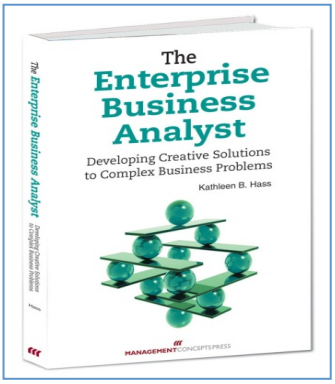
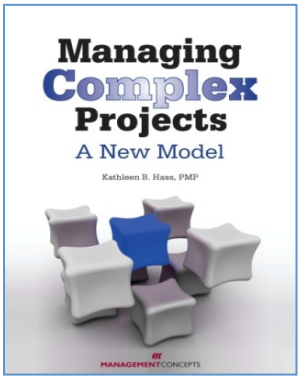
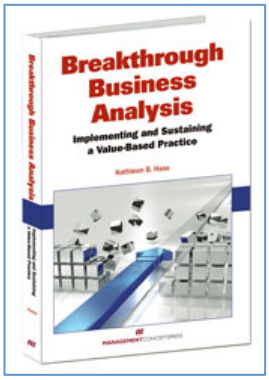
Kathleen Hass and Associates Assessment Practice Overview

The Journey to Professional Excellence

April 2015







A White Paper from Kathleen Hass and Associates

KH & Associates

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Introduction

Mature business management practices focus on alignment with and achievement of business strategies, goals and objectives and are directly correlated with higher organizational performance, value to the customer, and wealth to the bottom line. KHass and Associates assessments afford organizations access to the most comprehensive and far-reaching assessment services available to the business analysis (BA) and project management (PM) communities. Our assessments are superior to virtually all appraisal practices in the BA/PM space due to our in-depth scientific approach. Our assessments:

- Appraise both organizational maturity and individual/workforce capability based on four-stage reference models
- Present results that are continuously examined for reliability and validity by Lori Lindbergh, PhD, Senior Researcher and Psychometrician , LORIUS, LLC
- Benchmark results against a global data base of BAs and PMs performing comparable work
- Align with industry professional standards for BAs and PMs
- Align with standards and best practices for quality and fairness in educational and psychological assessment
- Incorporate the dimension of complexity: Are based on the skills and knowledge needed to work successfully on the complexity of the organization's current project assignments
- Examine critical relationships between competency, project complexity, and project outcomes.

Assessment Portfolio

Our assessment portfolio determines organizational maturity and workforce capability for individuals working at the project level, the strategic level, and the competitive/innovation level of project work. Our assessment practice consists of evaluation of two disciplines:

- Business Analysis / Enterprise Business Analysis
- Project Management / Complex Project Management

We offer assessments of:

- Individual and Workforce BA/PM Capability
- Organizational BA/PM Maturity

The Science behind our Assessments

Our assessments are based on industry standards and grounded in best practices for educational and psychological assessment, as well as standards for quality and fairness in assessment and research. Furthermore, our assessments are continuously examined for reliability and validity to ensure there is strong evidence that assessment measures what it is supposed to measure and there is strong evidence supporting the intended interpretation and use of the findings.

Our comprehensive data collection and analysis procedures provide organizations with a multidimensional snapshot of their BA or PM performance within the complexity of their change initiatives. Organizations will be confident that they can use our assessment findings to make accurate decisions about their PM and BA practices and use the findings to create a roadmap to guide their improvement efforts.

Global and Local Benchmarking

Results are benchmarked against three data points:

- Our **Capability Model**s, which are four-point reference models that are aligned with world class assessment standards, aligned with BA/PM industry standards and based on the complexity of BA/PM work assignments. The underlying premise of our assessment practice is that *as project complexity increases, more sophisticated knowledge, skills, methods, tools, and organizational structures are required for project success*. See appendices for a description of our capability models.
- Our **Global Data Base**, assembled over multiple years includes representation from US companies and Non-US organizations including Canada, New Zealand, and Australia. Industries represented include financial services, healthcare, information systems, government/nonprofit, and transportation.
- The **Participants' Peer Group**, if a group of BAs or PMs from one organization are participating, the assessment findings include a comparison between BA/PM model groups within the organization.

Industry Standards Compliance

The assessment process and the maturity models developed by Kathleen Hass and Associates are consistent with industry standard generally recognized practices. The models described herein have been designed to provide a roadmap to implementation of mature capabilities as described and published by these recognized standards associations:

- **Business Analysis** – Our models are based on the key practices embodied in the International Institute of Business Analysis (IIBA®) *Business Analysis Body of Knowledge (BABOK™ Guide) Version 2.0 and the IIBA® Business Analysis Competency Model Version 3* described in terms of key practices, tasks and techniques.
- **Project Management** – Our models encompass the Project Management Institute (PMI®) standards embodied in the following publications:
    - *A Guide to the Project Management Body of Knowledge (PMBOK™ Guide)*, Fourth Edition. The *PMBOK™ Guide* presents standards for the areas of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools and techniques.
    - The *Standard for Portfolio Management*
    - The *Standard for Program Management*
    - The *Project Management Competency Development Framework*

Assessment Capability Reference Models

For our BA/PM Assessment Practice, we use reference models to determine the current state of the practice (the models are described later in this paper) for both:

- Organizational Practice Maturity Model
- Individual and Workforce Competency Model

Organizational maturity reference models reflect the maturity of business processes and individual capabilities at various levels. Each maturity level consists of related practices for a predefined set of process areas that improve the organization's overall performance. We have elected to use a staged maturity model for our organizational maturity assessments because experience has shown that organizations do their best when they focus their process improvement efforts on fundamental practices first and only a manageable number of process areas at a time. As demonstrated by the SEI CMMI (Software Engineering Institute at Carnegie Mellon, Capability Maturity Model Integrated) assessment approach, it has become clear that sophisticated processes rely on the institutionalization of foundational processes first for optimum results. Toward that end, the staged model provides a systematic roadmap for improvement efforts.

A maturity level is a defined evolutionary plateau for organizational process improvement. Each maturity level institutionalizes an important subset of the organization's processes, preparing it to move to the next maturity level. The maturity levels are measured by the achievement of goals associated with each predefined set of process areas.[1]

Individual and Workforce Capability Assessments

Results are analyzed and reports are automatically generated:

- **Two Individual BA/PM Participant Reports**: Two reports are provided to each participant.
  - a summary benchmark report comparing the BA to:
    - The model
    - The BA's peers in the organization
    - BAs in the global data base doing similar work
    - The BA's supervisor's assessment (optional)
  - a proposed customized learning and development plan highlighting gaps in capabilities
- **Multiple BA/PM Workforce Group Reports**: Group reports are provided to participating organizations.
  - results for the entire PM or BA workforce comparing the BA workforce to:
    - The model
    - The BA's peers in the organization
    - BAs in the global data base doing similar work
    - The BA's supervisor assessment (optional)
  - results based on subgroups reporting to a manager comparing the BA group to:
    - The model
    - The BA's peers in the organization
    - BAs in the global data base doing similar work
    - The BA's supervisor assessment (optional)

[1] CMMI® for Development, Version 1.2, CMMI-DEV, V1.2, CMU/SEI-2006-TR-008, ESC-TR-2006-008, Improving processes for better products, CMMI Product Team, August 2006. P. 35

Organizational Maturity Assessments

Results are analyzed and a report is automatically generated for the participating organization. The report presents:

- A **summary benchmark comparison** measuring the participating organizational maturity against the maturity of other organizations in the same industry
- **Recommendations to close gaps** to achieve the current maturity level, and make significant progress attaining the next maturity level

Assessment Options

Our BA/PM assessments can be conducted separately, or concurrently. Organizations that elect to conduct the assessments simultaneously achieve economies of scale and efficiencies in the process. Conducting concurrent assessments also affords us the opportunity to develop integrated BA/PM improvement plans. Experience has demonstrated that synergies will be created between the two practice areas that are not possible with separate assessments. In addition, eagerness for change will emerge across the organization. Since the PM and BA disciplines need to work harmoniously to achieve high levels of efficiency and effectiveness, it is sometimes best to assess both disciplines concurrently.

Section 1: Assessment Services

PM/BA Practice Maturity Assessment

Each practice assessment is typically completed within 3 to 6 weeks, depending on the availability of key stakeholders and decision makers to participate in interviews and focus group sessions. Activities and deliverables are listed below.

PM/BA Practice Maturity Assessment Deliverables	
1.	Interviews and planning meetings, review of assessment instrument, focus groups, and review of artifacts for 3 representative projects (Typically: 3 project reviews, 5 management Interviews, and 2 focus groups)
2.	Assessment kick-off meeting with participants and their management team
3.	Client questionnaire on-line set-up, assessment communication/distribution, online data collection
4.	Data summary reports for each practice, with the PM or BA practice maturity rating, strengths, opportunities
5.	Findings and recommendations presentation to close the gaps in capabilities
6.	2-year roadmap and 12-month action plan to address level-2 gaps and begin to build level-3 capabilities

PM/BA Individual and Workforce Capability Assessment

This is typically completed within three to four weeks depending on the availability of the participants to complete the questionnaire instrument. Activities and deliverables are listed below.

PM/BA Individual and Workforce Evaluation Deliverables	
1.	Interviews and planning meetings: review of assessment instrument, determine number of group reports, groupings of PMs and BAs, logistics, etc.
2.	Questionnaire set-up and communication/distribution
3.	Assessment kickoff meeting with participants and their management team
4.	Individual PM/BA Summary Reports compiled and analyzed, reporting strengths and opportunities for improvement
5.	Individual PM/BA Proposed Professional Development Plans
6.	PM and BA Workforce Summary Report and Recommendations compiled and analyzed
7.	PM and BA Competency Findings and Recommendations Presentation
8.	PM and BA organizational learning and development recommendations to address the competency gaps

The organizational maturity assessment methodology we use is based on the following appraisal principles adapted from the SEI CMMI Appraisal Method for Process Improvement[2]:

- Start with an appraisal reference model.
- Use a formalized appraisal process.
- Involve senior management as the assessment sponsor.
- Focus the assessment on the sponsor's business objectives.
- Observe strict confidentiality and non-attribution of data.
- Approach the assessment collaboratively and positively.
- Focus on follow-on and decision-making activities by producing actionable assessment results.

[2] Standard CMMI Appraisal Method for Process Improvement (SCAMPI), Version 1.1: Method Definition Document, CMU/SEI-2001-HB-001

Section 2: BA and PM Practice Maturity Models

Organizational maturity assessment frameworks exist to provide a standard and consistent method to determine the maturity of business practices for specific disciplines (e.g., business analysis, project management, software engineering).

The BA Practice Maturity Model is a four-stage model, each stage representing a higher level of maturity. We have elected to use a four-stage model, representing continuous improvements and optimization at higher levels. Note that foundational practices reside at level 2, whereas the more sophisticated practices are resident at higher levels. In addition, our models contain the many business management and organizational practices that are needed for successful project outcomes.

See *Exhibit 1 – BA Practice Maturity Model*, which depicts the improvements realized as an organization traverses to higher levels of maturity. Also, see the *Exhibit 2 – BA Practice Maturity Model Practices Required at Each Level*, for a detailed comparison of the practices required at each level.

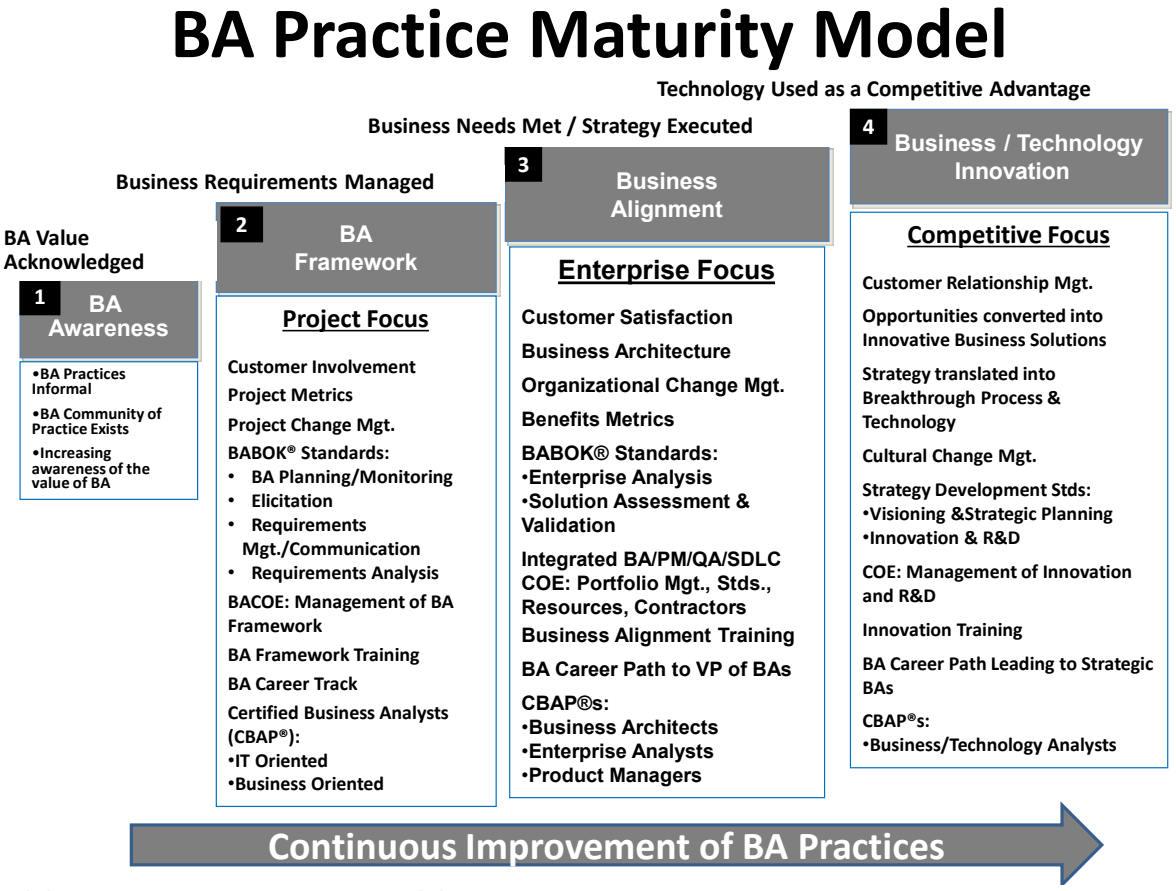

Exhibit 1 – BA Practice Maturity Model

BA Practices Required for Each Level of Maturity

The BA practices required for each level are described below.

	Level 1 BA Awareness	Level 2 BA Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
Business Outcomes **Practices**	**BA Value Acknowledged**	**Business Requirements Managed**	**Business Needs Met** **Strategy Executed**	**Technology used as a Competitive Advantage** **New Strategy Forged**
Customer Relationship Management		Customers and stakeholders are involved throughout the project.	Customer satisfaction is measured for both the process used to involve customers and the new business solution delivered by the project.	External customer relationships are measured and managed to continually increase customer satisfaction.
Standards, Methodology, Tools, Knowledge Management, Change Management	Process and tool standards are undefined.	• BA standards for practices and tools are defined and integrated. • Project knowledge is accessible to all project stakeholders. • Project scope changes are managed.	• BA standards, tools, and knowledge mgt. are integrated with PM, QA, SDLC standards • Organizational readiness assessments are conducted prior to deployment of new solutions.	• Convert business opportunities into innovative business solutions. • Translate strategy into breakthrough process and technology change. • Benchmarking, competitive analysis, feasibility analysis is conducted as part of the strategic planning process. • Cultural readiness assessments are conducted prior to deployment of new solutions.
Body Of Knowledge Areas		Standards for the following knowledge areas are defined, institutionalized, and measured: • BA Planning and Monitoring • Elicitation • Requirements Management and Communication • Requirements Analysis	Standards for the following knowledge areas are defined, institutionalized, and measured: • Enterprise Analysis • Solution Assessment and Validation	
Project Selection and Prioritization		•	• The business and technology architectures are defined and in sync. • The portfolio management process ensures business alignment of projects.	
Metrics		• Project metrics for cost, time, and scope are	• Quantitative BA process management program exists and is	Business benefits management program is tied to the portfolio management program.

	Level 1 BA Awareness	Level 2 BA Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
		collected, analyzed and reported. • Requirement defects are tracked, measured, and steps are taken for prevention in the future.	integrated with PM, QA, SDLC • Business benefits management program is defined and in place.	
Practice Support and Governance	BA Forum or Community of Practice exists.	BACOE: Centralized management of BA Framework	BACOE: Centralized management of: • Business case development, portfolio management, BPM, BDM • Resources, contractors, vendors • Governance Committee	BACOE: • Integrated with PM, QA, SDLC COEs • Centralized management of Innovation and R&D
Training and Support		BA Framework training program exists and all BAs attend.	• Business Alignment training program exists and all BAs attend.	• Business/Technology Optimization training program exists and all BAs attend. • BA Training ROI is measured.
Competency and Career Development		BA Career Track exists for: • IT Oriented Analysts • Business Oriented Analysts	BA Career Path leading to VP business analysis exists for: • Business Architecture Analysts • Enterprise Business Analysts	BA Career Path leading to strategic and domain expert BAs exists for: • Business/Technology Analysts • Cross-Functional Analysts • Cross-Domain Analysts • Organizational Change Analysts • Innovation Analysts

Exhibit 2 – BA Practice Maturity Model Practices Required at Each Level

Project Management Practice Maturity Model

The Organizational PM Practice Maturity Model is also a four-stage model, each stage representing a higher level of maturity. Note that the business management and organizational practices that are common to all business projects are similar in both models. See *Exhibit 3 – PM Practice Maturity Model*, and *Exhibit 4 – PM Practice Maturity Model Practices Required at Each Level*, for a more detailed comparison of the practices required at each level.

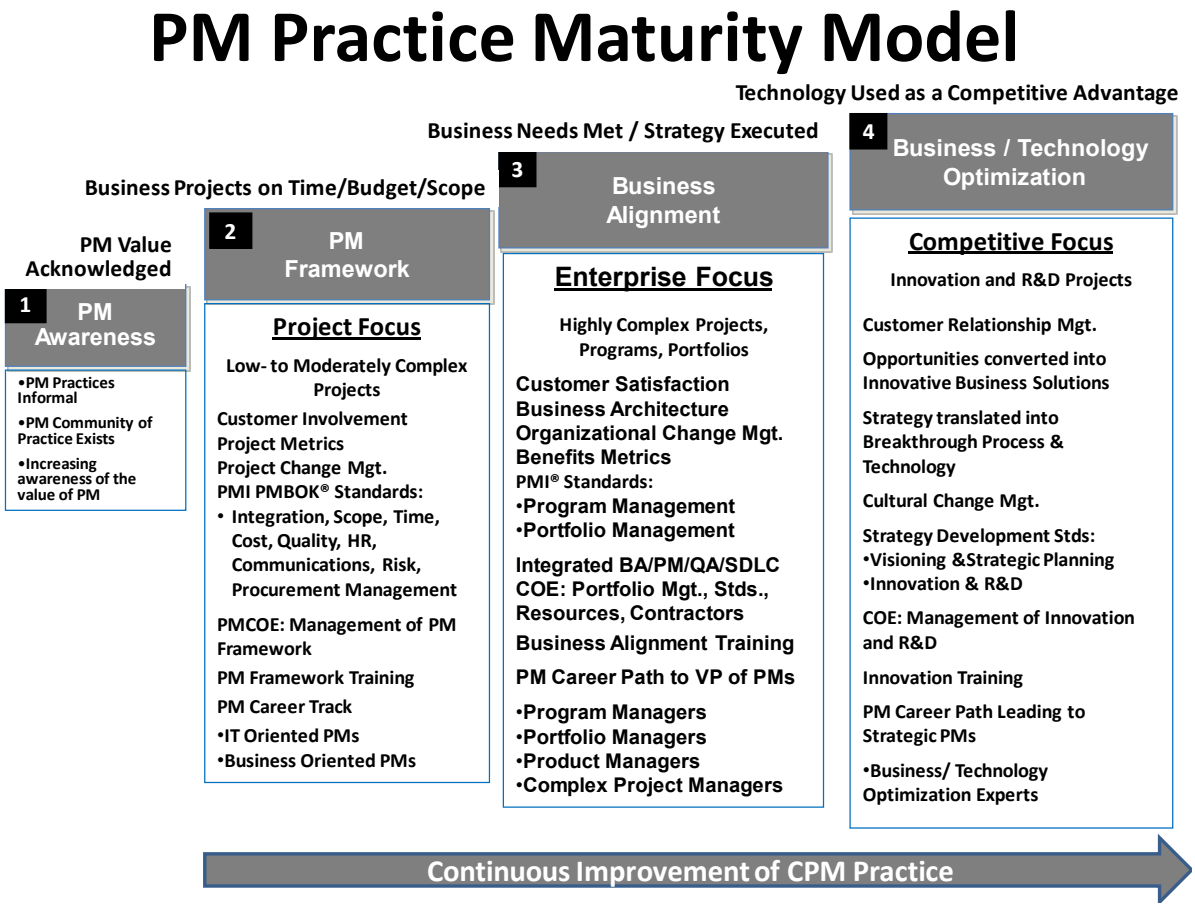

Exhibit 3 – PM Practice Maturity Model

PM Practices Required for Each Level of Maturity

The PM practices required for each level are outlined below. The PM Maturity Model is closely aligned with the BA model, with a few exceptions related to their technical knowledge areas and standards.

	Level 1 PM Awareness	Level 2 PM Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
Business Outcomes **Practices**	**PM Value Acknowledged**	**Business Projects Delivered on Time, Budget, Scope**	**Business Needs Met** **Strategy Executed**	**Technology used as a Competitive Advantage** **New Strategy Forged**
Customer Relationship Management		Customers and stakeholders are involved throughout the project.	Customer satisfaction is measured for both the process used to involve customers and the new business solution delivered by the project.	External customer relationships are measured and managed to continually increase customer satisfaction.
Standards, Methodology, Tools, Knowledge Management, Change Management	Process and tool standards are undefined.	• PM standards for practices and tools are defined and integrated. • Project knowledge is accessible to all project stakeholders. • Project scope changes are managed.	• PM standards, tools, and knowledge mgt. are integrated with BA, QA, SDLC standards • Organizational readiness assessments are conducted prior to deployment of new solutions.	• Convert business opportunities into innovative business solutions. • Translate strategy into breakthrough process and technology change. • Benchmarking, competitive analysis, feasibility analysis is conducted as part of the strategic planning process. • Cultural readiness assessments are conducted prior to deployment of new solutions.
Body Of Knowledge Areas		Standards for the following knowledge areas are defined, institutionalized, and measured for the PMI PMBOK® areas: • Integration, Scope, Time, Cost, Quality, HR, Communications, Risk, Procurement Management	Standards for the following knowledge areas are defined, institutionalized, and measured: • Program Management • Portfolio Management	
Project Selection and Prioritization		•	• The business and technology architectures are defined and in sync. • The portfolio management process ensures business alignment of projects.	
Metrics		• Project metrics for cost, time, and scope are collected,	• Quantitative PM process management program exists and is integrated with BA,	Business benefits management program is tied to the portfolio management program.

	Level 1 PM Awareness	Level 2 PM Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
		analyzed and reported. • Requirement defects are tracked, measured, and steps are taken for prevention in the future.	QA, SDLC • Business benefits management program is defined and in place.	
Practice Support and Governance	PM Forum or Community of Practice exists.	PMCOE/PMO: Centralized management of PM Framework	PMCOE/PMO: Centralized management of: • Business case development, portfolio management, BPM, BDM • Resources, contractors, vendors • Governance Committee	PMCOE/PMO: • Integrated with PM, QA, SDLC COEs • Centralized management of Innovation and R&D
Training and Support		PM Framework training program exists and all PM s attend.	• Business Alignment training program exists and all PMs attend.	• Business/Technology Optimization training program exists and all PMs attend. • PM Training ROI is measured.
Competency and Career Development		PM Career Track exists for: • IT Oriented PMs • Business Oriented PMs	PM Career Path leading to VP business analysis exists for: • Program Managers • Portfolio Managers • Product Managers • Complex Project Managers	PM Career Path leading to strategic and domain expert PMs exists for: • Business/Technology PMs • Cross-Functional PMs • Cross-Domain PMs • Organizational Change PMs • Innovation PMs

Exhibit 4 – PM Practice Maturity Model Practices Required at Each Level

Section 3: BA and PM Workforce Capability Models

The Business Analysis and Project Management Capability Models serve as the foundation to be used as a basis of our Workforce Competency Evaluation Program. These models are in close alignment with the BA/PM Organizational Practice Maturity Models that support the BA/PM Organizational Maturity Assessment Program. The workforce competency models for PM and BA are based on several dimensions: the business focus of typical work assignments, the complexity of the work assignments, the sophistication and effectiveness of the techniques used, performance outcomes, and increased levels of confidence, credibility, and influence needed to perform successfully.

Capability Models

Capability Models are derived from an in-depth, comprehensive study of a profession. Competency models identify the roles, areas of expertise, and foundational competencies for professionals in a particular field. We have conducted a comprehensive study of the business analysis and project management profession in order to define the full set of competencies required for 21st century complex projects.

BA/PM Workforce Capability Models

The BA/PM individual/workforce capability models are designed to determine the level of capability that currently exists within their organization, and the level of capability needed to successfully execute projects based on their complexity. From this information, we are able to identify the gaps in skills and competencies and draft a recommended PM/BA Learning and Development Plan. The model is four-tiered for both project managers and business analysts as described below. See *Exhibit 5 –Combined BA/PM Workforce Capability Model*. The levels of the model are based on the escalating complexity of typical BA/PM project assignments, as follows:

Area of Focus	Business Outcomes
Operations and Support Focused Projects	Business operations are maintained and enhanced
Project Focused Projects	Business objectives are met through projects
Enterprise Focused Projects	Business strategy is executive through projects, programs and portfolios
Competitive Focused Projects	New business strategy is forged and competitive advantage is improved through innovation and business/technology optimization

Operations and Support Focus

To maintain and enhance business operations, both generalists and system specialists are needed. These PMs and BAs typically spend about 30% of their time doing business analysis and project management activities for low to moderately complex projects designed to maintain and continually improve business processes and technology. The remaining time they are often fulfilling multiple roles including developer, engineer, SME, domain expert, and tester. As legacy processes and systems age, these PMs and BAs are becoming more valuable since they are likely the best (and often the *only*) SMEs who understand the current business processes and supporting technology. Competencies at this level encompass most of the skills needed to be successful at level 2 of the Organizational Practice Maturity Model described in Exhibits 2 and 4.

PM/BA Workforce Capability Model

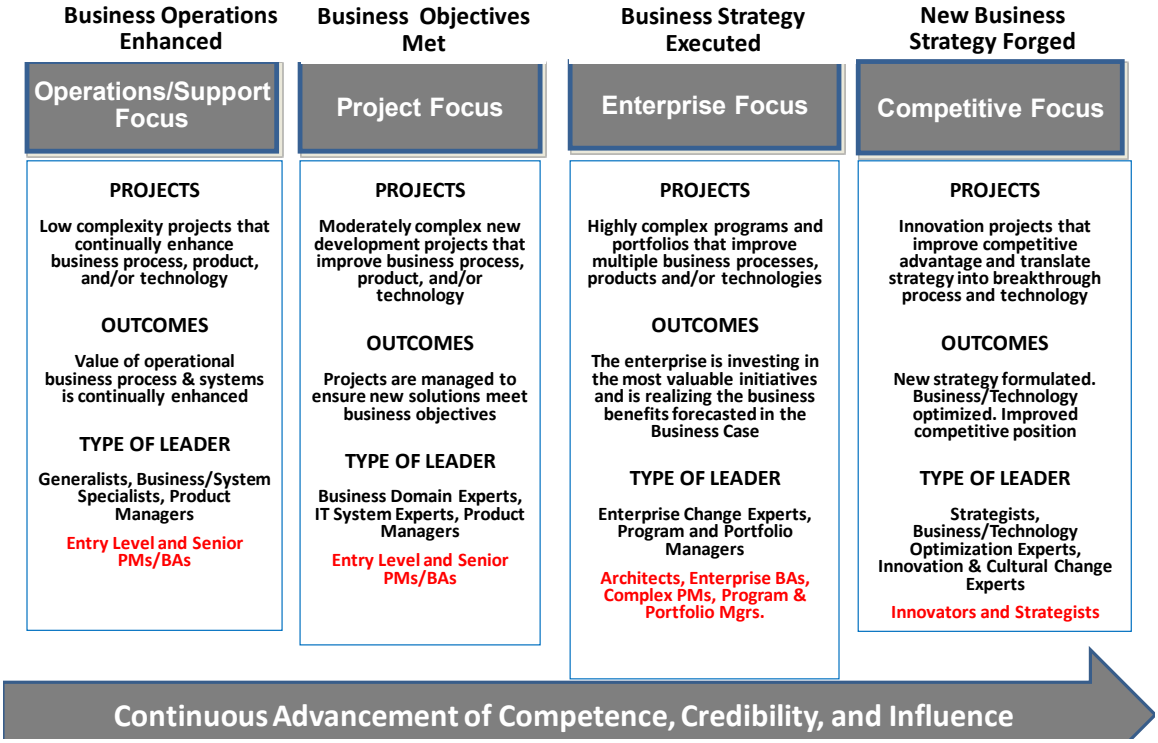

Exhibit 5 – Combined BA/PM Workforce Competency Model

Project Focus

To ensure business objectives are met through projects both IT- and Business-Oriented PMs and BAs are needed. These PMs and BAs work on moderately complex projects designed to develop new/changed business processes and IT systems. Competencies at this level encompass the skills needed to be successful at level 2 of the Organizational Practice Maturity Model, described in Exhibit 2 and 4.

- **IT-Oriented PMs and BAs** improve operations through changes to technology. The BAs are mostly generalists, with specialists that include Experience Analysts, Business Rules Analyst, Business Process Analyst, Data Analyst, etc.

- **Business-Oriented PMs and BAs** improve operations through changes to policy and procedures. Business-oriented PMs and BAs are mostly specialized, focused on Finance, Human Resources, Marketing, Manufacturing, etc. In decentralized organizations, these PMs and BAs are dedicated to a major business area, improving the processes and the corresponding technologies that are used to run the operations. In other more centralized organizations, these PMs and BAs are organized as a pool of talent whose efforts can be transferred seamlessly to the areas of the enterprise that are in most need of project support.

Enterprise Focus

This group includes very senior PMs and BAs. PMs are trained and experienced in managing highly complex projects, programs and portfolios. The BAs often specialize into two groups: Enterprise Analysts and Business Architects, who are operating at the enterprise level of the organization ensuring that the business analysis activities are dedicated to the most valuable initiatives, and the business analysis assets (deliverables/artifacts e.g., models, diagrams) are considered corporate assets and are therefore reusable. Enterprise PMs and BAs focus on the analysis needed to prepare a solid business case to propose new initiatives and work on highly-complex enterprise-wide projects; while Business Architects make the enterprise visible and keep the business and IT architecture in synch. Competencies at this level encompass the skills needed to be successful at level 3 of the Organizational Practice Maturity Model described in Exhibit 2 and 4.

Competitive Focus

Business/Technology Optimization PMs and BAs are business and technology visionaries who serve as Innovation Experts, Organizational Change Specialists, and Cross Domain Experts. Business/Technology PMs and BAs focus outside of the enterprise on what the industry is doing and design innovative new approaches to doing business to ensure the enterprise remains competitive, or even leaps ahead of the competition. Business/Technology PMs and BAs forge new strategies, translate strategy into breakthrough process and technology, and convert business opportunities to innovative business solutions. Competencies at this level encompass the skills needed to be successful at level 4 of the Organizational Practice Maturity Model described in Exhibit 2 and 4.

Section 4: BA and PM Capabilities Assessed

The capabilities that are included in the individual and workforce capability models consist of technical skills, supporting leadership and soft skill competencies, and techniques used to carry out the PM/BA work. See below for a listing of:

- BA competencies that are evaluated and techniques that are considered
- PM competencies that are evaluated and techniques that are considered
- PM/BA supporting competencies that are evaluated

BA Workforce Technical capabilities and Techniques

BA Technical Capabilities
Source: BABOK® Guide

Level 2: Project Focused
1. Business Analysis Planning and Monitoring
2. Elicitation
3. Requirements Management and Communication
4. Requirements Analysis

Level 3: Enterprise Focused
5. Enterprise Analysis
6. Solution Assessment and Validation

BA Techniques Used to Perform the Work

Level 1: Operations/Support-Focused Business Analyst

1. Acceptance and Evaluation Criteria Definition
2. Brainstorming
3. Checklists
4. Continuous Process Improvement
5. Defect and Issue Reporting
6. Document Analysis
7. Estimation
8. Functional Decomposition
9. Interface Analysis
10. Interviews
11. Non-Functional Requirements Analysis
12. Observation
13. Problem Tracking
14. Replanning
15. Requirements Change Management
16. Requirements Documentation
17. Requirements Prioritization
18. Sequence Diagramming
19. Stakeholder Analysis/Mapping
20. Time Boxing / Budgeting
21. Voting

Level 2: Project-Focused Business Analyst

1. Baselining
2. Business Case Validation
3. Business Process Analysis and Management
4. Business Rules Analysis and Management
5. Change Management
6. Conflict and Issue Management
7. Consensus Mapping
8. Communications Requirements Analysis
9. Business Process Design
10. Data Dictionary and Glossary
11. Data Flow Diagrams
12. Data Modeling
13. Decision Analysis
14. Delphi
15. Expert Judgment
16. Focus Groups
17. Force Field Analysis
18. MoSCoW Analysis
19. Process Modeling
20. Prototyping
21. Requirements Attribute Assignment
22. Requirements Briefings and Presentations
23. Requirements for Vendor Selection
24. Requirements Traceability/Coverage Matrix
25. Requirements Decomposition
26. Requirements Workshops
27. Requirements Review, Validation and Signoff
28. Responsibility Matrix (RACI)
29. Reverse Engineering
30. RFI, RFQ, RFP
31. Risk Analysis
32. Scenarios and Use Cases
33. Scope Modeling
34. Solution Modeling
35. State Diagrams
36. Structured Walkthroughs
37. Survey/Questionnaire
38. User Acceptance Testing
39. User Stories and Storyboards
40. Value Analysis
41. Variance Analysis
42. Vendor Assessment

Level 3: Enterprise-Focused Business Analyst

1. Balanced Scorecard
2. Benchmarking
3. Business Architecture
4. Business Case Development and Validation
5. Business Opportunity Analysis
6. Business Problem Analysis
7. Business Process Reengineering
8. Competitive Analysis
9. Cost/Benefit Analysis and Economic Modeling
10. Current State Analysis
11. Feasibility Analysis
12. Future State Analysis
13. Goal Decomposition
14. Gap Analysis
15. Last Responsible Moment Decision making
16. Lessons Learned Process
17. Metrics and Key Performance Indicators
18. Organizational Modeling
19. Organizational Change
20. Portfolio Analysis
21. Project and Program Prioritization
22. Root Cause Analysis (Fishbone Diagram)
23. SWOT Analysis

Level 4: Business/Technology-Focused Business Analyst

1. Breakthrough Process Design
2. Cultural Change
3. Divergent thinking
4. Edge-of-Chaos Analysis
5. Emotional Intelligence
6. Experimentation
7. Idea Generation
8. Innovation and Creativity
9. Innovation Teams
10. Intuition
11. Investigation and Experimentation
12. Metaphors and Storytelling
13. Mind Mapping
14. Pattern Discovery
15. Research and Development
16. Strategic Planning
17. Systematic Inventive Thinking
18. Visualization

PM Workforce Technical Capabilities and Techniques

PM Technical Capabilities
Source: PMBOK® Guide

Level 2: Project Focused
1. Integration Management
2. Scope Management
3. Time Management
4. Cost Management
5. Quality Management
6. Human Resource Management
7. Communications Management
8. Risk Management
9. Procurement Management

Level 3: Enterprise Focus
10. Program Management
11. Portfolio Management

PM Techniques Used to Perform the Work

Level 1: Operations/Support-Focused Project Manager

Scope Management
1. Alternative identification
2. Change control system
3. Configuration management
4. Decomposition
5. Inspection
6. Product analysis
7. Re-planning
8. Stakeholder analysis
9. Templates, forms, standards
10. Variance analysis
11. Work Breakdown Structure

Time/Cost Management
1. Analogous estimating

Communication Management
1. Communication requirements analysis
2. Communication technology
3. Information gathering and retrieval systems
4. Information distribution methods
5. Lessons learned
6. Presentation tools

HR Management
1. Conflict management
2. General management skills
3. Ground rules
4. Negotiation
5. Networking
6. Organization charts and position descriptions

2. Bottom-up estimating
3. Critical path method
4. Dependencies determination
5. Expert judgment
6. PM software
7. Progress reporting
8. Project performance reviews
9. Top-down estimating

Quality Management
1. Quality control tools and techniques
2. Quality planning tools and techniques

Risk Management
2. Assumptions analysis
3. Checklist analysis
4. Documentation reviews
5. Information gathering techniques
6. Probability and impact assessment

Integration Management
1. Expert judgment
2. PM information system
3. PM methodology
4. Project selection and prioritization methods
5. Earned value

Level 2: Project-Focused Project Manager

Time/Cost Management
1. Alternative analysis
2. Arrow diagramming method
3. Cost aggregation
4. Cost change control system
5. Earned value
6. Cost of quality
7. Forecasting
8. Funding limit reconciliation
9. Leads and lags
10. Parametric estimating
11. Performance measurement & analysis
12. Precedence diagramming method
13. Published estimating data
14. Reserve analysis
15. Resource cost rates
16. Resource leveling
17. Rolling wave planning
18. Schedule change control system
19. Schedule compression
20. Schedule network analysis
21. Three-point estimating
22. Variance analysis
23. Variance management
24. Vendor bid analysis
25. What-if analysis

Communications Management
1. Communication methods
2. Cost reporting systems
3. Performance information gathering and retrieval systems
4. Status review meetings
5. Time reporting systems

HR Management
1. Acquisition
2. Co-location
3. Organizational theory
4. Performance appraisals
5. Recognition and rewards
6. Team-building activities
7. Training
8. Virtual teams

Risk Management
1. Contingent response strategy
2. Diagramming techniques
3. Planning and analysis
4. Quantitative risk analysis techniques
5. Reserve analysis
6. Risk assessment
7. Risk audits
8. Risk categorization
9. Risk data quality assessment
10. Risk urgency assessment
11. Strategies for negative risks or threats
12. Strategies for positive risks or opportunities
13. Technical performance measurement
14. Variance and trend analysis
15. Integration Management

Procurement Management
1. Advertising
2. Bidder conferences
3. Buyer-conducted performance review
4. Claims administration
5. Contract change control system
6. Contract negotiation
7. Contract types
8. Expert judgment
9. Independent estimates
10. Inspections and audits
11. Make or buy analysis
12. Payment system
13. Performance reporting
14. Proposal evaluation techniques
15. Qualified sellers list
16. Records management system
17. Screening system
18. Seller rating systems
19. Standard forms
20. Weighting system

Quality Management
1. Design of experiments
2. Process analysis

Level 3: Enterprise-Focused Project Manager

Program Management
1. Adaptive Management Techniques
2. Benchmarking
3. Benefits Management
4. Business Architecture
5. Business Process Reengineering
6. Cost of quality
7. Current State Analysis
8. Feasibility Analysis

Portfolio Management
1. Balanced Scorecard
2. Business Case Development And Validation
3. Business Opportunity Analysis
4. Business Problem Analysis
5. Competitive Analysis
6. Cost/Benefit Analysis and Economic Modeling
7. Financial Capacity Analysis
8. Financial Reporting Systems

9. Future State Analysis
10. Gap Analysis
11. Goal Decomposition
12. Incremental Development
13. Integrated Change Control
14. Last Responsible Moment Decision making
15. Metrics and Key Performance Indicators
16. Organizational Change
17. Organizational Modeling
18. Pre-Program Analysis
19. Program Governance
20. Program Management and Technical Framework
21. Quality audits
22. Root Cause Analysis (Fishbone Diagram)
23. SWOT Analysis
24. Transition Planning

9. Graphical Analytic Methods
10. Graphical Representation Methods
11. Human Resource Capacity Analysis
12. Performance Measurement System
13. Portfolio Analysis
14. Portfolio Component Identification, Categorization and Documentation (Business Case, Projects, Programs, Etc.)
15. Portfolio Management Roles and Responsibilities Document
16. Portfolio Management System
17. Probability Analysis
18. Project and Program Prioritization
19. Quantitative Analysis
20. Scenario Analysis
21. Scoring Model of Weighted Criteria for Prioritization
22. Weighted Ranking of Projects

Level 4: Business/Technology-Focused Project Manager

1. Breakthrough Process Design
2. Cultural Change
3. Divergent thinking
4. Edge-of-Chaos Analysis
5. Emotional Intelligence
6. Experimentation
7. Idea Generation and Mind Mapping
8. Innovation and Creativity
9. Innovation Teams
10. Intuition
11. Investigation and Experimentation
12. Metaphors and Storytelling
13. Mind Mapping
14. Pattern Discovery
15. Research and Development
16. Strategic Planning
17. Systematic Inventive Thinking
18. Visualization

PM/BA Workforce Supporting Competencies

Since both the project manager and business analyst fill a leadership position within organizations, driving change and business value, they both need to possess effective knowledge, skills, attitudes and behaviors that are related to successfully bringing about positive change through projects. The following supporting competencies are also assessed as a vital component of our PM/BA Workforce Evaluation Program.

PM and BA Supporting Capabilities

Source: PMBOK® Guide and BABOK® Guide

Analytical Thinking
- Decision-Making
- Problem Solving
- Systems Thinking
- Creativity
- Visioning
- Innovation

Business Knowledge
- Business Principles and Practices
- Industry Knowledge
- Organizational Knowledge
- Solution Knowledge
- Software Application

Personal Competencies
- Communicating
- Leading
- Managing
- Cognitive Ability
- Effectiveness
- Professionalism

Interactional Skills
- Oral Communication
- Written Communication
- Teaching and Mentoring
- Facilitation and Negotiation
- Leadership
- Influencing
- Teamwork

Section 5: BA and PM Workforce Characteristics Assessed

Workforce Characteristics

In addition to evaluating technical capabilities, techniques used, and supporting leadership skills, our workforce evaluation collects data on the following workforce dimensions:

- Information used to summarize data and benchmark your workforce against the PM and BA professions includes:
  - Years of experience
  - Education Level
  - Acquisition of skills
  - Professional training attendance
  - Percentage of time performing PM or BA activities
  - Other roles played on projects
- Project and workload information is also provided, including:
  - Number of core work requests and number of concurrent projects
  - Project complexity characteristics of current projects
  - Perception of current workload status (under/over allocated)

About the Assessment Team

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Kitty is the president of her consulting practice specializing in business analysis, project management, and strategy execution through portfolio management. Kitty is a prominent presenter at industry conferences, author and facilitator. Her expertise includes IT strategic planning, implementing and managing PMOs and BA Centers of Excellence, executive coaching, coaching to critical projects, and managing large complex programs. She has over 25 years of experience providing professional services to Federal agencies, the intelligence community, and Fortune 500 companies.

Kitty served as a Member of the IIBA Board of Directors from 2008 - 2016. She has authored numerous white papers and articles on leading-edge business practices, the renowned series entitled, *Business Analysis Essential Library, and* the PMI 2009 Book of the Year, *Managing Project Complexity - A New Model*. *The Enterprise Business Analyst: Developing Creative Solutions to Complex Business Problems, and Breakthrough Business Analysis, Implementing and Sustaining a Value-based Practice.*

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Lori is the president of her firm offering a unique approach to surveys, assessments, and applied research to help organizations, leaders and managers, consultants, and business professions transform data into actionable business intelligence to drive improvement, professional development, and performance outcomes. She has more than 20 years of experience conducting assessments, surveys, and applied research for organizations in multiple industry sectors and the Federal government.

Her expertise includes measuring individual and workforce capabilities, developing structural models for organizational assessment and research, conducting outcomes-based research for effective decision making, and translating complex data into actionable results.

Lori is a frequent presenter at industry conferences, has authored a number of white papers on assessment topics, and is an associate faculty member teaching courses in organizational psychology and behavior, statistics and research methods, and behavioral sciences.