management Focus

SOA Interoperability

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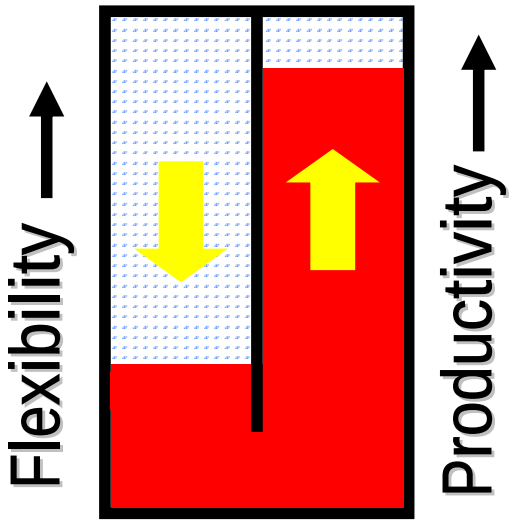
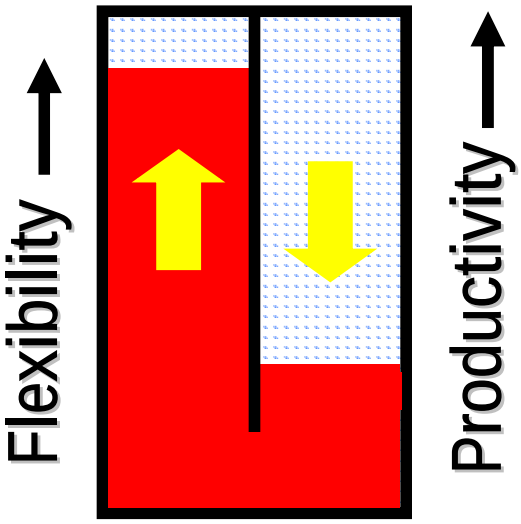
Bottom Line: Flexibility Versus Productivity

Microsoft .NET sacrifices technical flexibility in favor of developer productivity



Java sacrifices developer productivity in favor of technical flexibility.



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Summary Trends For Java

- Java technology commitments become slightly more vendor proprietary over the next 3 years but openness continues to drive overall adoption
- This is mitigated somewhat by investments in open source tools and frameworks.
- Java productivity increases as a result of less flexibility and simplified Java EE 5 but continues to lag .NET for small and medium scope projects.
- Java adds multi-language capabilities as it expands to support dynamic languages to better address next generation AD concepts.

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Summary Trends For Microsoft .NET

- .NET takes an increasing role in systematic ‘enterprise’ development efforts.
- Microsoft’s Team Server tools take a dominant role in .NET application lifecycle management roles.
- .NET 3.0 emerges as strong technology advances but is slow to be adopted until Vista reaches critical mass adoption.

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