KEY REAL WORLD BEST PRACTICES
in applying
PMBOK Project Management Framework
for delivering
IT Projects

KBAINEY PROFESSIONAL IT SERVICES

KEY REAL-WORLD CONSIDERATIONS TO APPLYING PMBOK

Flexibility and Alignment
- PMBOK defines a project management framework that consists of a collection of key elements and processes for managing projects, as published by the Project Management Institute (PMI). It is a general guideline for project management in any industry and does NOT provide a prescription for using these processes within the context of software development. **The PMI expects knowledge experts in their specific industries to apply this project management framework to their respective business processes-Flexibility and Alignment.**

PMBOK with Agile
- Many traditional project management practitioners think that Iterative Development   methodologies such as Agile, IBM-RUP, etc. and PMBOK are mutually exclusive. Innovative software development professionals leverage the best of each to deliver the highest business value. PMBOK provides a project management framework and a set of key elements and processes for project management, while Agile defines a philosophy of iterations and incremental developments that enables teams to be more effective through continuous improvement and improved working relationships with their customers. **Applying PMBOK processes with the Agile project delivery life cycle creates an environment that enables and support project success-PMBOK with Agile.**

PMBOK with Model-Driven Developments
- PMBOK describes a generic project lifecycle for any size project with established process groups and knowledge areas. Model-driven IT development such as RUP prescribes generic software development processes within a project lifecycle, which can be tailored to implement any size software project**. Applying PMBOK processes with model-driven IT development approaches focus on increasing throughput by eliminating waste and removing high-ceremony processes-PMBOK with Model-driven developments.**

Agile Project Manager

- The PMBOK practices of scope definition, work breakdown structure (WBS) creation, and scope verification occur iteratively in Agile approaches. **Rather than defining all of the elements of an integrated project plan at the beginning of the project-- scope, work breakdown structure, schedule, cost, and controls--the agile project manager will focus on planning using a level of detail that is more appropriate and realistic for the schedule constraints-Agile Project Manager.**

PMBOK and Waterfall

- Many IT professionals associate PMBOK with the waterfall methodology, when in fact it does not. Years of traditional integrated plan-driven software development culture or thinking preferences using waterfall methodologies have created an assumption that a waterfall approach is the only way to adhere to the practices prescribed in the PMBOK. Waterfall's big up-front planning translates into Agile's continuous iterations or prototypes, where gross-level features and estimates are planned at the beginning of a release, and more detailed planning of tasks and effort is done at the beginning of every iteration. **The big up-front "Victorian-novel" PMO documentation effort that went hand-in-hand with the planning is also drastically reduced, and model-driven documentation appropriate for the type and number software iterations is readily supported and embraced-PMBOK and Waterfall.**

PMBOK and Agile.

- PMBOK framework processes aren't really that different from agile methods. They are simply executed more often, iteratively and incrementally, with the attention to detail that is appropriate for the timeframe. **IT is a dynamically changing environment, as a result will normally result in potential scope change at the end of each iteration, as new information is learned about the technology and the change in customers' preferences- PMBOK and Agile.**

PMBOK and software development

- Does PMBOK fits into software development processes or does software development processes fit into PMBOK? **PMBOK is the means to the end-result of delivering successful software solutions to support the business. It is NOT the end-result to software development-PMBOK and software development.**

PMBOK and new PMO

- PMBOK framework processes can be applied in using emerging technology solutions, such as SharePoint, wikis, etc. and other third-party tools for communications with geographically dispersed teams. Innovative project managers change the traditional culture from writing large, detailed document defining the plan for the entire project, to facilitating the team in their ongoing iterative planning efforts and sharing that information in the most visible way possible. **They streamline the process so that decisions are made quickly, collaboratively, and with reduced PMO process ceremony and administrative coordination-PMBOK and new PMO.**

PMBOK and Agile-Change Control

- PMBOK Integrated change control processes change dramatically with Agile methodologies, especially for those traditional IT professionals with the waterfall thinking preferences. **The idea of minimum process to achieve maximum value whereby change control process is streamlined and integrated into the daily routine of agile teams can be challenging-PMBOK and Agile-Change Control.**

PMBOK and Model-Driven approaches-Scope Management

- PMBOK Scope Management processes also changes dramatically with Iterative Development approaches, such as Agile, RUP, etc. IT is a dynamically changing in environment and requirements constantly change in response to customer business needs, shifts in the industry, advances in technology, and things learned during the development process. Scope management is one of knowledge areas that is given a great deal of attention in the PMBOK. The approach to managing scope changes using the typical traditional Integrated plan-driven waterfall approach and the integrated model-driven Iterative approach, is completely different. **The traditional Integrated Plan-driven approaches prevent changes in scope, whereas the integrated model-driven approaches expect and embrace controlled scope change, based on the greatest business value. The Iterative Development approaches prevent a wasteful buildup of requirements inventory, some of which may never be processed.-PMBOK and Model-Driven approaches-Scope Management.**