



GEM Mapped to Other Management and Architecture Frameworks and Methodologies

		As of: 7/17/2003		Supports GEM			Yes	Partial	No			
Rough Mapping of GEM Spiral Life Cycle Activities to Other Notable Frameworks, Methodologies, and Life Cycles												
GEM Enterprise Management Methodology Activities, Using Model Driven Enterprise Management (MDEM) Technologies		Zachman IT Framework Perspectives (1987-99)	Spewak Enterprise Architecture Planning (EAP) Methodology (1992)	OpenGroup TOGAF8 (1995)	DoDAF / C4ISR (1996)	CMM, CMMI, ISO 9000 Mapping	CIO Council FEAF (1998)	OMB FEA (2002)	OMG MDA	Defense Management Engineering	Balanced Scorecard	
1. Enterprise Concurrent Capability Intelligence												Each Row to the left represents a phase of a common "Executive" capability for Enterprise, Function, Program, and Project Management. Note that no methodologies other than GEM provide full coverage of the enterprise management dual spiral life cycle operations and intelligence process. This causes ineffective and inefficient activities in the other frameworks, methodologies, and life cycles in comparison to GEM
1.1 Enterprise Functional Capability Inventory												
1.1.1 Functional Knowledge Bases												
1.2 GEM Intelligence Base												
1.2.1 Enterprise Architecture												
1.2.1.1 Enterprise Initial Business Architecture												
1.2.1.1.1 Business Security Architecture												
1.2.1.2 Enterprise Full Business Architecture												
1.2.1.2.1 Business Security Architecture												
1.2.1.3 Data Architecture												
1.2.1.3.1 Data Security Architecture												
1.2.1.4 Application Architecture												
1.2.1.4.1 Application Security Architecture												
1.2.1.5 Technology Architecture												
1.2.1.5.1 Technical Security Architecture												
1.3 Enterprise Role-based Asset Distribution and Access Control												
2. Enterprise Concurrent Capability Operations												
2.1 Aligned Enterprise and Functional Missions (Executive Function)												
2.1.1 Aligned Enterprise and Functional Visions of Perfect Performance												
2.1.1.1 Integrated Measurable Goals												
2.1.1.1.1 Integrated Attainable Objectives												
2.1.1.1.1.1 Integrated Concurrent Operation Strategies												
2.1.1.1.1.1.1 Strategy Initiative/Project Management												
2.1.1.1.1.1.1.1 Preliminary Design of Capability and Security												
2.1.1.1.1.1.1.2 Detail Design of Functional Capability and Security												
2.1.1.1.1.1.1.3 Capability System Implementation Plans												
2.1.1.1.1.1.4 Capability Component Implementation Plans												
2.1.1.1.1.2 Strategy Recurring Operations Management												
2.1.1.1.1.2.1 Capability Operation and Maintenance												
2.1.1.1.1.2.1.1 Operational Intelligence Input and Processing (Operational Data Processing)												
2.1.1.1.1.2.1.2 Operational Intelligence Analysis and Reporting (Business Intelligence)												
2.1.1.1.1.2 Integrated Concurrent Operation Performance Review												
2.1.1.1.1.3 Integrated Concurrent Operation Performance Assessment												
2.1.1.1.2 Integrated Concurrent Value-Chain Assessment												
2.1.1.1.3 Integrated Concurrent Vulnerability (Strength, Weakness, Opportunity, Threat, Risk) Assessment												
<p>Each column above represents \$Billions of services/labor/material expense for fragmented, partial, and suboptimal results in enterprise management, improvement, engineering, security, and situational awareness. When an enterprise follows the GEM methodology life cycle shown at the left, it can accomplish all that these more fragmented approaches can attain, but with more integration, less cost, more responsiveness, and more accountability.</p>												

7/17/2003

TranTech Proprietary. One World Information System (OWIS) Proprietary and Copyright 1982-2003

12

GEM operates from the principle of a "spiral life cycle", also known as a "closed loop system". The results of one cycle are fed into the next cycle, providing part of the basis for adjusting that subsequent cycle. In GEM, management information products, such as reports, documents, data, etc., are "recycled" by the enterprise to refine its intelligence about its internal operations and arrangements, and about its larger environment and value chain. Because GEM is "generalized", it can be applied to perform specific operations, such as enterprise architecture in all its varieties.

Each column to the right of the GEM methodology dual-spiral life cycle management outline above represents \$Billions of services/labor/material expense for fragmented, partial, and suboptimal results in enterprise management, improvement, engineering, security, and situational awareness. When an enterprise follows the GEM methodology life cycle shown at the left, it can achieve all that these more fragmented approaches can attain, and much more, but with more integration, less cost, more responsiveness, and more accountability. All of the products, capabilities, maturity, quality, consistency, etc. that these varied approaches seek to deliver to the enterprise can be provided through implementation of the one GEM process.

Each Row of the diagram above represents a phase of a common "Executive" capability for Enterprise, Function, Program, and Project Management, expressed as the GEM methodology dual-spiral life cycle. Note that no methodologies other than GEM provide full coverage of this complete enterprise management process. This causes ineffective and inefficient activities in the other frameworks, methodologies, and life cycles in comparison to GEM.

GEM seems to be a BIG process, and yet is actually quite small, consistent and understandable in design. It is BIG in operation, but small in structure, considering all that it delivers through the use of modern open-standard technology as open-source and/or commercial products.

Because of the multi-functional breadth of GEM and its technical functional depth, it is often recognizable in part, but not always as a whole. It can be recognized by different people as strategic management, functional/program management, project management, knowledge management, resource management, security management, business intelligence, customer relations management, supply chain management, system/software engineering management, etc. GEM is all of these things, packaged together as a single whole-enterprise management process, which can also serve as the design for a whole-enterprise management system.

The variety of management concepts, technology concepts, and technologies supporting GEM implementation has recently reached common awareness (e.g., hyperlinks, object models, value-chains, enterprise architecture, process/capability maturity). The technology to support whole-enterprise management with GEM are now based on open standards, and GEM can be economically and quickly implemented in a variety of ways with combinations of open-source and commercial products.

By applying GEM, an organization and its value-chain can leverage all of the prior management improvement work, rolling the results and methods of those efforts into a comprehensive management life cycle – GEM.