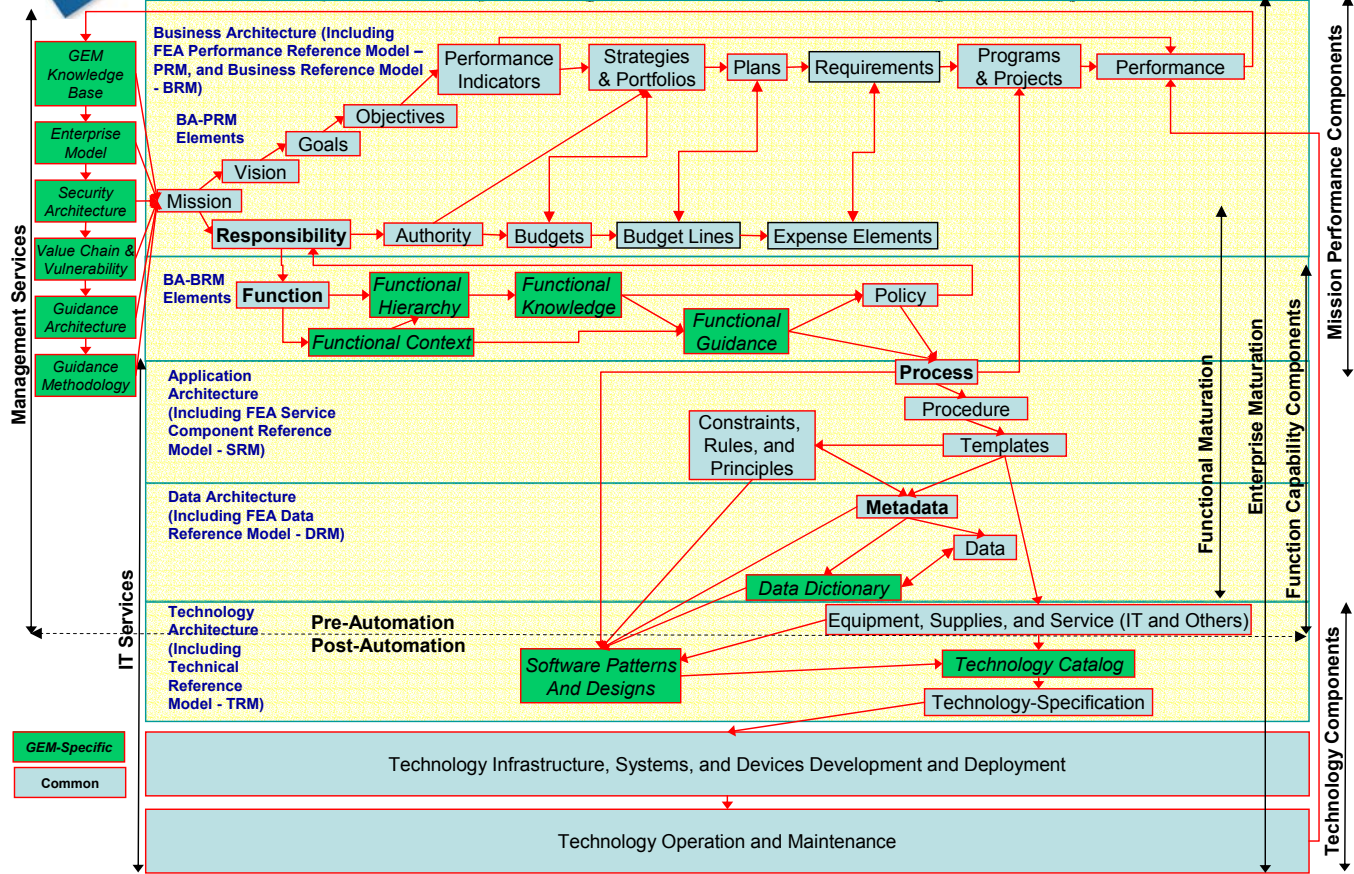


# GEM – Enterprise Operation and Vulnerability Flow

(Concurrently For Organizations, Functions, Programs, Projects, etc.)



This diagram illustrates the closed-loop operational flow of an organization using the GEM methodology's Spiral Life Cycle. It enables refinement of enterprise knowledge throughout each operational activity, and shared learning and awareness.

This diagram also illustrates the operational flow elements of the GEM methodology's Spiral Life Cycle overlaid on the top-level OMB FEA Model with its PRM, BRM, SRM, DRM, and TRM elements, shown as yellow frames. The light blue boxes represent operational activities common to most organizations, whether accomplished formally or informally. The darker green boxes, with italic text, identifies the additional activities accomplished through the use of the GEM methodology, with an evolving GEM repository, and evolving GEM-repository-based or repository-integrated functional applications.

Note that while an "enterprise architecture", shown here as the FEA model, has elements in common across all organizations, GEM extends the organization's enterprise architecture to support the larger enterprise management process of secure organizational operations management from managed organizational intelligence. GEM extends the FEA, Zachman Framework, C4ISR/DoDAF, TOGAF, TEAF, and other EA frameworks, and glues these EA efforts together with the operational efforts, melding them into a full enterprise management (EM) solution framework. GEM, as a methodology, repository, and repository-based and repository-integrated applications, provides a dynamic federated interoperability model for communities of interest (COI) within the enterprise, and a comprehensive EA and EM management approach.

This supports our contention that the FEA is not really new. It's largely repackaging of what most who have taken an "enterprise view", or a "system view of the organization" have done all along.

The EA and FEA are not ends in themselves, but are a means to gain control over technology expenditures, primarily IT expenditures. IT spending has shown the trend of suboptimization - spending on localized views of need for assigned or assumed functions, not prioritized enterprise requirements. This control over technology spending and the reduction of suboptimization directly supports the alignment of the Executive Branch and its operations with the President's Management Agenda, in pursuit of Performance Management and compliance with the Government Performance and Results Act (GPRA).

If these common operational artifacts are reviewed by those outside of the EA and IT communities, then most will acknowledge that their organization performs the activities yielding enterprise-wide common operational artifacts roughly matching the PRM and BMR. Fewer will have enterprise-wide common operational artifacts matching the SRM, while even fewer will have enterprise-wide common operational artifacts matching the DRM and TRM.

To make this a closed loop, and thus self-refining, and environmentally adaptive system, we submit that the organizations must also perform those enterprise-wide management activities that produce the GEM-specific operational artifacts shown in green blocks. These are the glue that tie the operations together into a single enterprise-wide process flow.

The need for a closed loop operational process thus drives the need for a shared, distributed, common, enterprise-wide repository for this process. Without such a shared repository, an "enterprise brain", every activity in this flow that is not shared breaks that activity and its subsequent activities out of the "enterprise-wide" view and makes it a locally suboptimized activity. If an activity and its artifacts are not in the shared repository, they are hidden from the enterprise view and enterprise accountability. This takes 'local operational autonomy' too far in the direction of wildness and away from the controlled order needed by any organization to survive and thrive. It's like a wild mutation, or worse, like cancer. Most wild mutations are not beneficial to the organization/organism, and cancer is never beneficial. A closed-loop, self-referencing, environmentally adaptive, self-healing management process is needed.