Project Management and Business Analysis Maturity Assessments

A White Paper from Kathleen Hass and Associates

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Introduction

Mature business management practices focus on alignment with and achievement of business strategies, goals and objectives. Mature and capable business practices are directly correlated with higher organizational performance. For our Project Management (PM) and Business Analysis (BA) Practice Maturity Program, we use two different types of models to determine the current state of the practice:

- Organizational Practice Maturity Models
- Workforce Competency Models

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:

- **Project Management** – Our models encompass the Project Management Institute (PMI®) standards embodied in the following publications:

    o *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.

    o The *Standard for Portfolio Management*

    o The *Standard for Program Management*

    o The *Project Management Competency Development Framework*

- **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* described in terms of key practices, tasks and techniques.

Our BA/PM assessments can be conducted separately, or concurrently. Clients 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 PM/BA 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, we advise our clients 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. Client questionnaire on-line set-up, assessment communication/distribution, online data collection
3. Assessment kick-off presentation
4. Data summary reports for each practice, with the PM or BA practice maturity rating, strengths, opportunities
5. Findings and recommendations report and 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 Evaluation

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. Evaluation questionnaire set-up and communication/distribution
3. Assessment kickoff presentation
4. Individual PM/BA Summary Reports for up to 10 PMs and 10 BAs compiled and analyzed, reporting strengths and opportunities for improvement
5. Individual PM/BA Proposed Professional Development Plans for up to 10 PMs and 10 BAs
6. PM and BA Practice Data Summary Report and Recommendations compiled and analyzed
7. PM and BA Competency Findings and Recommendations Presentation
8. PM and BA Practice professional development plans 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[1]:

- 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.

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[1] 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).

Organizational Maturity Reference Models

Organizational maturity reference models reflect the maturity of business processes 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. It has also 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.[2]

Business Analysis Practice Maturity Model

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 as an arrow across all levels. Note that foundational business analysis practices reside at level 2, whereas the more sophisticated BA 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.

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[2] 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
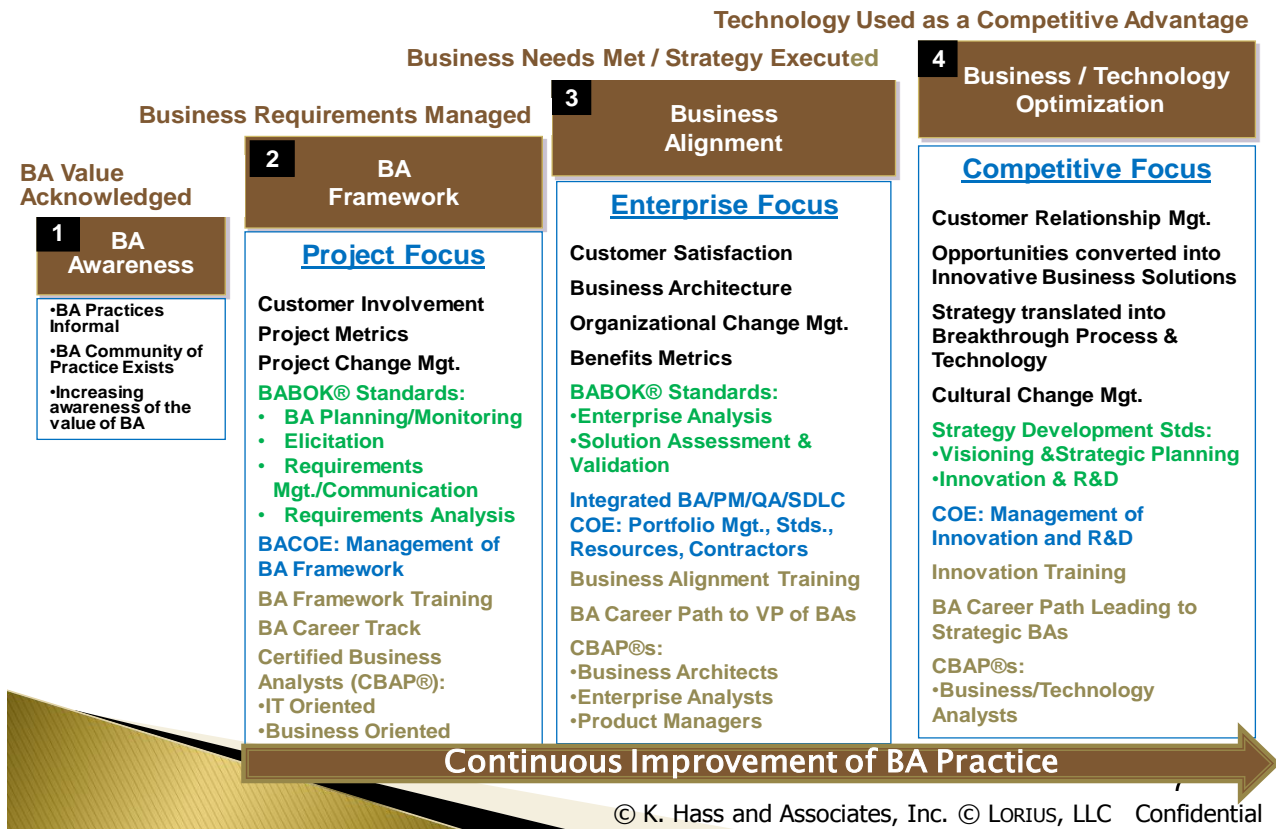
BA Practice Maturity Model

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	BA Value Acknowledged	Business Requirements Managed	Business Needs Met Strategy Executed	Technology used as a Competitive Advantage New Strategy Forged
Practices				
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	Process and tool standards are undefined.	• BA standards for practices and tools are defined	• BA standards, tools, and knowledge mgt. are integrated with	• Convert business opportunities into innovative business

	Level 1 BA Awareness	Level 2 BA Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
Management, Change Management		and integrated. • Project knowledge is accessible to all project stakeholders. • Project scope changes are managed.	PM, QA, SDLC standards • Organizational readiness assessments are conducted prior to deployment of new solutions.	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 collected, analyzed and reported. • Requirement defects are tracked, measured, and steps are taken for prevention in the future.	• Quantitative BA process management program exists and is integrated with PM, QA, SDLC • Business benefits management program is defined and in place.	Business benefits management program is tied to the portfolio management program.
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		BA Framework training	• Business Alignment	• Business/Technology

	Level 1 BA Awareness	Level 2 BA Framework	Level 3 Business Alignment	Level 4 Business/Technology Optimization
Support		program exists and all BAs attend.	training program exists and all BAs attend.	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. The PM model is aligned with the BA model, with the significant differences embodied in the practices described in the PMBOK Guide. 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.

PM Practice Maturity Model

Technology Used as a Competitive Advantage

Business Needs Met / Strategy Executed

Business Projects on Time/Budget/Scope

4 Business / Technology Optimization

3 Business Alignment

PM Value Acknowledged

2 PM Framework

1 PM Awareness

1 PM Awareness
- PM Practices Informal
- PM Community of Practice Exists
- Increasing awareness of the value of PM

2 PM Framework — Project Focus
Customer Involvement
Project Metrics
Project Change Mgt.
PMI PMBOK® Standards:
- Integration, Scope, Time, Cost, Quality, HR, Communications, Risk, Procurement Management

PMCOE: Management of PM Framework
PM Framework Training
PM Career Track
Certified PMs:
- IT Oriented
- Business Oriented

3 Business Alignment — Enterprise Focus
Customer Satisfaction
Business Architecture
Organizational Change Mgt.
Benefits Metrics
PMI® Standards:
- Program Management
- Portfolio Management

Integrated BA/PM/QA/SDLC
COE: Portfolio Mgt., Stds., Resources, Contractors
Business Alignment Training
PM Career Path to VP of PMs
Certified PMs:
- Program Managers
- Portfolio Managers
- Product Managers
- Complex Project Managers

4 Business / Technology Optimization — Competitive Focus
Customer Relationship Mgt.
Opportunities converted into Innovative Business Solutions
Strategy translated into Breakthrough Process & Technology
Cultural Change Mgt.
Strategy Development Stds:
- Visioning &Strategic Planning
- Innovation & R&D

COE: Management of Innovation and R&D
Innovation Training
PM Career Path Leading to Strategic PMs
Certified PMs:
- Business/ Technology Optimization PMs

Continuous Improvement of the PM Practice

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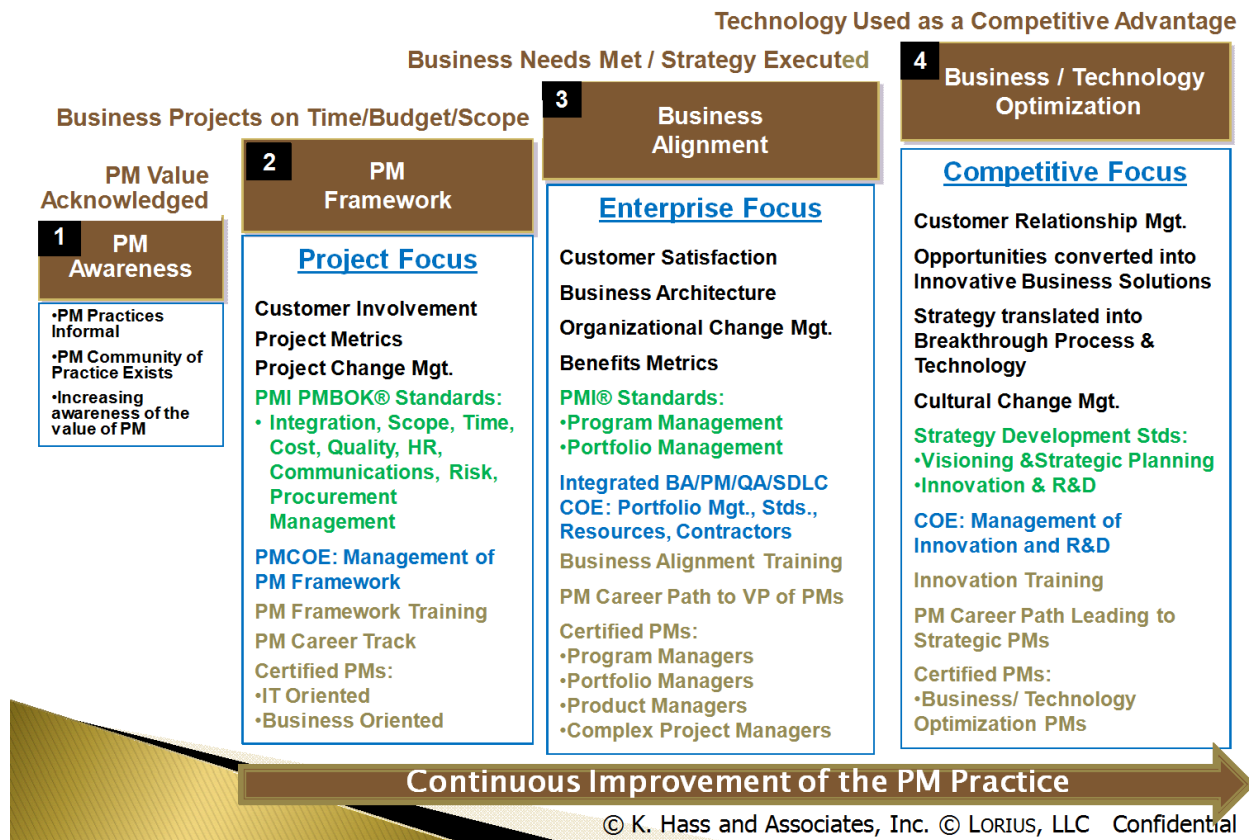Exhibit 3 – PM Practice Maturity Model

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 Competency Models

The Business Analysis and Project Management Competency 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.

Workforce Competency Models

Competency 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 Competency Models

The BA/PM competency models were designed to help our clients determine level of competency that currently exists within their organization, and the level of competency 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 Professional Development Plan. The model is four-tiered for both project managers and business analysts as described below. See *Exhibit 5 –Combined BA/PM Workforce Competency Model*. The levels of the model are as follows:

Area of Focus	Business Outcomes
Operations and Support Focus	Business operations are maintained and enhanced
Project Focus	Business objectives are met through projects
Enterprise Focus	Business strategy is executive through projects, programs and portfolios
Competitive Focus	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.
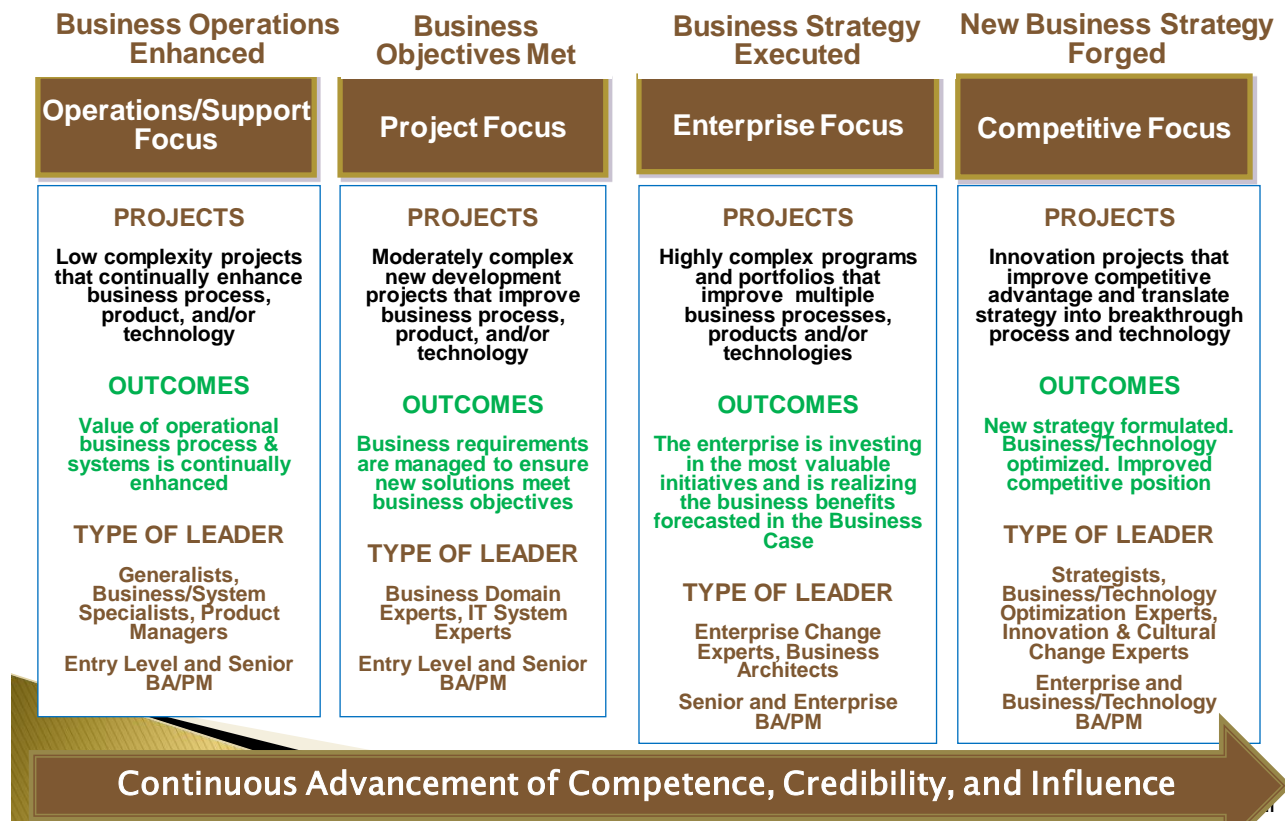
BA/PM Workforce Competency Model

Business Operations Enhanced	Business Objectives Met	Business Strategy Executed	New Business Strategy Forged
Operations/Support Focus	**Project Focus**	**Enterprise Focus**	**Competitive Focus**
PROJECTS Low complexity projects that continually enhance business process, product, and/or technology	**PROJECTS** Moderately complex new development projects that improve business process, product, and/or technology	**PROJECTS** Highly complex programs and portfolios that improve multiple business processes, products and/or technologies	**PROJECTS** Innovation projects that improve competitive advantage and translate strategy into breakthrough process and technology
OUTCOMES Value of operational business process & systems is continually enhanced	**OUTCOMES** Business requirements are managed to ensure new solutions meet business objectives	**OUTCOMES** The enterprise is investing in the most valuable initiatives and is realizing the business benefits forecasted in the Business Case	**OUTCOMES** New strategy formulated. Business/Technology optimized. Improved competitive position
TYPE OF LEADER Generalists, Business/System Specialists, Product Managers Entry Level and Senior BA/PM	**TYPE OF LEADER** Business Domain Experts, IT System Experts Entry Level and Senior BA/PM	**TYPE OF LEADER** Enterprise Change Experts, Business Architects Senior and Enterprise BA/PM	**TYPE OF LEADER** Strategists, Business/Technology Optimization Experts, Innovation & Cultural Change Experts Enterprise and Business/Technology BA/PM

Continuous Advancement of Competence, Credibility, and Influence

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.

PM and BA Competencies

The competencies that are included in the 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 Competencies and Techniques

BA Technical Competencies
Source: BABOK® Guide

1. Business Analysis Planning and Monitoring
2. Elicitation
3. Requirements Management and Communication
4. Enterprise Analysis
5. Requirements Analysis
6. Solution Assessment and Validation

BA TECHNIQUES USED TO PERFORM THE WORK

Operations/Support-Focused Business Analyst

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

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

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

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 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 Workforce Technical Competencies and Techniques

PM Technical Competencies
Source: PMBOK® Guide

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

PM Techniques Used to Perform the Work

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
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

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

Risk Management
1. Assumptions analysis
2. Checklist analysis
3. Documentation reviews
4. Information gathering techniques
5. 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

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

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

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

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

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
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

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. 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

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 improvements, they both need to possess effective knowledge, skills, attitudes and behaviors that are related to successfully bringing about positive change through their projects. The following supporting competencies are also assessed as a vital component of our PM/BA Workforce Evaluation Program.

PM and BA Supporting Competencies
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

PM/BA Workforce Characteristics

In addition to evaluating technical competencies, techniques used, and supporting competencies, 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:
  - 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, 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)