BUSINESS ANALYSIS CERTIFICATE PROGRAM
University of Nebraska at Omaha • Nebraska Business Development Center

CERTIFICATE IN

BUSINESS ANALYSIS

nbdc®

NEBRASKA BUSINESS DEVELOPMENT CENTER
University of Nebraska at Omaha • College of Business Administration
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Core Principles of Business Analysis

Length of course: two days

Learning Objectives

Students will:

- Learn what a business analyst is and does
- Learn common business analysis terms
- Explore a framework for business analysis activities
- Practice techniques for deciding the best business approach
- Learn how to:
    a. Properly define business needs
    b. Determine the best business solution and scope
    c. Define the business case

Exercises

- Brainstorming to answer "How does this fit with your experience at your business?
- Example of benchmarking. Exploration of web sites to discover their mission
- Teams of students select and execute a Fishbone Diagram. Each team shares their results with the group
- Group discussion on what hinders you from taking the time to accurately define business outcomes
- Teams brainstorm what can go wrong if "assess capability gaps" is done poorly. Debrief
- Partners perform a Feasibility Study on various scenarios, including a quickly written Feasibility Study report. Step-by-step debrief
- Select one of the eight estimation techniques and execute an example. Extensive debrief so they can experience the other seven
- Each student writes a Problem or Vision Statement
- Identify Future Value and Net Present Value with the help of a matrix
- Perform a SWOT analysis
- Perform a Risk Analysis Matrix
- Teams work through a Case Study that solidifies their comprehension of course content

Outline

1. What is Business Analysis?
    1.1. What is Business Analysis?
    1.2. What is the BABOK?
        1.2.1. Overview of the Seven Knowledge Areas
        1.2.2. How the pieces fit together
    1.3. Business Analysis Environment
        1.3.1.Business Architecture
    1.4. Enterprise Analysis Overview
    1.5. Determining the rigor of BA needed
2. Define Business Need
    2.1. Triggers and Drivers
        2.1.1. Input – Business Goals and Objectives
    2.2. Techniques
        2.2.1. Benchmarking
        2.2.2. Root Cause Analysis
        2.2.3. Output – Desired Outcome
3. Assess Capability Gaps
4. Determine Solution Approach

Techniques
    4.1. Feasibility Studies
    4.2. Estimating
5. Define Solution Scope Techniques
    5.1. Problem or Vision Statement
6. Define Business Case Techniques
    6.1. Decision Analysis
    6.2. Cost Benefit Analysis
    6.3. SWOT Analysis
    6.4. Risk Assessment
7. Sample Business Cases

Requirements Elicitation Methods and Models

Length of course: three days

Learning Objectives

Students will be able to:

- Understand where requirements gathering and documenting fits in with project management and the work of the business analyst
- Create a plan for eliciting requirements that uses appropriate methods
- Write effective, concise requirements
- Model the requirements appropriately

Exercises

- Begin defining requirements for their next dream house
- Brainstorm: What happens without a rigorous requirements process?
- Begin thinking about a requirements process that would work in their workplace. Debrief
- Teams classify cards of user requirements
- Teams write a short vision and scope statement on a case study
- Teams conduct a brainstorming session. Each team is responsible for either its purpose, evaluation criteria, method, or facilitation
- Explore interface analysis with a puzzle
- Write interview questions and then interview at least one other class member
- Partners write a five to ten question survey, administer it to the other class members, and analyze the results
- Teams reverse engineer a common item, then document its requirements. The other teams analyze their documentation to see if they can guess the item
- Analyze the benefit of each method of elicitation
- Rewrite incorrectly written requirements
- Create a paper prototype of a web site
- Create a use case table and diagram for a case study
- Create context diagram from a case study and one from their work environment
- Create a state transition diagram for a common household appliance and then one from their work environment
- Select one of the data and behavior models to use on a case study. Teams debrief

Outline

1. The Context for Requirements Elicitation
    - 1.1. Knowledge Areas
    - 1.2. Definition of Requirement
    - 1.3. Working with Requirements in a Project Environment
2. The Importance of Good Requirements
    - 2.1. Development vs. Management
3. The Requirements Team
    - 3.1. Stakeholder Analysis
4. Requirements Classification
5. Vision and Scope
6. Requirements Elicitation Techniques
    - 6.1. Brainstorming – Practice
    - 6.2. Document Analysis
    - 6.3. Focus Groups – Practice
    - 6.4.Interface Analysis
    - 6.5. Interview – Practice
    - 6.6. Observation
    - 6.7. Prototyping
    - 6.8. Requirements Workshop (JAD)
    - 6.9. Surveys/Questionnaires – Practice creating, administering, and analyzing a survey
    - 6.10. Reverse Engineering
    - 6.11. When to use which elicitation technique
7. Planning for Requirements Elicitation
8. Documenting Requirements – Practice creating and following written requirements
9. Testing Requirements
    - 9.1. Usage Models
    - 9.2. Prototyping – Practice
    - 9.3. User Stories
    - 9.4. Use Cases
    - 9.5. Class Diagrams
10. Process / Flow Models
    - 10.1. Context Diagram – Practice
    - 10.2. State Transition
11. Data and Behavior Models
    - 11.1. CRUD matrix
    - 11.2. Entity Relationship diagrams
    - 11.3. Dialog maps
    - 11.4. Mind maps
    - 11.5.P rocess maps
12. Improving your practices

Process Mapping for Business Improvement

Length of courses: one day

Learning Objectives

Students will learn to:

- Capture and understand business rules and practices
- Measure business process effectiveness
- Organize and lead a team in process mapping
- Launch an improvement initiative
- Align your business strategy with process change

Exercises

- Teams quickly plan and then execute a process.
- Teams create a map of a common process, then add swim lanes
- Watch a movie of a process and then in teams create an intermediate level process map of it. They then add value and non value added times to their map
- Teams create two more intermediate level maps, one from a case study and one from their work. Teams present their maps with other teams
- Watch a movie of how the process was redesigned, watching for waste
- Create a future state map of their intermediate map and present it to the class

Course Outline

1. Why we map a process
    - 1.1. Some Basic Beliefs
    - 1.2. Where Most Problems Arise
    - 1.3. We Map to Improve
2. Who is involved
    - 2.1. Factors Contributing to Effective Teams
3. How do we pick a process to improve
    - 3.1. Primary and Secondary processes
    - 3.2. Value Added Processes
    - 3.3. Non-Value Added Processes
    - 3.4. Link to Six Sigma and Continuous Improvement
4. When do we map a process?
5. Basic Steps in process mapping
    - 5.1. The 8 basic steps
    - 5.2. A 10 step methodology
    - 5.3. Basic Symbols
    - 5.4. Using a brown paper to map
6. Levels of detail
    - 6.1. Swim lanes
    - 6.2. Functional-activity
    - 6.3. Control points
    - 6.4. Control point matrixes
7. Moving from Current to Future State Mapping
    - 7.1. Work flow redesign
    - 7.2. Information flow redesign
    - 7.3. Design guides
    - 7.4. Organizing people
    - 7.5. Generating redesign ideas
8. Methods to go from current state to future
    - 8.1. Boot strap
    - 8.2. Questions
    - 8.3. Look at waste
    - 8.4. Four lenses
9. Implementing the future state map
    - 9.1. Overlaps with project management
    - 9.2. How to pick your first project

Introduction to Negotiation

Length of course: one day

The workshop is based upon Principled Bargaining, a method pioneered through the Harvard Negotiation Project. The teaching methodology uses a series of exercises and hypothetical problems to highlight the five foundational techniques. You will also discuss the differing contexts of negotiation, finding the important issues, reading the behavior styles of the other party, minimizing conflicts and deadlocks and knowing when to end your negotiations. The workshop will help you refine your negotiating skills and prepare you to achieve top results. Break-out discussions will be centered on the three types of interest at the negotiations table; 1) conflicting, 2) complementary, and 3) shared.

Learning Objectives

Students will:

- Focus on interests
    a. conflicting
    b. complementary
    c. shared
- Learn and trade across differing priorities
- Use fair process norms
- Use objective criteria to determine reasonable numbers
- Learn to build trust through authentic communication

Exercises

- Win As Much As You Can
- Role Playing with Instructions from Mother
- Five into Two ~ Part 1
- Five into Two ~ Part 2
- Race Horse Negotiation

Outline

1. What are Negotiations?
    1.1 Introduction
    1.2 Two Types of Negotiators
    1.3 Summary
2. Negotiation Strategies
    2.1 Introduction
    2.2 Seeking Advantage
    2.3 Seeking Joint Gain
    2.4 Summary
3. Characteristics of Negotiations
    3.1 Introduction
    3.2 Recurring Dynamics ~ Steps of the Negotiation Process
    3.3 Asymmetrical information
    3.4 Tension
    3.5 Debrief Notes
4. Interests of Negotiating Parties
    4.1 Introduction
    4.2 Summary
    4.3 Debrief Notes
5. Tools For Mutual Gain
    5.1 Introduction
    5.2 Summary
    5.3 Debrief Notes
6. Understanding The People and Separating them from the Problem
    6.1 Introduction
    6.2 Summary
7. Hard Bargaining
    7.1 Introduction
    7.2 Summary
8. Group Practices, Both Good and Bad
    8.1 Introduction
    8.2 Summary
9. Course Summary
    9.1 Revisit participant's key take-away list
    9.2 Debrief
    9.3 Additional Resources
    9.4 Facilitator Biography

Crucial Conversations and Communication

Length of course: half day

You will learn the core communication skills found to be effective in all types of communication, but especially in one-on-one conversations with your boss, your peers, and/or your people. You will also learn how to apply these skills to your situation and evaluate how they work within your own workplace.

Learning Objectives

Students will:

- Define a crucial conversation
- Explore obstacles to holding difficult conversations
- Identify individual tendencies when holding a crucial conversation
- Develop skills to resolve disagreements, build acceptance rather than resistance, and foster teamwork

Exercises

- "Communication stress" activity to explore what prevents individuals from holding difficult conversations
- Video clip demonstrating the negative influence caused by poor communication
- Discussion of dialogues that went wrong
- Assessment of individual communication style when in a stressful situation
- Video clip examples of poor communication skills
- Practice contrasting tool to use when in a difficult dialogue
- Activity to emphasize tendency to subjectively evaluate rather than factually evaluate
- Scenarios to practice holding a crucial conversation
- "How soon is possible?" activity to help participants understand how easy it is to misinterpret messages

Running Productive Meetings

Length of course: half day

It's been said that more important decisions are made in meetings than anywhere else (even on the golf course!). You probably find that hard to believe—in view of the way most meetings are planned and conducted. This workshop is for anyone who has to plan and run any meeting-formal or informal, small or large, frequently or infrequently.

Learning Objectives

Students will:

- Explore the roles that can help a meeting be productive for everyone involved – before, during and after the meeting
- Learn how to increase productivity and meeting effectiveness through collaborative processes
- Learn how to use ground rules to improve meeting interaction and communication
- Understand patterns used to build consensus
- Practice using techniques and tools that can help you effectively plan, conduct, and evaluate any meeting
- Evaluate how to use the techniques in your organization

Exercises

- Highlight the value that teams create (that individuals cannot create on their own)
- Generate goals using a meeting technique
- Use collaborative techniques to reduce barriers to a successful meeting
- Use brainstorming techniques to generate ground rules
- Conduct a short meeting using the techniques demonstrated

CBAP Certification Exam Prep

Length of course: three days

Learning Objectives

- Prepare to take and pass the CBAP Certification Exam
- Overview of the BABOK Knowledge Areas and their relationships:
    - a. Enterprise Analysis
    - b. Requirements Planning and Management
    - c. Requirements Elicitation
    - d. Requirements Analysis and Documentation
    - e. Requirements Communication
    - f. Solution Assessment and Validation
- Identify critical principles, activities, tasks and definitions as described in the BABOK
- Develop test preparation strategy
- Measure ability to successfully complete the exam through practice exams and sample questions

Instructors

Pam ~ MS, PMP

Pam is a consultant and professional facilitator. She has extensive experience in business analysis, project and program management, IT, and education. Pam draws her experience from 20 years in R&D at Bell Laboratories where she contributed in the areas of computer development, technical management, project management and product management. Pam holds a Bachelor of Science degree in Mathematics (with distinction) and a Master of Science degree in Computer Science from the University of Nebraska-Lincoln, a Master's Certificate in Project Management from Stephen's Institute of Technology and she has been PMP certified by the Project Management Institute since 1998.

Beth ~ BS

Beth has 20 years of program development, consulting and computer technology expertise with a special emphasis in effective project management and the efficient use of databases. She has a proven track record in instructional design and involving students through simulations. Beth acquired much of her business analysis and project management acumen during her tenure at Intel Corporation. Combined with strong technical writing skills, she consistently strives to customize all she does to meet the needs of customers.

Janet ~ MBA

Janet has more than 15 years experience at UNO's NBDC as Program Director. She has an extensive background in education, consulting, project management, and administration. She has a proven track record identifying client needs and seeing them through to their successful completion. Janet has been named Professor of the Year by the Applied Information Management Institute and received the University of Nebraska at Omaha Chancellor's Medal which recognized her for demonstrating extraordinary service. Janet is a Certified Collaboration Professional through UNO's Center for Collaboration Science. She holds a Master of Business Administration degree from the University of Nebraska at Omaha, where she is a member of the business honorary society Beta Gamma Sigma.

David ~ MPA, JD

Dave is an award winning teacher of negotiating skills and is an internationally acclaimed, skilled negotiator in the public arena. Many of his dealings were consensus measures forged by negotiation that brought contesting parties to agreement. His skill has been developed at training seminars at Harvard, MIT, Cornell, Pepperdine and the University of Illinois.

Terrence ~ MMIS, CISA, CSSBB

Terry has been leading people and managing resources for over 30 years. He holds a Master's degree in management information systems, is a Certified Information Systems Auditor, and a certified Six Sigma Black Belt. He has developed a reputation for building highly effective business teams from diverse individuals. The results have included more effective and efficient processes in Fortune 500 companies as well as military organizations. He has been a teacher, a mentor, and a coach to over 500 professionals in many different fields and has developed innovative classes on quality. Throughout his military and private-sector careers, Terry's process management experience drives positive change. Terry has worked with clients throughout the US and the UK and frequently speaks at national conferences on process-related topics.

Lee ~ MA, PMP

Lee has worked extensively in senior operations management positions. He has an established reputation for efficient problem solving, productive leadership, and has worked internationally. In addition, Lee has organizational leadership experience with federal, state and local government agencies, publicly traded corporations, and privately held corporations. In 2008, he worked on a project management initiative training more than 300 employees at a Fortune 500 Company. Lee is a retired colonel in the United States Air Force and is a certified Project Management Professional (PMP). He has a Master of Arts degree in Public Administration and Communication from the University of New York. His Bachelor's of Business Administration degree is in Production Systems Management from University of Oklahoma.

Teresa ~ MBA

Teresa holds a Master of Business Administration degree from the University of Nebraska at Omaha and is currently enrolled in the industrial/organizational psychology doctorate program at the University. She instructs students in the topics of business communication, project management, and business analysis. As with most business analysts/project managers, she has played a dual role over the past 12 years in a large Omaha-based corporation. She brings real expertise and hands-on experience to the NBDC team as she has managed all types of projects, including start-ups, transfers, and system conversions. She has worked closely with corporate sponsors to determine product pricing, develop business cases, and implement billing processes.

Dayle ~ CBAP, PMP, ACC

Dayle has inspired excellence in thousands of people using a unique and energetic blend of project and program management, business analysis, and project risk management tools and techniques. For over 20 years, she has taught, coached and consulted people and organizations on how to take sophisticated exams, manage projects better and deal with business and personal obstacles. Driven by a passion for collaborating in the success of others, Dayle draws on expertise obtained from her own success while serving in marketing, sales, business analysis, and project management leadership roles for a variety of commercial and non-profit organizations such as Motorola and the Girl Scouts of the USA. Dayle received her MBA from Roosevelt University, and her BA in Psychology from SUNY at Stony Brook. She is a Project Management Professional (PMP), certified from the Project Management Institute; an Associate Certified Coach (ACC) from the International Coach Federation; and a Certified Business Analyst Professional (CBAP) from the International Institute of Business Analysis.