**Understanding Roles between   
Enterprise Architecture and the Project Management Office**

People frequently ask, "Where's the boundary between project management responsibilities and enterprise architecture?" This is a good question, because project managers and their staff frequently develop business user needs to include technical and functional requirements. Whereas, enterprise architecture (EA) also employs a method yielding technical standards and business functional needs. Prior to the introduction of EA to the organization, many enterprises fail to prepare for EA's impact on the culture - and like any [innovation](http://austinea.org/definition/#innovation), there's always a disruptive nature of the change. This paper explains the differences and challenges required of a project management office (PMO) to establish an EA practice when none previously existed.

**Project Management** is the discipline of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria frequently referred as business objectives. A project is a temporary endeavor designed to produce a unique product, service or result with a defined beginning and end usually time-constrained and often constrained by funding and deliverables. Projects are typically undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. The temporary nature of projects stands in contrast with business as usual (or operations), which are repetitive, permanent, or semi-permanent functional activities to produce products or services.

The primary challenge of project management is to achieve all of the project goals, objectives and constraints. This information is usually described in a user or project guide, which is a living document created at the beginning of the project. The primary constraints are scope, time, quality and budget - I like to refer to these as cost, schedule and performance, because these are key PM responsibilities. The secondary - and more ambitious - challenge is to optimize the allocation of necessary inputs and integrate them to meet pre-defined objectives. From <https://en.wikipedia.org/wiki/Project_management>

**Enterprise Architecture** is the process of translating business vision and strategy into effective enterprise change by creating, communicating, and improving the key principles and models that describe the enterprise's future state and enable its evolution over time. EA is a team approach to unify common understanding while blueprinting future needs of the enterprise using architecture views.

The EA practice is a collaborative approach to conduct enterprise analysis, design, planning, and implementation leading to successful development and execution of business strategies. The City's practice applies industry best-practice principles to guide organizations through process, information flow, and technology alignment to accomplish business plans and strategies. The EA approach analyzes elements of the enterprise to identify, motivate, and achieve value-based, boundaryless business transformations. From <https://en.wikipedia.org/wiki/Enterprise_architecture>

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| Select to enlarge... <http://austinea.org/image/strategicMetaModel.jpg> **Strategic EA Meta-Model** |

**Role Differences**

It's unclear from the project management definition that the responsibility translates business vision and strategy into effective enterprise change to create, communicate, and improve key principles and models - the EA definition. From an information technology (IT) perspective, EA differs significantly from project management. EA includes non-IT analysis such as organizational and business process considerations - frequently conditions where IT doesn't play a role - EA also assists in the establishment of clear understanding of the business environment - i.e., the boundary between services and stakeholders (users and citizens) - sometimes referred as important business outcomes. Here's a good YouTube video that explains the business requirements problem and the importance of consistent requirements analysis - see [Reasons Projects Fail](https://www.youtube.com/watch?v=4a4ZxOAQifE&feature=youtu.be).

Therefore, it shouldn't be a surprise when confusion surfaces among organizations performing similar, if not identical, responsibilities. Just because an organization doesn't have an EA practice, doesn't mean they're not performing some level of informal EA activity. Without some EA activity, the enterprise completely falls apart. In the absence of an EA, a PMO might perform business analysis to collect IT requirements supporting business needs. This is one area (among others) where EA and the PMO overlap due to legacy practice or possibly a result of limited EA resources.

EA is responsible to assist business leaders in vision, mission, capability, goal and objective identification leading to a comprehensive use case model describing visionary use of IT business systems. This includes the people, process and technology to accomplish the business mission while achieving the business target vision through select business goals (not just IT goals). Information technology is just one part of the solution - business is responsible for the roles, activities and workflow to accomplish their mission. The EA method identifies goal dependencies essential for project management planning - these goals are analogous to project milestones traditionally planned using Gantt charts or waterfall schedules. EA simply facilitates this process through a series of best-practice techniques. From <https://en.wikipedia.org/wiki/Gantt_chart>

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| Select to enlarge... <http://austinea.org/arch/realEstate/report/realEstateVision.jpg> **Office of City Real Estate Capability Area Architecture** From <http://austinea.org/whitepaper/umleastrategy/> |

EA assists in the derivation of these plans using a value-based approach - EA refers to these as sequencing plans (not to be confused with UML sequence diagrams). Architects derive sequencing plans from [capability area architectures](http://austinea.org/definition/#caa) to establish the relationships (i.e., dependencies) between business capabilities (i.e., services) and business goals - the process includes the identity of important goal dependencies and their influence on important business outcomes to accomplish the mission. In essence, goals amplify the business vision. I think of goals as mini-visions (milestones) to accomplish the overall business vision of the organization.

EA doesn't tell business people or the PMO what to do. EA facilitates the discussion and provides a process between the PMO and the business leadership to create an executable breakdown (sequencing plan) to ensure achievement of the ultimate vision. EA's sole authority stems from the direction of business leaders - captured in standard form by the architecture. The skilled architect's knowledge of IT guides the business to executable solutions - this is why architects require a great deal of information technology experience.

EA is liaison and consultant to the business stakeholder and IT project management. Working directly for business leaders, EA creates an architecture to capture the business needs such as purpose, vision, mission, capabilities, business goals, scope, process, functional needs, success factors (objectives) and other business technical requirements to complete the business architecture. On approval, the business stakeholder authorizes delivery of the business architecture to IT project management. IT project management uses the business architecture to plan implementation (proposal development, contracting, coordinate resource needs, planning, outsourcing strategies, etc.). If IT project management identifies required changes to the business architecture deliverable, possibly due to technology considerations, strategies, etc., IT project management coordinates with EA (per guidance by the business stakeholder) to make necessary business stakeholder approved corrections or updates. During architecture collaboration sessions, IT project management participates to obtain better business understanding regarding architecture design considerations and other business conclusions drawn. Project management participation leads to a better-informed project manager regarding operational considerations. From <http://austinea.org/roadmap/#3_3>

Here's a blog-post written by John Zachman (known as the father of enterprise architecture) explaining EA as a management issue:

There presently appears to be a gross misunderstanding about Enterprise Architecture among management... but also among the information community as well. Enterprise Architecture is NOT an Information Technology issue... it is a Management issue. It is likely perceived to be an Information Technology issue as opposed to a Management issue for two reasons:

1. Awareness of the subject of Enterprise Architecture tends to surface in the Enterprise through IT, the Information Systems (or Information Technology) Community.  
     
   The Information Community raises the subject, probably because it finds itself between a rock and a hard place! It doesn’t make much difference what it is doing... how fast the processors, how modern the operating systems, how clever the programming... they are still producing implementations that are not aligned, not flexible, not integrated, not reusable, not interoperable, not meeting expectations... and therefore, they, the Information people, raise the issue: "Chief... we are never going to meet your expectations until we have a way to transcribe what your expectations are! And, we have to transcribe your expectations in such a fashion that we can do engineering kind of work with them... we have to do some 'Enterprise Architecture.'"  
     
   It is not adequate to say, "I feel good... or bad" or, "make money... or save money," or, "grow... or optimize', or, "go this way... or that." These are all good... and we all think these kinds of things... we have intuition, common sense, "sixth senses", feelings, etc., but few of us are good at taking the time for formalizing and articulating what we are thinking. Although all of these thoughts are relevant, they are not adequate for engineering purposes. "We have to do some Enterprise Architecture."  
     
   **It's not an IT issue at all. It is a Management issue. IT would just be helping formalize and articulate the Management issues. But since IT raises the issue it is perceived to be an IT issue.**  
     
   Secondly:
2. Information Technology people seem to have the skills to do Enterprise Architecture if any Enterprise Architecture is being or is to be done.  
     
   Let's assume the best for a moment... let's assume the Enterprise decides "Okay you guys! We are going to DO Enterprise Architecture!" Who's going to do it? The CEO? General Management? Probably not. If it is going to get done, probably, somebody from IT is going to do the actual work of it.

From <https://www.zachman.com/resources/zblog/item/defining-enterprise-architecture-misunderstandings>

Many project managers develop requirements using various methods largely inferring to the interrogatives such as who, what, when, where, how and why leading to a table of business needs. This approach tends to create an ad-hoc set of non-technical, technical and functional requirements potentially confusing solution providers. Typically, project managers are not business analysts and few business analysts have the knowledge to architect integrated solutions for complex systems - a skill needed to architect solutions consumable by both technical and non-technical people.

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| Select to enlarge... [C:\Users\byrdr\Documents\austinea.org\whitepaper\PMandEA\EARelationships.jpg](file:///C:\Users\byrdr\Documents\austinea.org\whitepaper\PMandEA\EARelationships.jpg) **EA Relationships** |

**Achieving Business Momentum**

If we compare the responsibilities of an enterprise architect with a business analyst or system analyst, they're very similar. Except, the enterprise architect employs a standardized system analysis approach using common tooling. The tooling yields collective knowledge across the enterprise resulting in business pattern recognition and improved integration - i.e., the left hand knows what the right hand is doing. The enterprise architect develops functional requirements using the Unified Modeling Language (UML) use case model, which employs a value-based principle - in that, the UML employs a result of value (ROV) principle to a role (an actor in UML). This best-practice method contextualizes business needs, thereby, improving solution provider understanding.

The ROV principle is what differentiates the UML architecture approach over other more tradition methods. Traditional architecture methods tend to decompose processes into inputs, controls, outputs and mechanisms (ICOM) - this approach favors process over outcomes. The difference is difficult for the non-object-oriented analyst to recognize and understand. The Object Management Group (OMG) is standardizing object-oriented methods with the Unified Architecture Framework (UAF) - our current method. Therefore, object-oriented thinking is becoming common with today's IT professionals making ICOM principles obsolete. Fifteen years ago, ICOM dominated architecture principles - its limitations in scalability seriously damaged the start of the EA practice - i.e., the focus wasn't on value - the focus was on process. Process in itself does not produce value; rather, identified value requires a process.