



Raising Abstractions for the Software Defined Business

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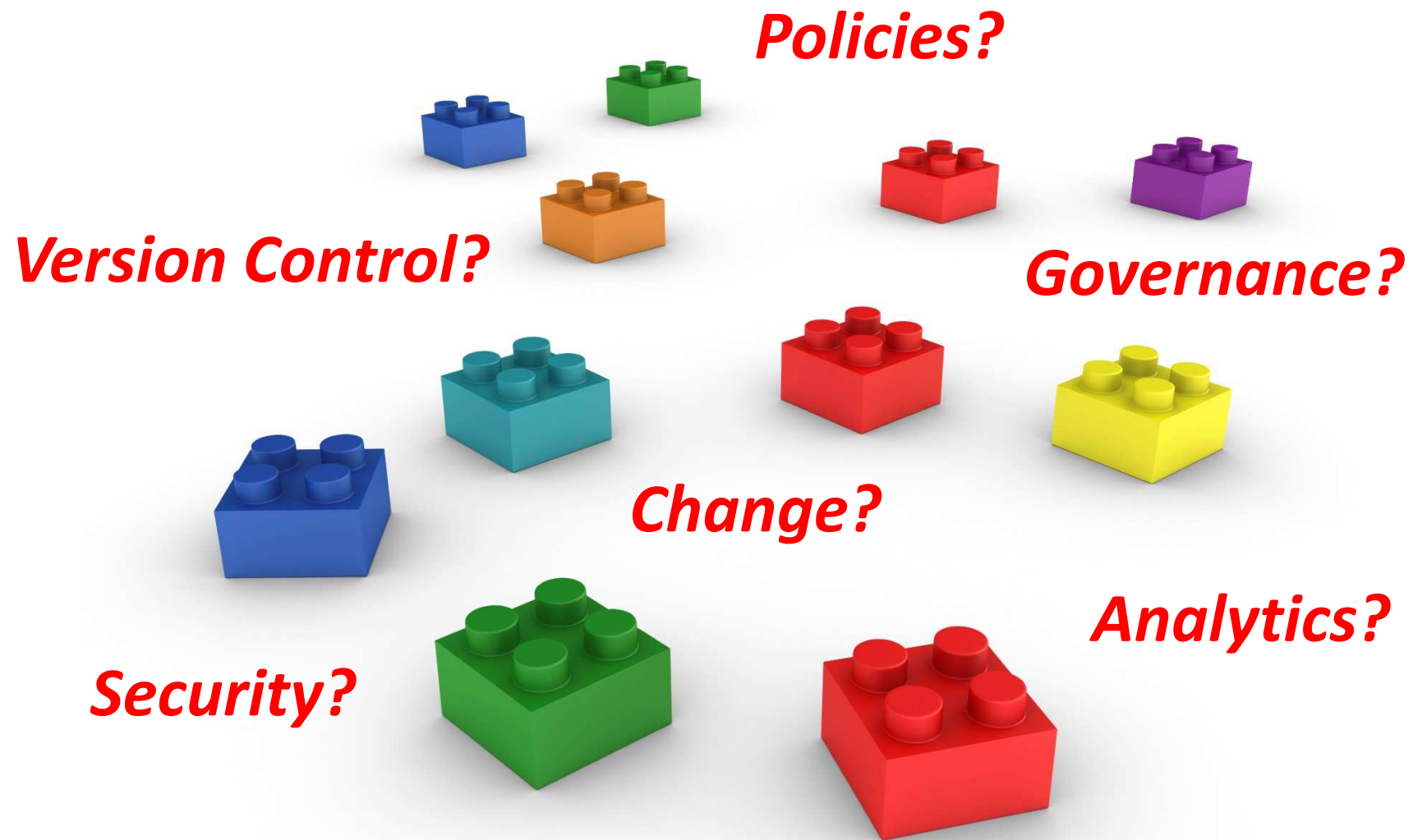
The real-world is dynamic,
distributed and diverse

Traditional IT methods don't respond,
scale or adapt fast enough

Recreating Silos in the Cloud

Infrastructure is virtualized and horizontal,
but apps are still 3-tier vertically integrated

As operations fragment management is lost

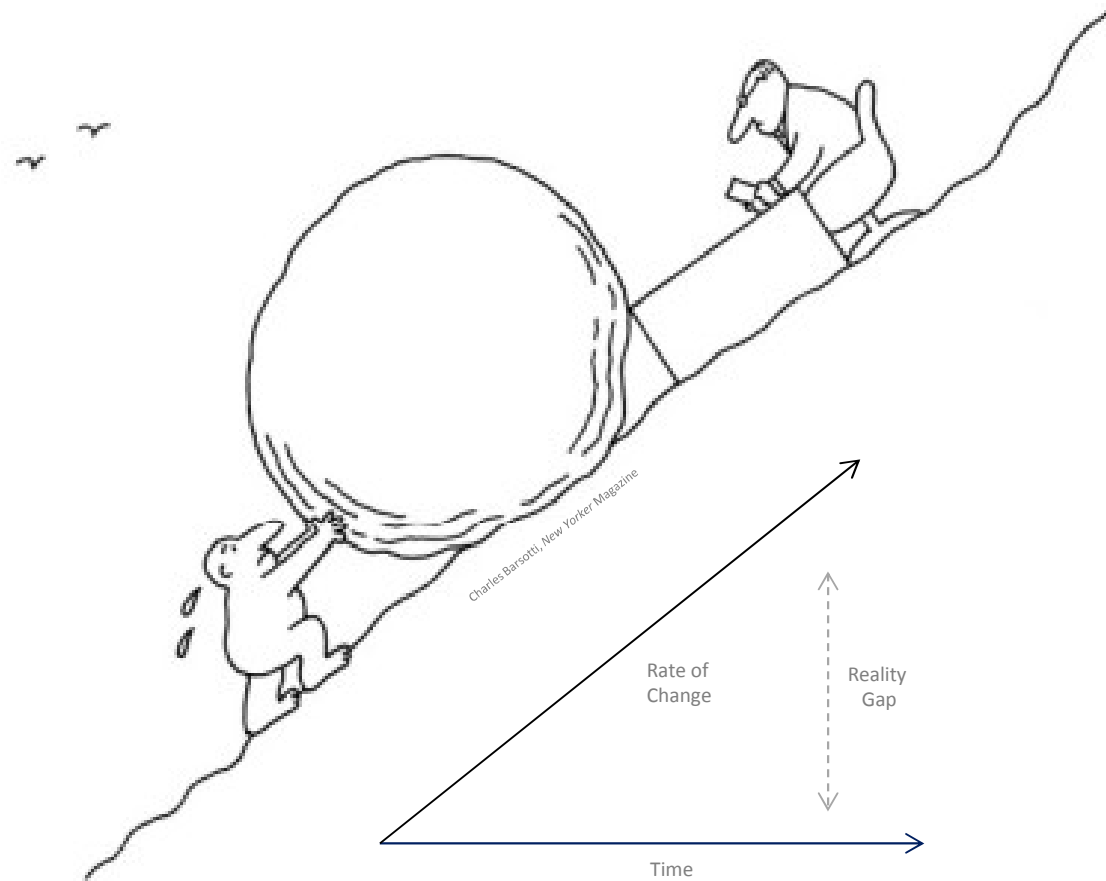


The Application Model is broken



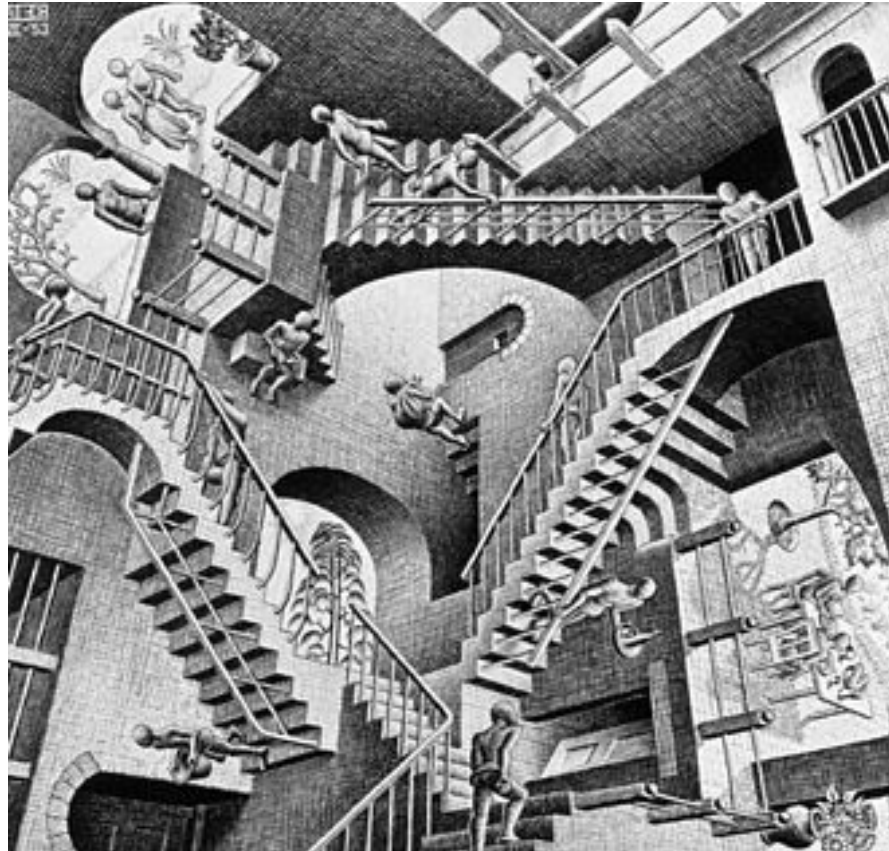
... but what we really need is flexibility

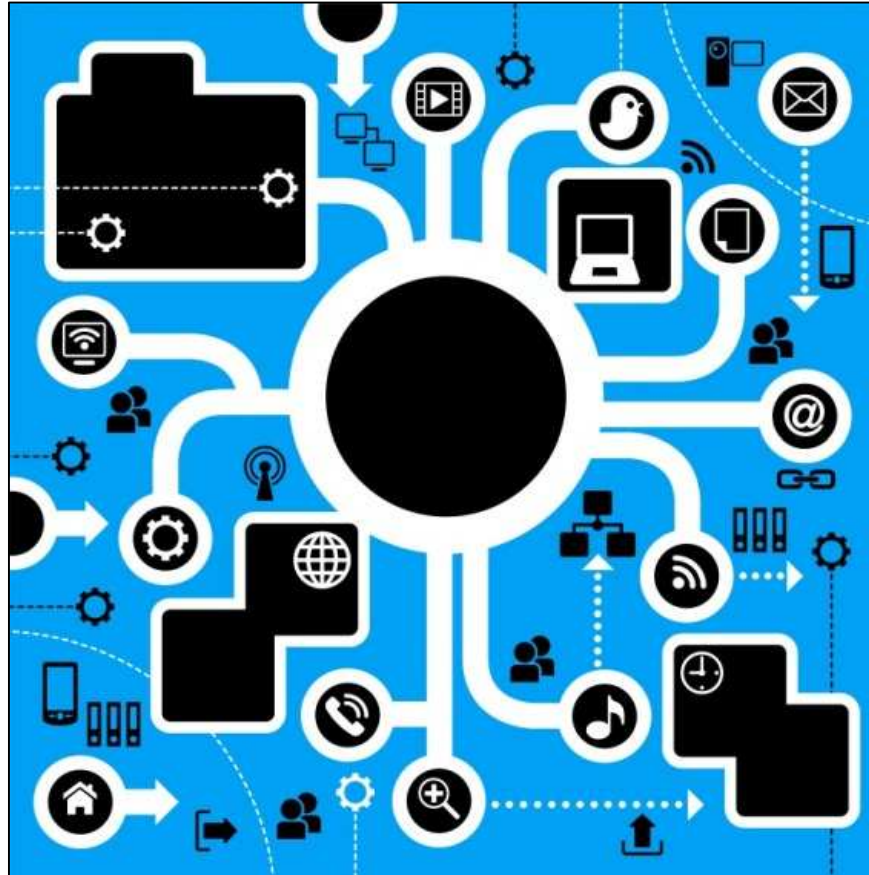




to cope with accelerating rate of change

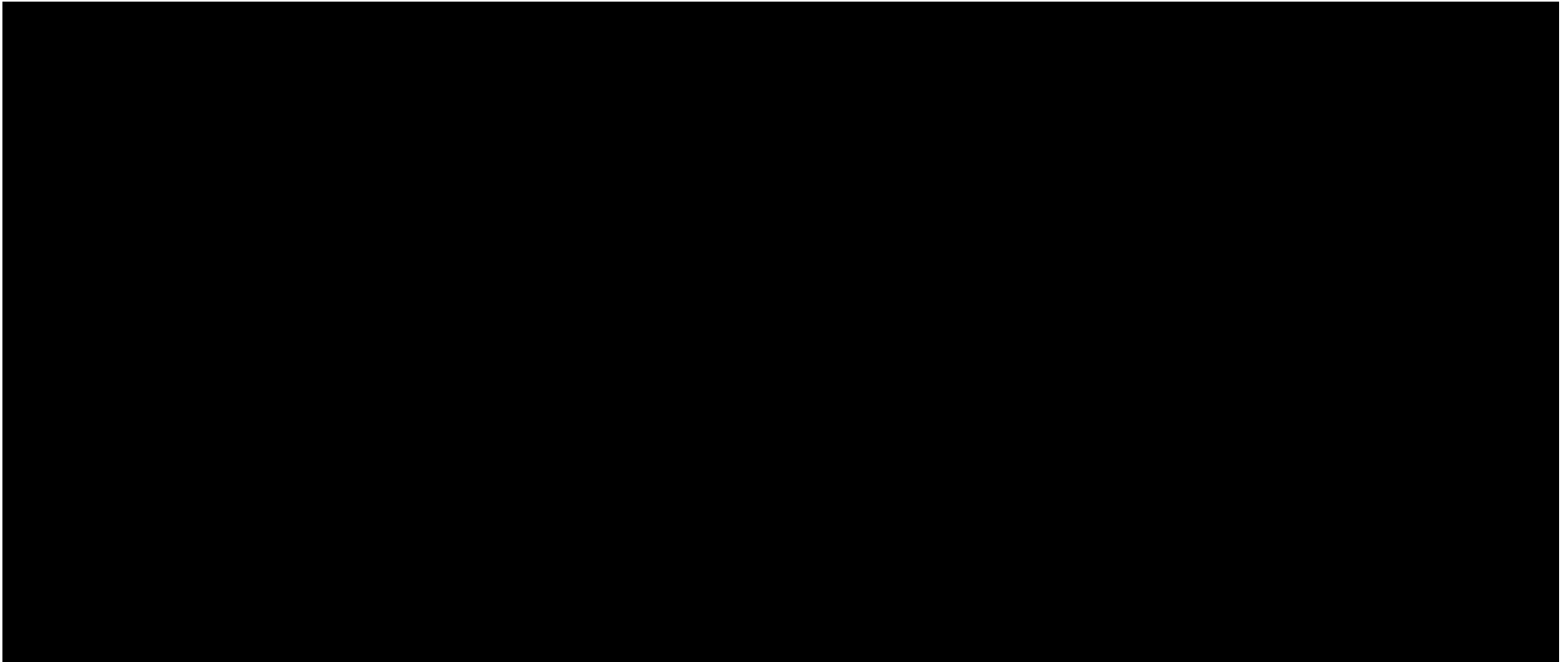
varied perspectives





and increasing demands for interoperability

EnterpriseWeb has re-invented middleware



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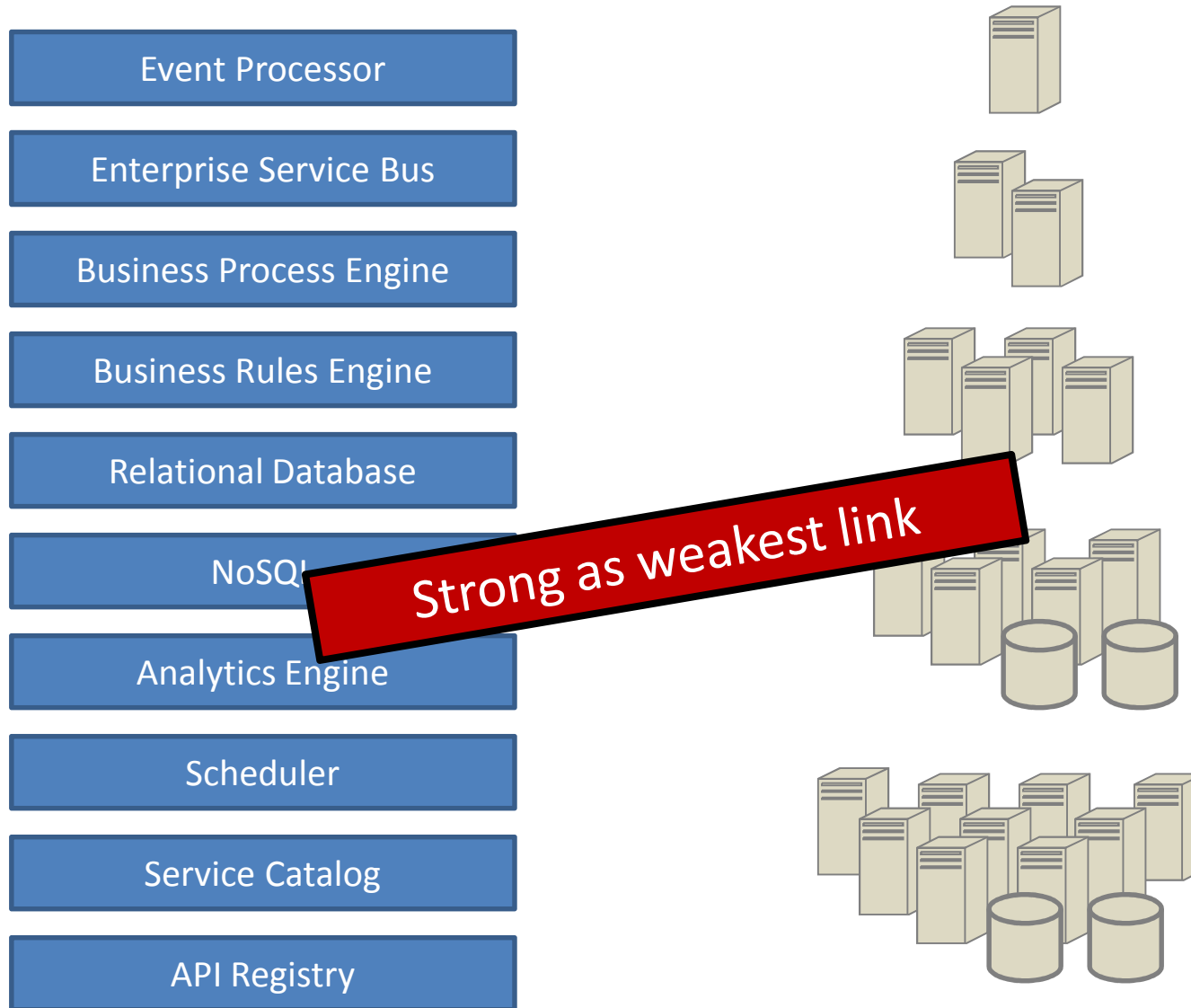
A lightweight, scale-out architecture for responsive and highly-connected processes

- personalize user-experiences
- dynamically enforce compliance
- automate IT governance
- optimize Agile, DevOps, Cloud IoT and system pipelines
- integrate value-chains

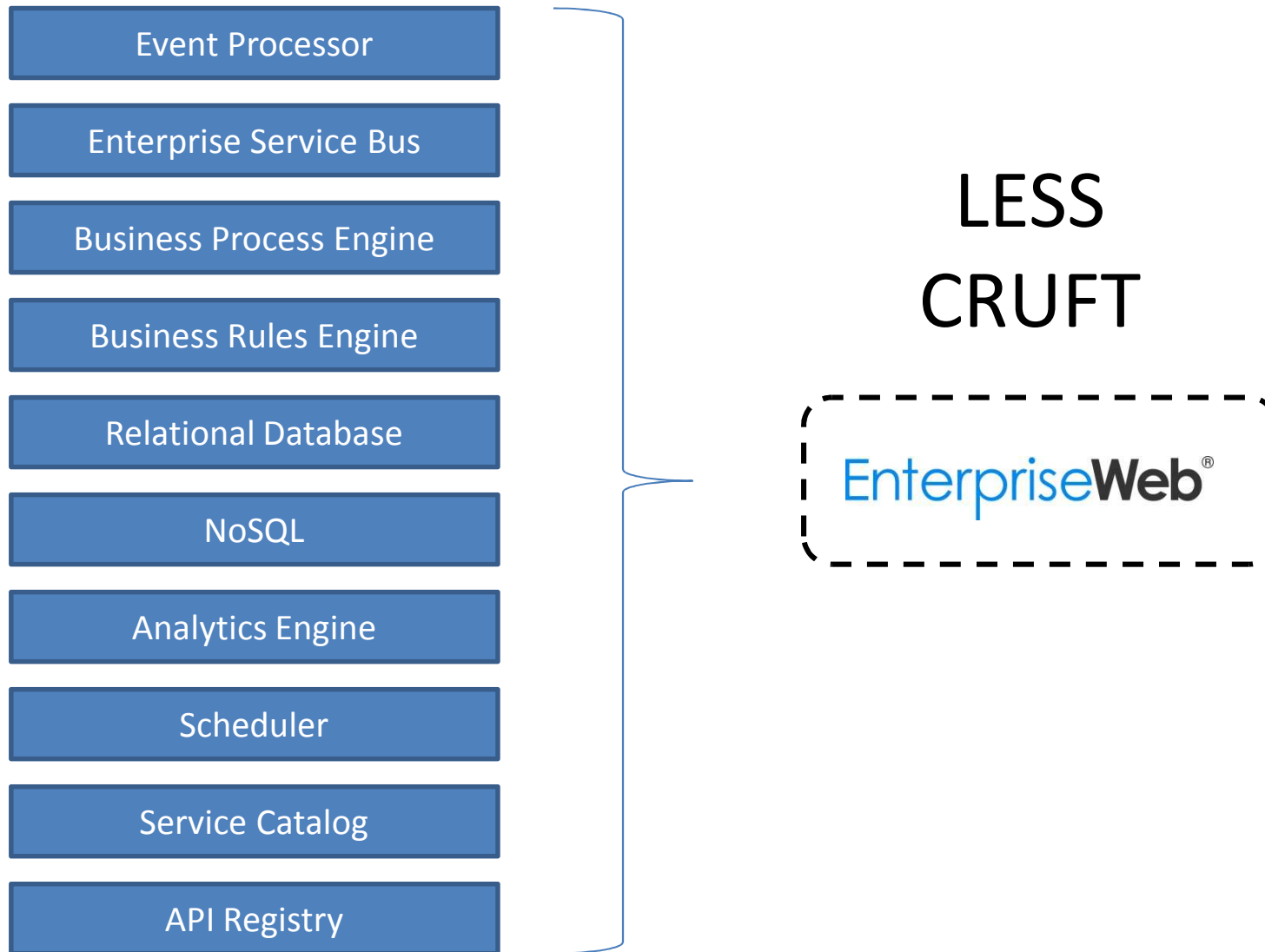
Radically Simplifying Distributed Processes

- unified object model
- shared methods/common management
- middleware functions delivered as services
- immutable-shared memory,
- horizontal scale-out plug-in fabric

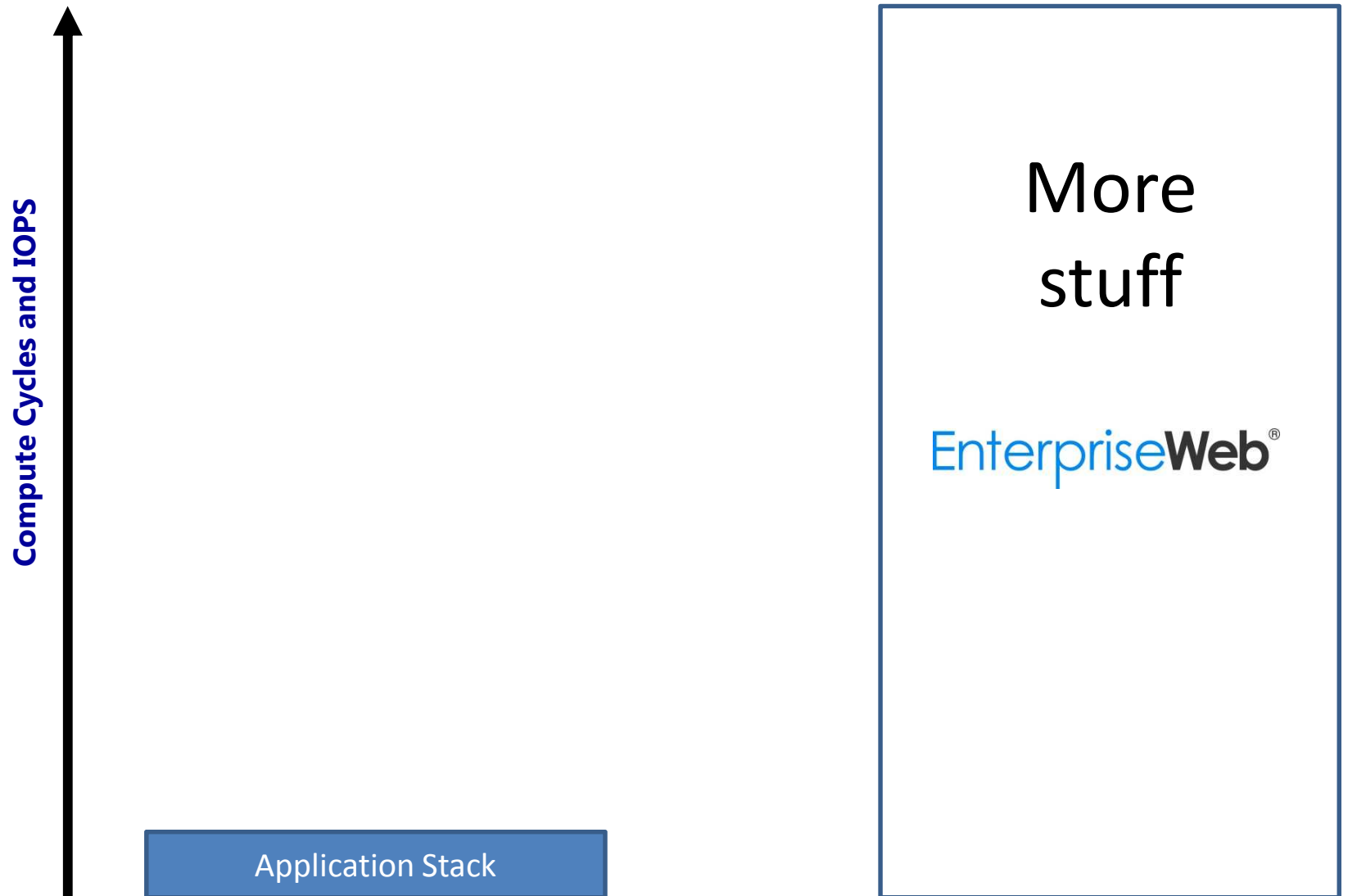
The Application Middleware Stack



From Vertical Specialization to Horizontal Generalization



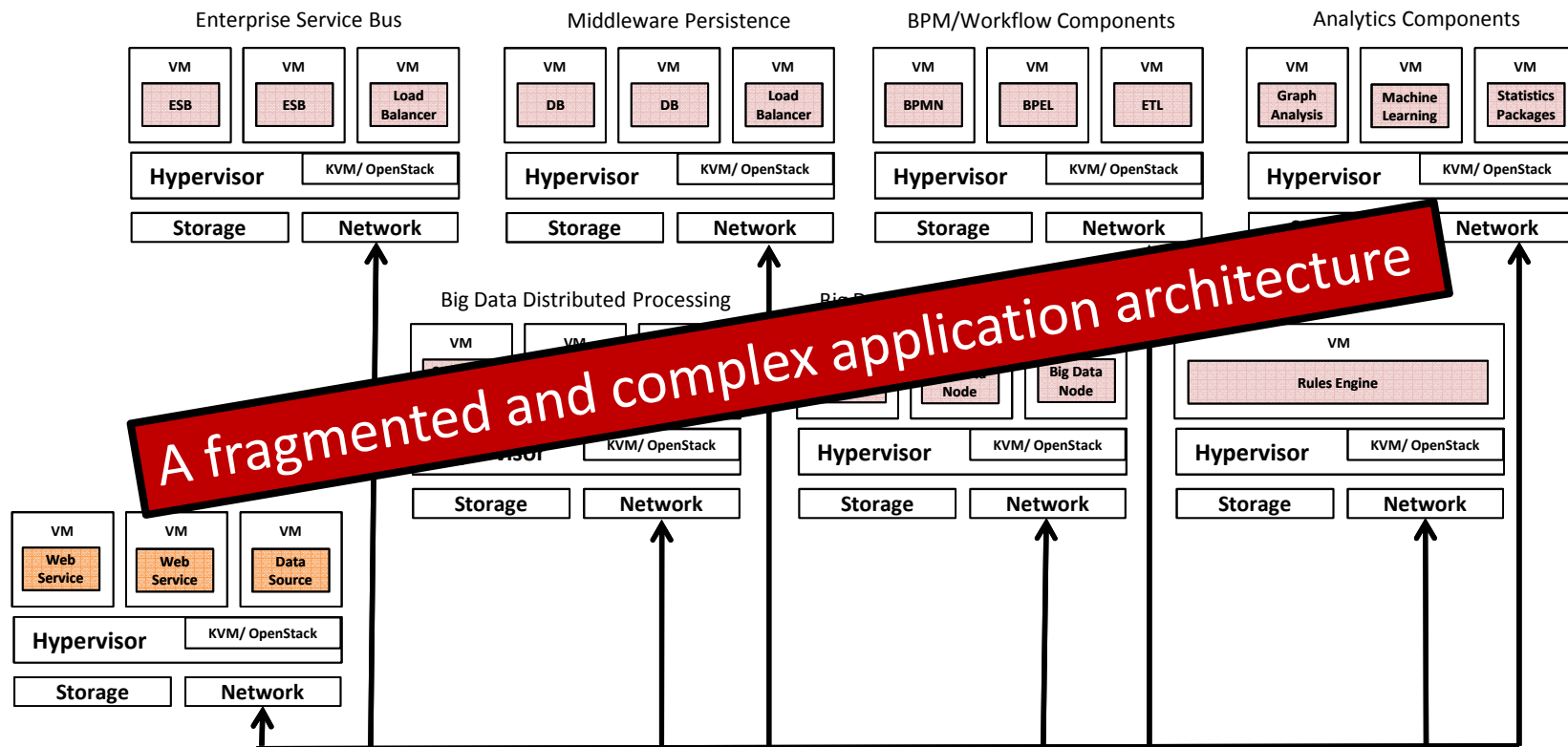
From Mass Production of to Mass Customization



Application middleware stacks are inadequate for distributed intelligent systems

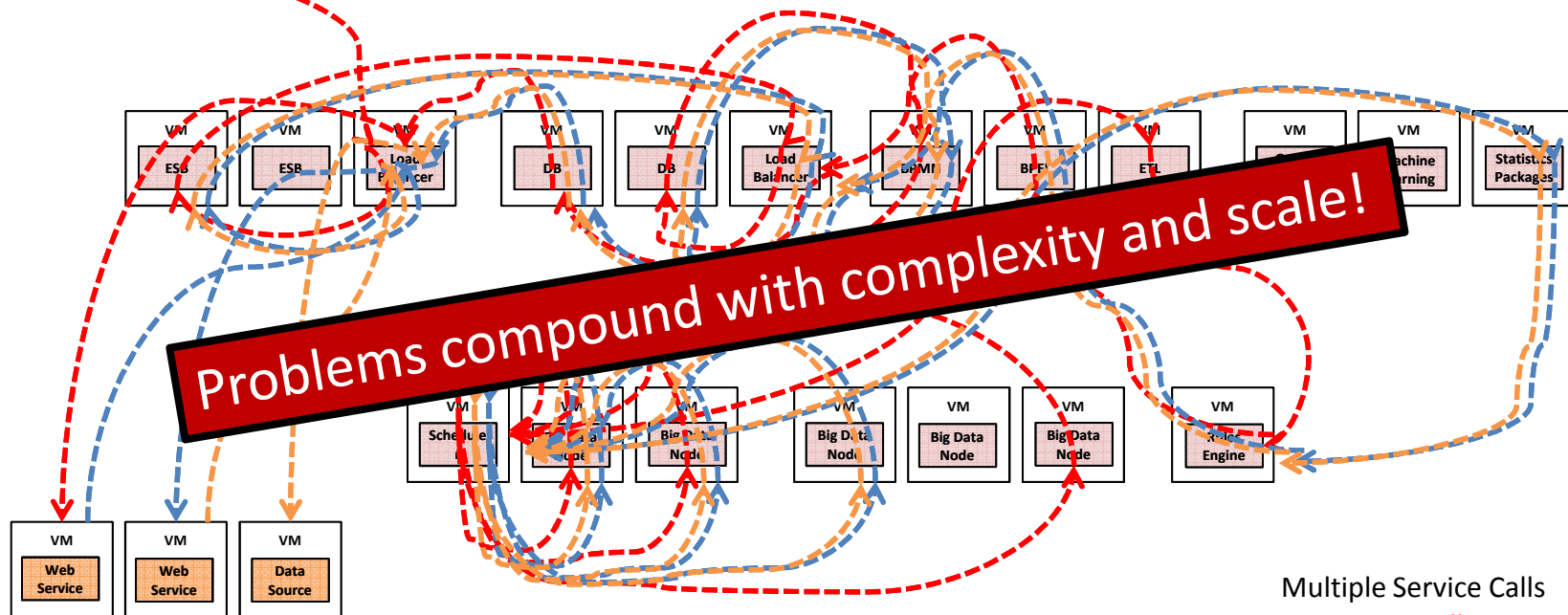
- Stacks distribute a problem over a network of isolated components
(cost, footprint, complexity, latency)
- Minimal state is passed in a linear chain of messages
(no shared memory for transaction, constrains reasoning)
- Not conceived for dynamic data-driven interactions
(tightly-coupled, brittle, siloed applications)
- Components don't all scale the same so applications cannot scale-out
(increased activity = more middleware, not elastic)
- To support more complex applications you add more components
(e.g. management, big data, IoT, etc.)

Example of small middleware stack implementation



Example of simple middleware stack transaction

Event



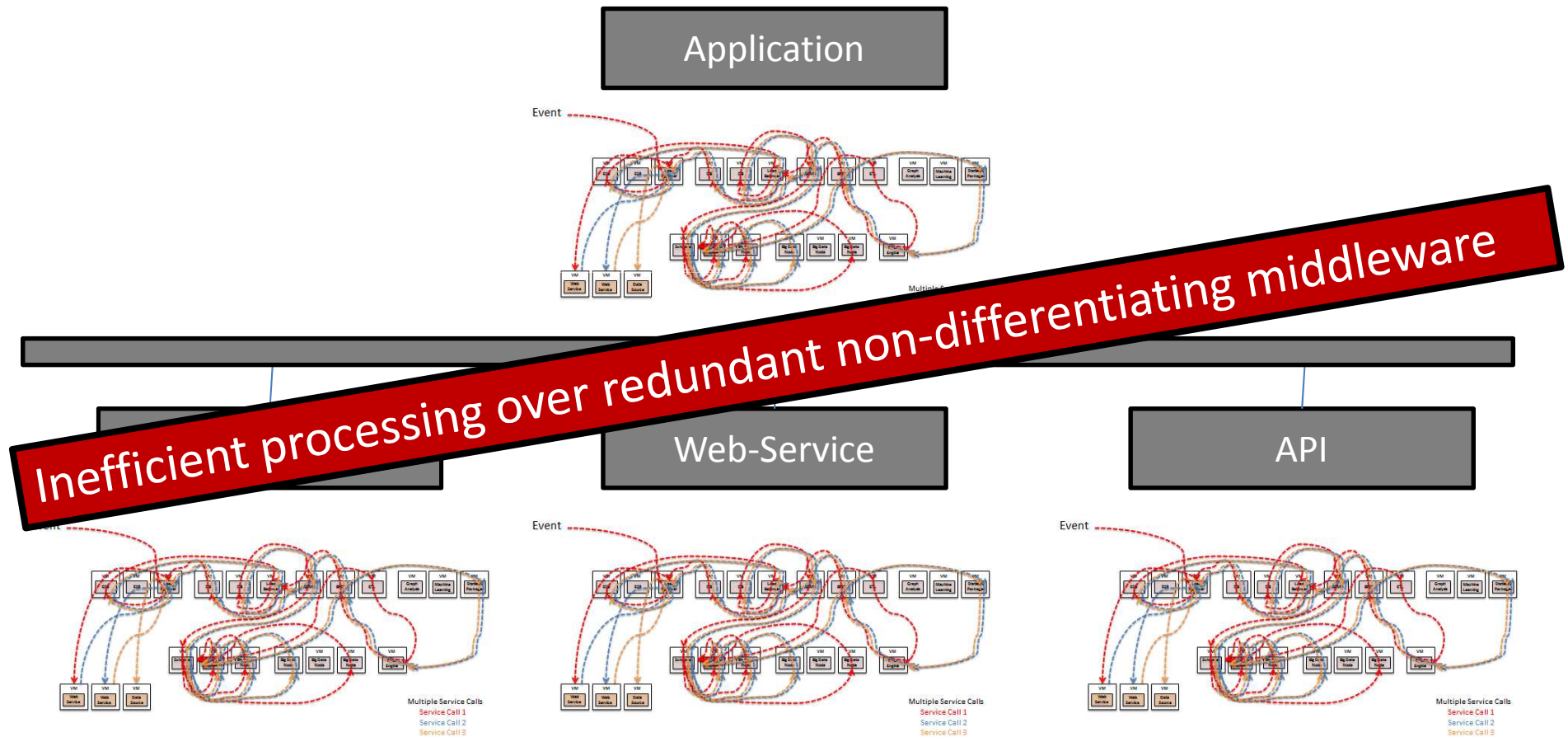
Multiple Service Calls

Service Call 1

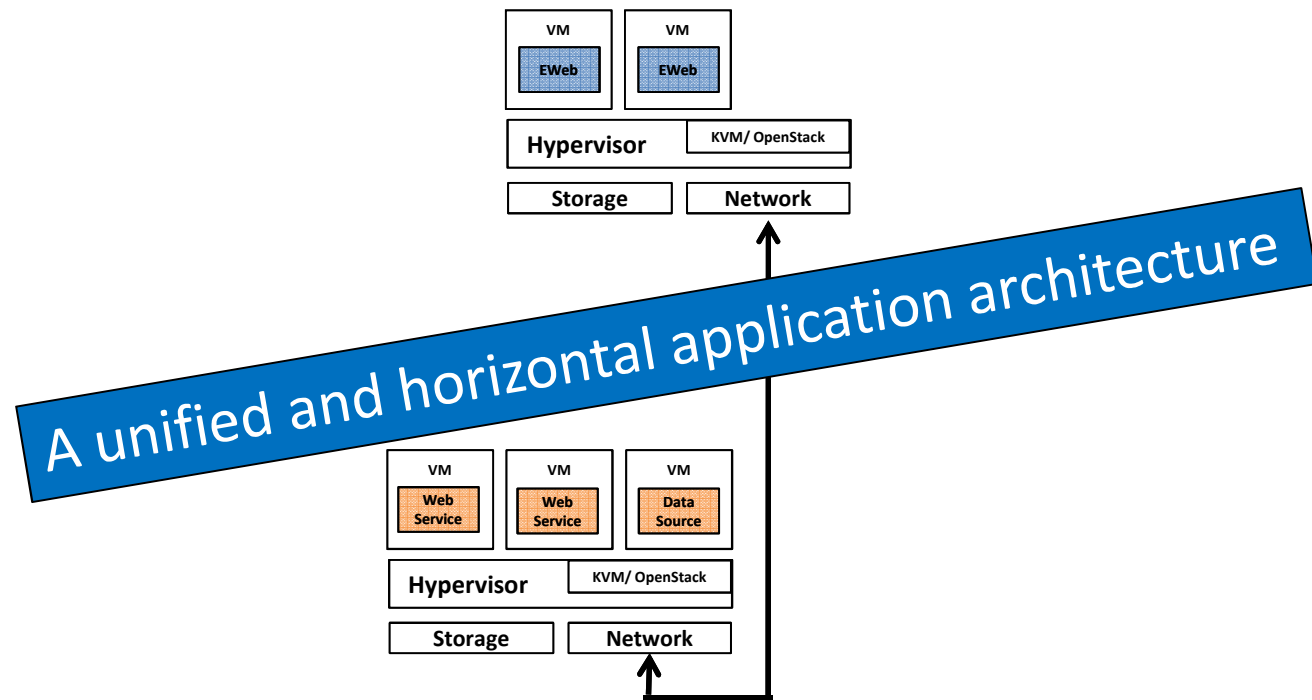
Service Call 2

Service Call 3

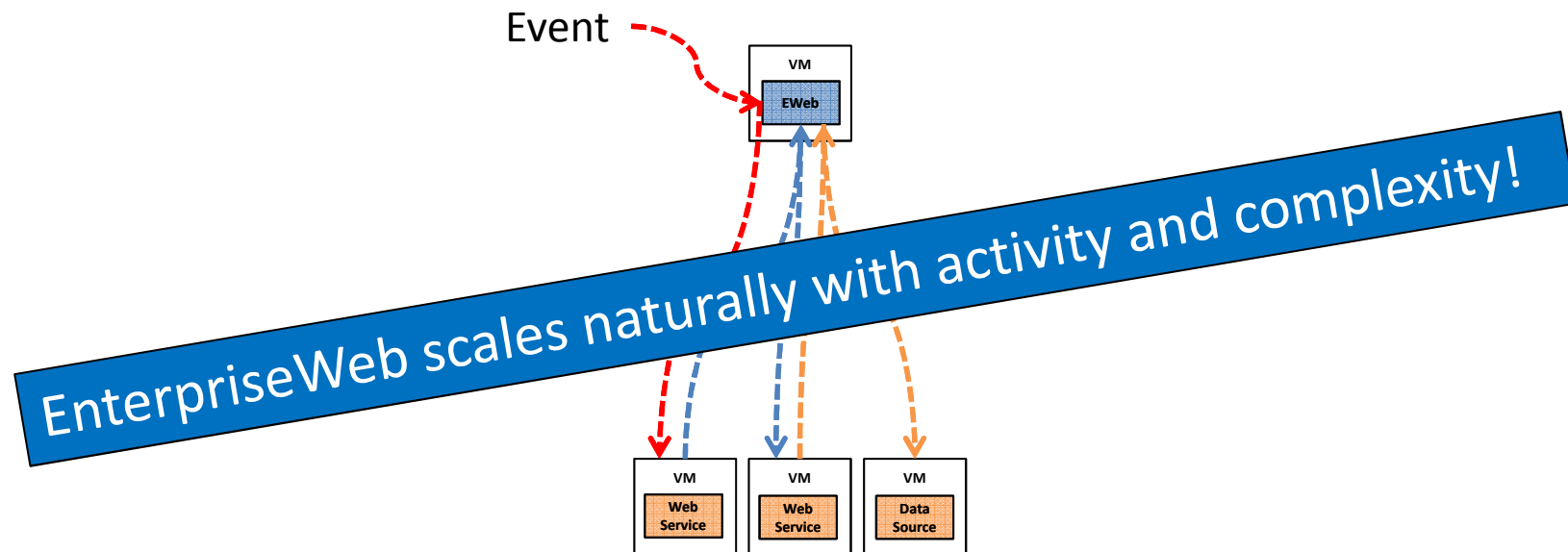
Example of Inter-process communications



Example of standard EnterpriseWeb implementation



Example of simple EnterpriseWeb transaction



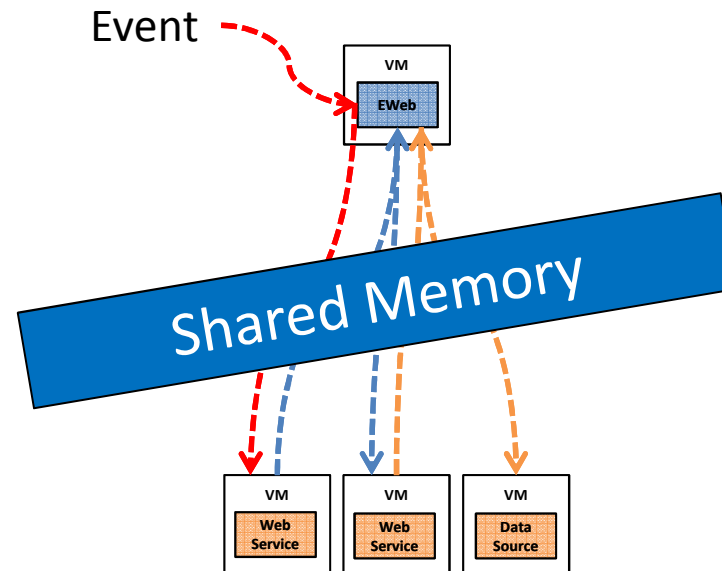
Multiple Service Calls

Service Call 1

Service Call 2

Service Call 3

Example of Inter-process communications in EnterpriseWeb



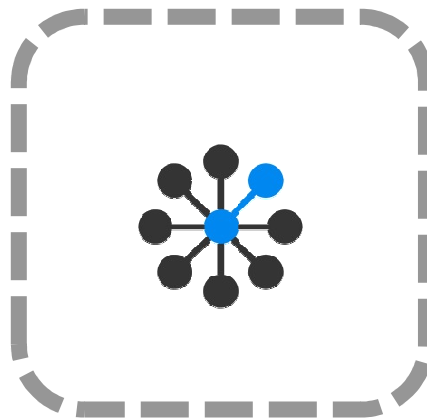
Multiple Service Calls

Service Call 1

Service Call 2

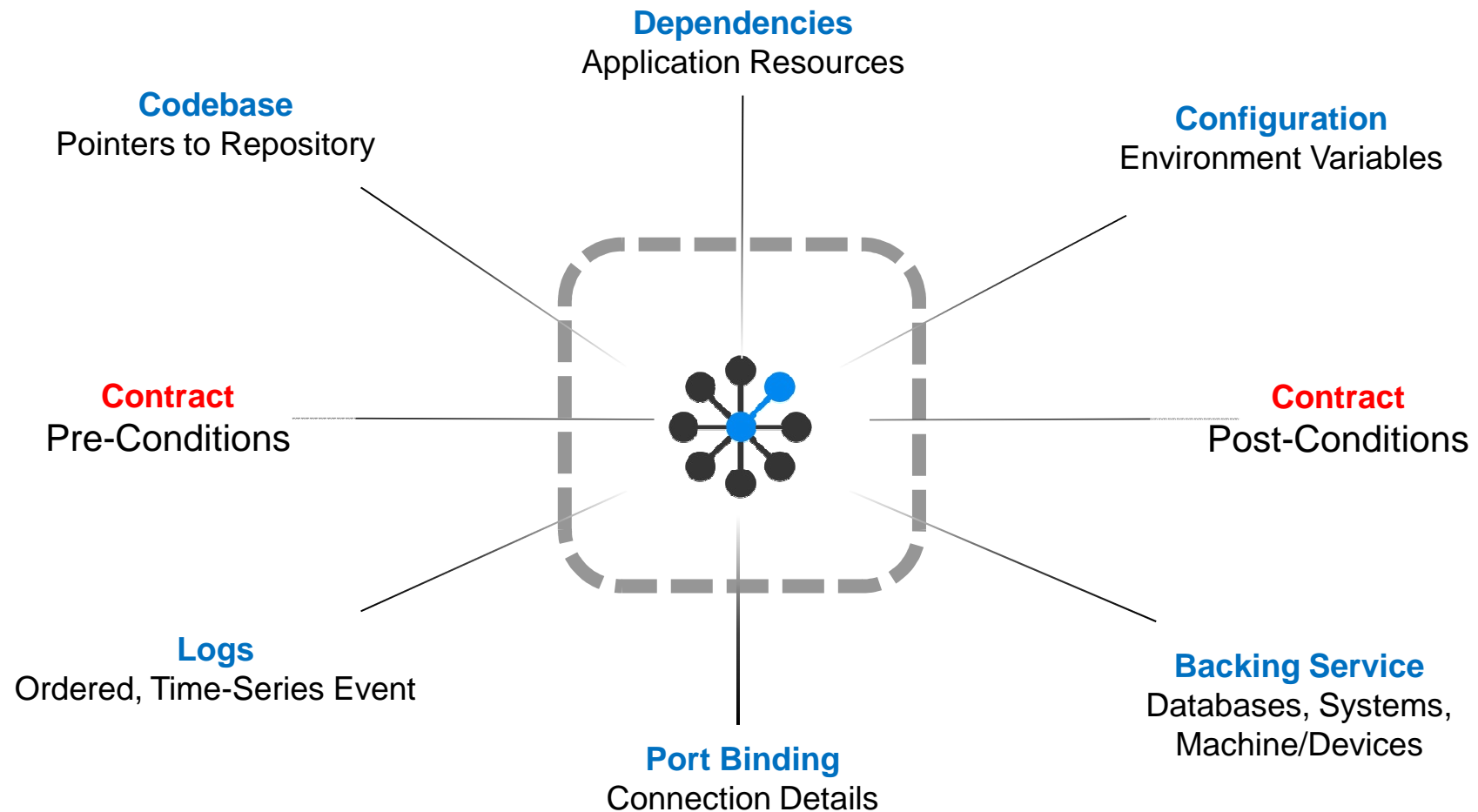
Service Call 3

The platform is based on an abstraction,
every **endpoint** is a graph object



Modeled as set of loosely-coupled relationships

Modeling the Application Graph

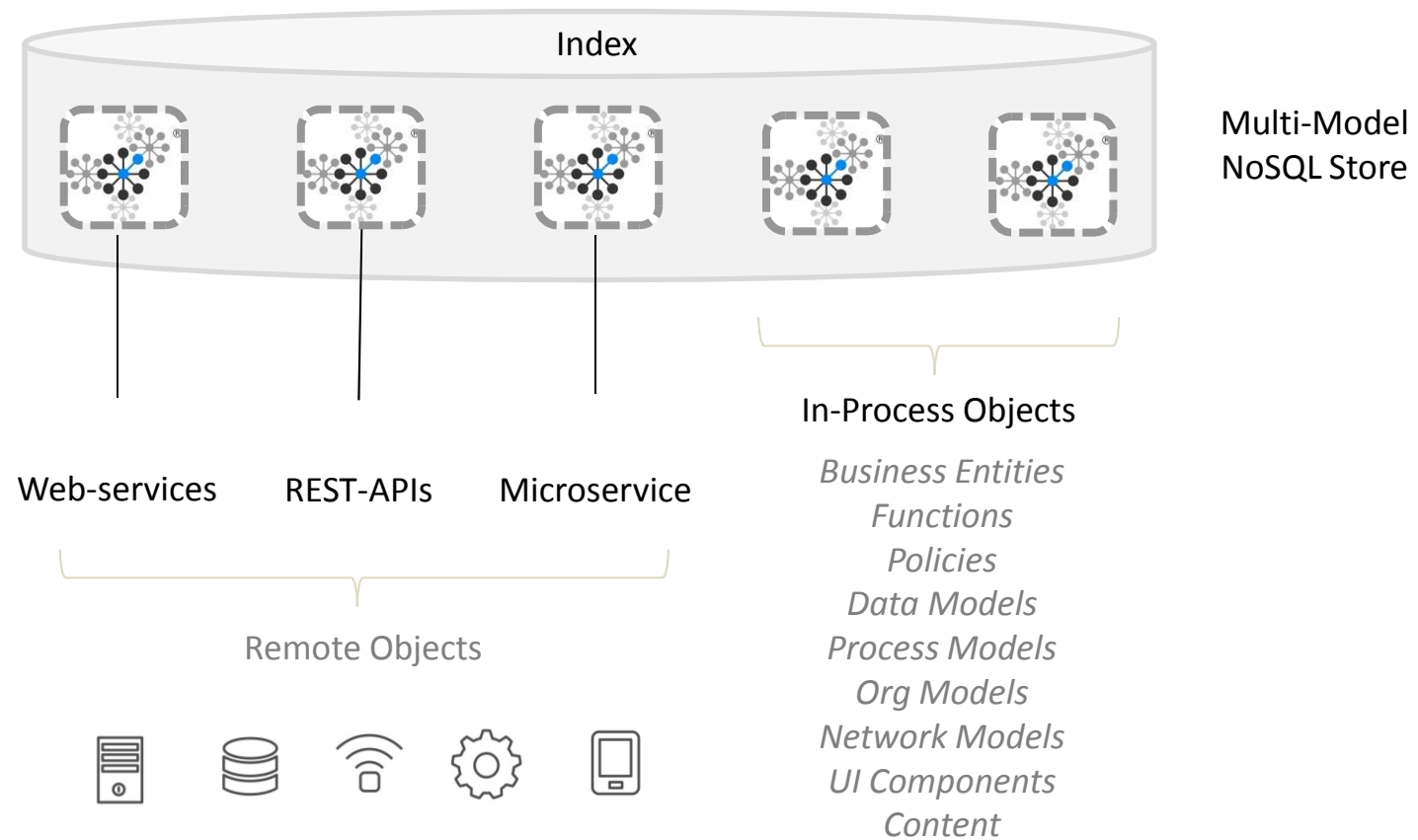


Objects can be composed to form higher-order functions, entities, data models, processes

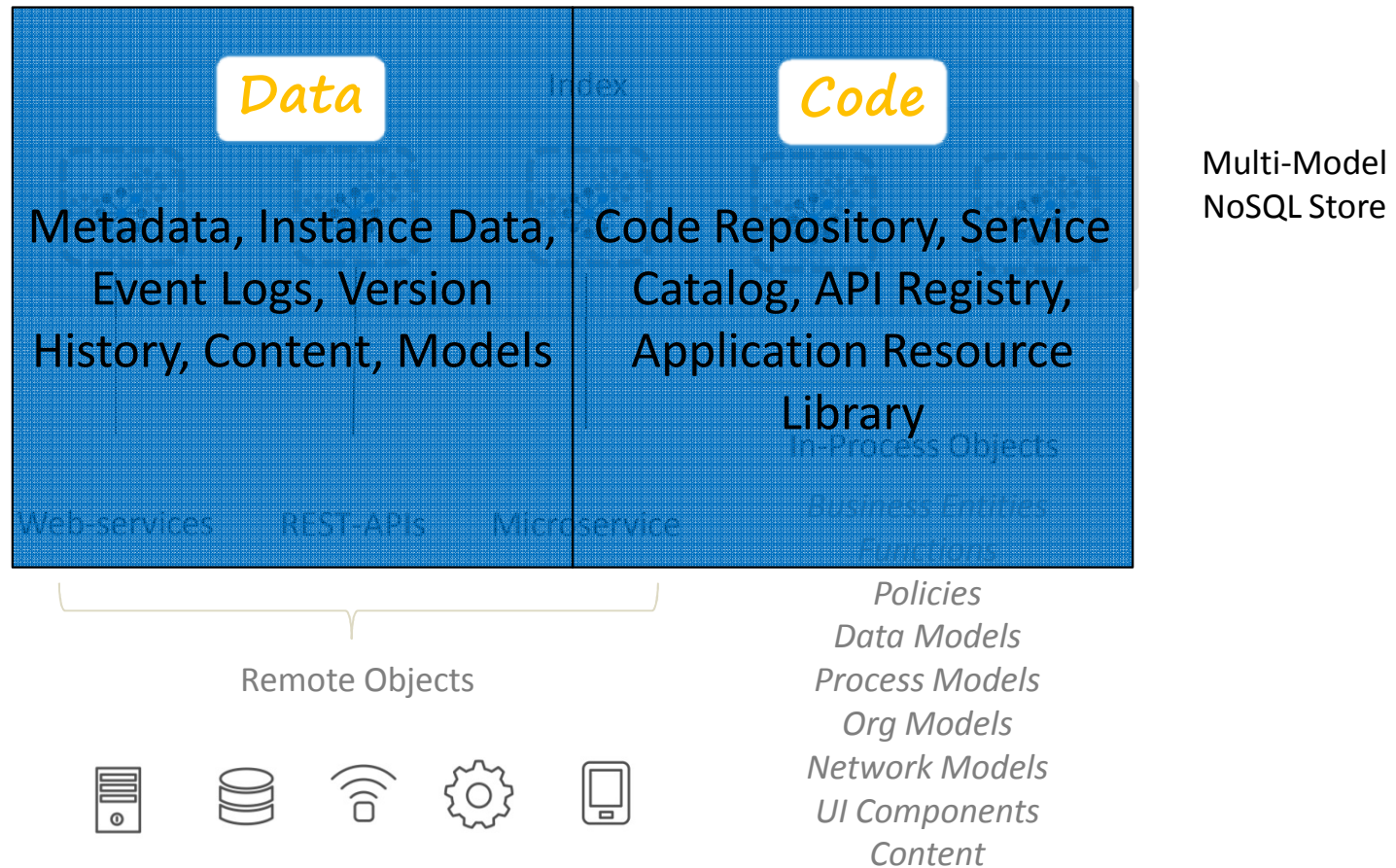


The abstraction harmonizes the representation of diverse and distributed resources, in order to simplify distributed computing

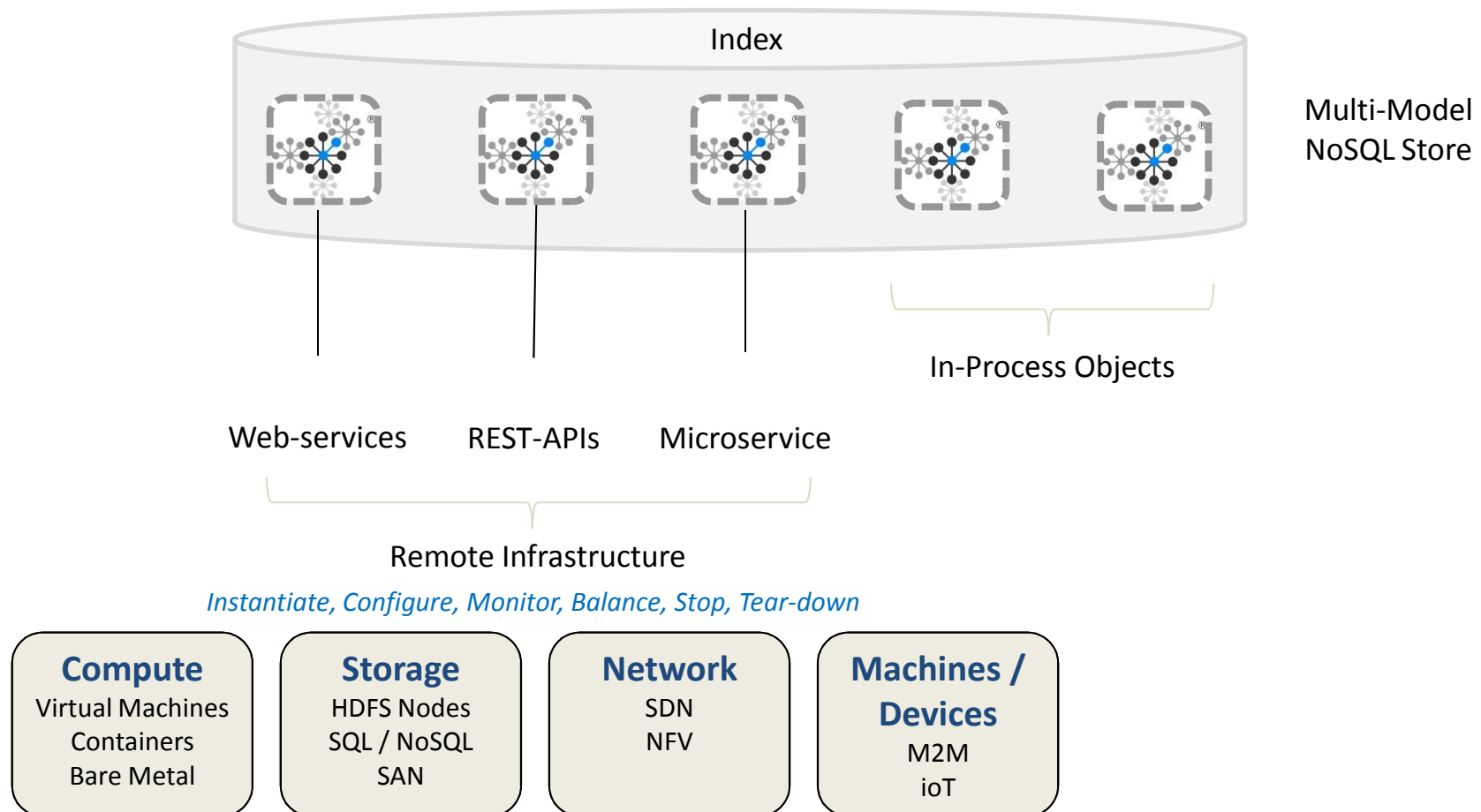
A Unified Object Model



Logical Repository



Instrumented Infrastructure

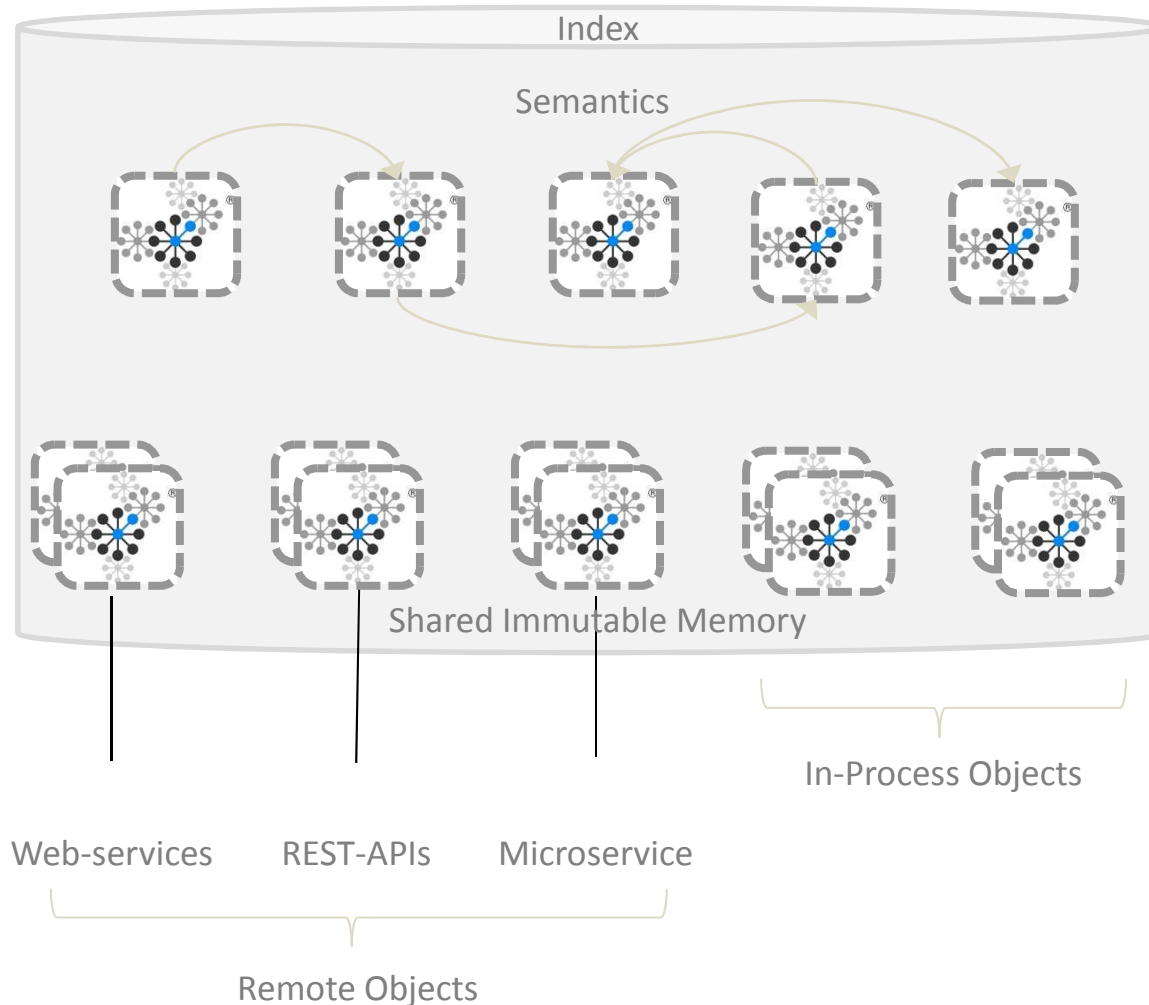


It presents an overlay application fabric,
over diverse and distributed endpoints

Under Common Management

**Declarative
Composition**

**Unified
Object
Model**



System Security



access, search,
navigation



Modeling
Environment



Platform
Services



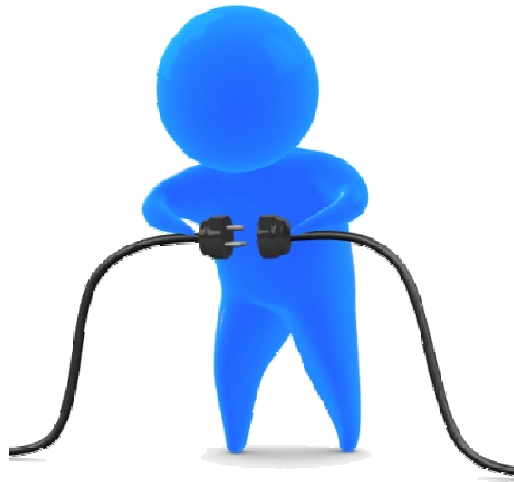
Shared
Libraries



Policy
Management

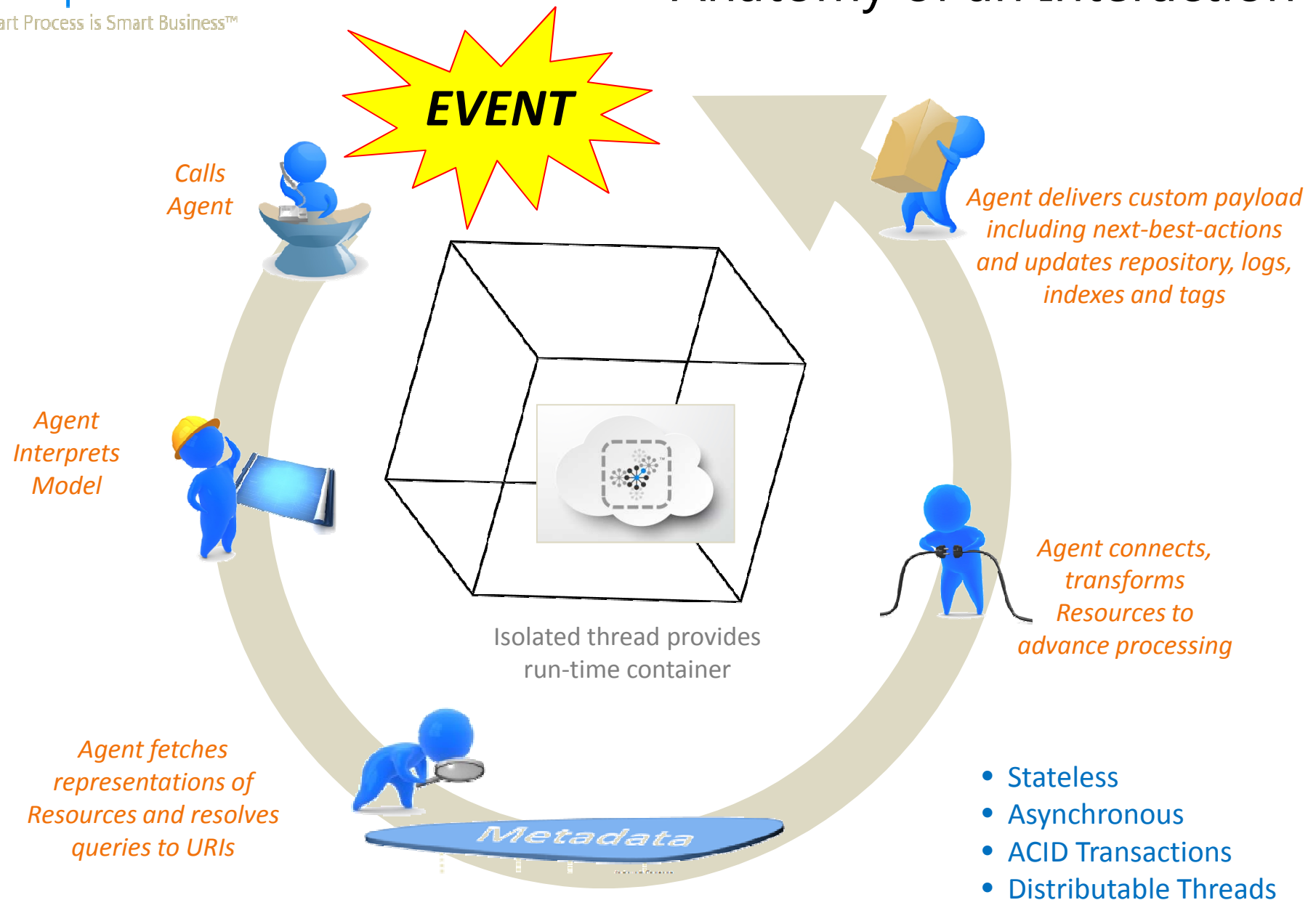


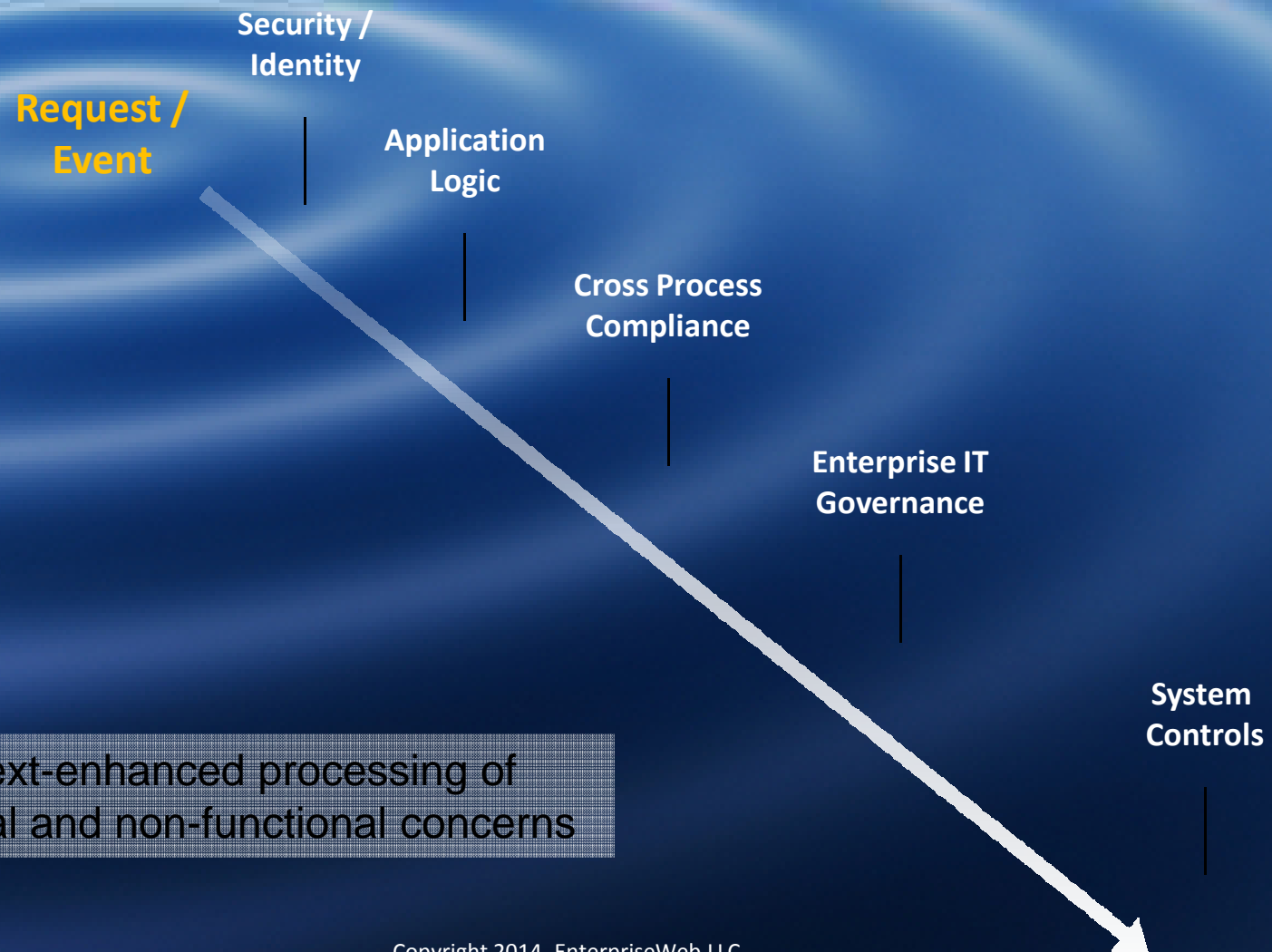
At run-time events are handled by goal-oriented software agents

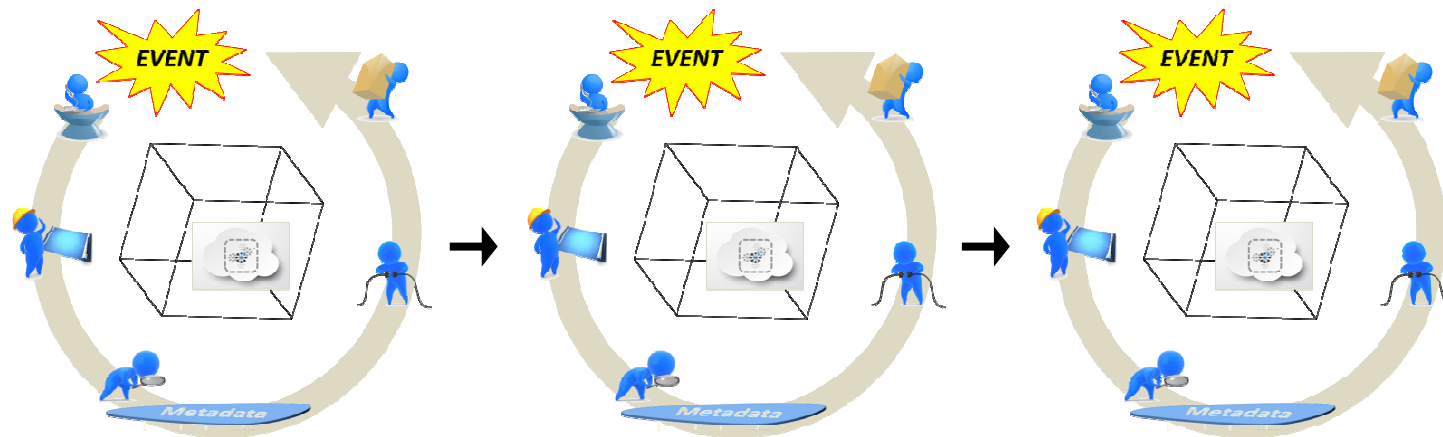


The agents use interaction metadata to
semantically interpret graph object

Anatomy of an Interaction







An asynchronous series of ACID transactions

Our high-level abstraction, takes virtualization to the application layer.

We radically simplify distributed computing to enable the software defined business.

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Best GRC Solution



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Dynamic Pricing; Customer Experience Management;
Supply Chain Optimization; Integrated Operations;
Cross-Process Governance; Event-Monitoring;
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Inflight Data Quality Management; Flexible Master
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