YN/PS Advanced Administration Business Case Analysis (BCA)

Contract #: N00189-12-D-Z016 DO: 0012

This document establishes the intended method to provide the recommended business solutions and the associated cost and risk. There is a recommended solution identified, as well as three alternatives to the recommendation. Each associated cost and consideration is contained herein.

2/22/2016

Table of Contents

1.0 Executive Summary 2
2.0 Background 3
3.0 Initiative Description 4
4.0 Strategic Alignment 9
5.0 Analysis of Alternatives 9
6.0 Business and Operational Impacts 11
7.0 Risk Assessment 12
8.0 Cost Benefit Analysis 13
9.0 Conclusions and Recommendations 18
10.0 Implementation Strategy 20
11.0 Review and Approval Process 21
Appendix A: YN Advanced Administration Risk Management Register 22

1.0 Executive Summary

1.1 Summary Components

The objective for this Business Case Analysis (BCA) is to provide the Center for Service Support and the Naval Education Training Command a singular document for consideration of how to approach the technical challenges associated with the curriculum change and update to the Yeoman / Personnel Specialist Advanced Administration (A-510-0024) course content. During the initial upfront analysis of the curriculum, and site visit to Norfolk, VA., it was identified that an electronic method of connection within the classroom needed to be obtained. Although the learning sites do have Personal Computers (PCs) available to all students, they lack the ability to connect to an outside source, requiring instructors and students to utilize paper-based Trainee Guides (TGs) to act as the learning continuum. This has resulted in students understanding the theory of advanced administration, but lacking the skillset to perform as an advanced administrator. As part of the End-to-End (E2E) process, the use of cognition is no longer the goal for performance criteria, and the shift to performance objectives has predicated this requirement. The intended initiative will use a networked classroom to provide the necessary ability for students to connect to actual Navy administrative toolsets. This coupled with Job Sheets and group play, will allow students to both act and perform as administrative professionals in a secure classroom environment. Aside from this proposed solution, there are three viable alternatives to providing a networked classroom.

Alternative 1: Internal classroom network that mirrors actual Navy administrative tools.

Alternative 2: Standalone media resident on each student's PC that will mimic Navy administrative tools.

Alternative 3: Paper-based TGs and standalone media to supplement the performance criteria.

Cost considerations and risk identification for the proposed solution and alternatives attempt to identify how the intended approaches are impacted by various outliers and how certain risks may manifest. The recommended use of current Navy network structure and classroom equipment will cost the least over time and provide the best solution with minimal risk.

2.0 Background

2.1 Problem/Process Improvement Opportunity

The current state of training has been in flux as the shift from a full Instructor Led Training (ILT), lecture-based instruction incorporated a Blended training environment. This change provided students the ability to complete the recall-based objectives in a remote and standalone format.

"The previous course which consisted of three weeks of in-class, resident training and now makes it a blended solution of one week of Interactive Media Instruction (IMI), which the student must successfully complete at their parent command prior to requesting a quota reservation from the Center for Service Support Learning Site San Diego, CA or the Center for Service Support Learning Site Norfolk, VA.

Upon successful completion of the IMI portion of this course and receipt of a quota reservation for the two week resident portion of this course, the student will attend the two week resident portion of the course which consists of 80 contact hours of ILT.

The course now consists of 3 modules. Module 1 is the IMI portion of the course. Module 2 consists of all elements of week 2 and Module 3 contains all elements of week 3.

As a result of the April 2014 Human Performance Requirements Review (HPRR), the following changes were completed. There were Course Training Task List (CTTL) items that were added as well as the applicable content to reflect Fleet input, deleted as well as the associated content as the Fleet identified this content was no longer relevant, and consolidated to remove redundancy of tasks per Fleet input.

Due to these HPRR actions, the Executive Steering Committee (ESC) explained that these changes to the curriculum will not change the length of the course."

Although this approach did provide students with a Blended learning solution, as part of the NETC E2E process, content was required to shift from cognition to application. The requirements for the latest change to the curricula are contained in Performance Work Statement (PWS) N00189-12-D-Z016 Delivery Order: 0012

2.2 Current Situation

The YN/PS Advanced Administration School course will provide senior YN/PS personnel with management skills in administrative and personnel procedures for afloat and shore commands. The YN / PS Advanced Administration curriculum is a current course (CIN A510-0024) that is being instructed at learning sites Norfolk, VA and San Diego, CA. According to the reviews the asynchronous IMI requires revision to be more palatable to the students and some of the course content requires revision due to Fleet incongruences. The Job Duty Task Analysis (JDTA) has been completed prior to this study, and any recommendations for alteration to the proposed curricula will align with the completed JDTA.

Learning sites must include at least 1 projector, 1 projector screen or smart board, 1 computer per student, 1 instructor station with a computer, each computer must have an up-to-date document editing software, internet browser, and required plug-ins. There is no resident network structure in the classroom and any desire to have students connect to an external Uniform Resource Locater (URL), or network location via Local Area Network (LAN), is not available at this current juncture.

Training occurs at the Center for Service Support (CSS) Learning Site Norfolk and CSS Learning Site San Diego; all personnel partaking in this course must travel to either Norfolk or San Diego to attend the course of instruction. With the exception of the material resident in the Lesson Plan and Trainee Guide, all produced materials used in the classroom are locally obtained and maintained. CSS provides the coordination and funding support for the learning sites; however, each learning site coordinates with the local command infrastructure to support their particular efforts.

Training is also provided by both learning site instructors at remote locations via Mobile Training Team (MTT).

3.0 Initiative Description

3.1 Initiative Description

The initiative was established as part of contract N00189-12-D-Z016 Delivery Order: 0012 and is currently being fulfilled by URS Federal Services. The PWS institutes the requirements as follows: *"As part of this training content development effort, the contractor shall provide services to CSS in the development of 80 hours of synchronous instructor led and 40 hours of asynchronous level 2 interactive multi-media instruction (IMI) developed at a KPL 2 level (Application/Analysis) training content for a total of 120 hours using different instructional delivery methods, developed at the application / analysis level using Authoring Instructional Material (AIM) Content Planning Module (CPM) and Learning Object LO Module (LOM)."*

This developmental requirement is based on the JDTA that was created by the CSS and is current in the CPM. The project is a two year contract that spans the entirety of the E2E training spectrum and will deliver all front matter, training content, and instructional support. The development and delivery of the training content will NOT incur any additional safety related occupational requirements and will mirror the current training construct.

3.2 Objectives

The overall objective and goal of this effort is to produce an effective curriculum that provides trainees with assessable application of their knowledge in a secure classroom environment. The 40 hours of IMI currently resident on the Navy eLearning (NeL) NETC Learning Management System (LMS) will be repurposed and updated to current training standards. The 80 hours of ILT will be shifted from cognitive recall to psychomotor application in the classroom.

Although established as part of the Integrated Master Schedule (IMS) the objectives and goals for this effort are defined below:

Complete the Training Situation Document (TSD) As-Is NLT Tue 1/26/16
Complete an Instructional Performance Requirements Document (IPRD) NLT Tue 1/19/16
Complete an Instructional Media Requirements Document (IMRD) NLT Tue 1/19/16
Complete the Front End Analysis (FEA) NLT Mon 2/22/16
Complete the Business Case Analysis (BCA) NLT Mon 2/22/16
Approve the Instructional Media Design Package (IMDP) /CPM Project NLT Fri 3/11/16
Approve the Assessment Matrix/Testing Plan (AM/TP) NLT Fri 3/11/16
Approve IMI Prototype NLT Fri 2/5/16
Deliver Module 1 - Administrative Procedures NLT Mon 6/20/16
Deliver Module 2 - Personnel Procedures NLT Wed 11/30/16
Deliver IMI Learning Products NLT Fri 12/2/16
Approve Administrative Procedures IMI (Lesson 1) Storyboards NLT Fri 6/17/16
Approve Administrative Procedures IMI (Lesson 1) Alpha NLT Thu 9/1/16
Approve Personnel Procedures IMI (Lesson 2) Storyboards NLT Fri 9/2/16
Approve Personnel Procedures IMI (Lesson 2) Alpha NLT Thu 11/17/16
Approve Military Pay IMI (Lesson 3) Storyboards NLT Fri 7/22/16
Approve Military Pay IMI (Lesson 3) Alpha NLT Fri 10/7/16
Approve Advancement & Promotion IMI (Lesson 4) Storyboards NLT Fri 7/8/16
Approve Advancement & Promotion IMI (Lesson 4) Alpha NLT Fri 9/23/16
Approve Manning & Manpower IMI (Lesson 5) Storyboards NLT Fri 8/26/16
Approve Manning & Manpower IMI (Lesson 5) Alpha NLT Thu 11/24/16
Approve PCS Travel IMI (Lesson 6) Storyboards NLT Fri 8/5/16
Approve PCS Travel IMI (Lesson 6) Alpha NLT Fri 10/28/16
Approve Reserve Procedures IMI (Lesson 7) Storyboards NLT Fri 6/3/16
Approve Reserve Procedures IMI (Lesson 7) Alpha NLT Fri 12/2/16
Approve Legal Procedure IMI (Lesson 8) Storyboards NLT Fri 9/16/16
Approve Legal Procedure IMI (Lesson 8) Alpha NLT Fri 12/2/16
Submit Courses to GCAT (CHARMS) NLT Wed 4/19/17
Support Train the Trainer NLT Fri 1/13/17
Support the Course Trial NLT Thu 6/29/17
Deliver all content/data/source files NLT Tue 7/11/17
Develop Course Management Documentation NLT Tue 9/26/17
Destroy/Return GFI/GFE NLT Wed 9/27/17

3.3 Scope

Timeframe: The timeframe for this project is the Period of Performance (POP) 28 Sept 2015 through 27 Sept 2017 and is supported by the CSS and NETC.

Department/Organization: Naval Education Training Command (NETC) and the Center for Service Support (CSS).

Function: NETC is overall the control authority with CSS acting as direct representative.

Technology: The following list identifies the minimum software requirements for Internet (NeL/NKO) and classroom (ILT) delivery of the YN/PS Advanced Administration courseware:

- Microsoft Windows 7 SP1
- Microsoft Internet Explorer 8
- Flash Player 10
- Adobe Acrobat Reader X
- Microsoft Office 2007
- Current NMCI Core Build

Media resources used to develop the training solution:

Software Name	Vendor Name	Version Number	Developmental Use
3D Studio Max	Autodesk	2013	To create highly complex and multiple-view three-dimensional (3D) animations and images
Acrobat	Adobe	11.0	To create Portable Document Format (PDF) documents
AIM CPM	USN	5.6 Build: 5606	To develop the Project and all associated reports
AIM LO Module	USN	5.0 Build 5402	To create LP and TG
Flash	Adobe	CS5	To create and enhance interactivity and animation capabilities; create interface functionality
Illustrator	Adobe	CS5	To create two-dimensional (2D) graphics
Microsoft Office	Microsoft	2010	To create project-related documentation, such as analysis reports; create paper-based training products
Photoshop	Adobe	CS5	To create GUI graphics; edit and color-correct photographs; create 2D graphics
After Effects	Adobe	CS5	To create motion graphics and visual effects.

Software Name	Vendor Name	Version Number	Developmental Use
Premiere Pro	Adobe	CS5	To modify, convert, and export new and existing videos

Graphics

- All graphics will be exported as *.swf, *.jpg or *.png.
- The maximum graphic size will be 1024 x 650.
- Placeholder graphics will be created for the Storyboards to provide the reviewers (both internal and Government) with information about what will appear in the final courseware.

Audio and Video

- All audio elements will be exported as *.wav, *.mp3 or *.swf.
- All video elements will be exported as *.mpg, or *.swf.
- The maximum video screen size will be 1024 x 650.

Animation

- Flash will be used for displaying 2D animations. 3D Studio Max may be used to develop complex, multiple-view animations, which will be converted to *.swf.
- The maximum animation screen size will be 1024 x 650.

3.4 Out of Scope

This section does not directly apply to this effort.

3.5 Projected Outcomes

Outcome/Deliverable	Estimated Completion
Instructional Performance Requirements Document (IPRD)	1/19/16
Instructional Media Requirements Document (IMRD)	1/19/16
Training Situation Document (TSD) As-Is	1/26/16
IMI Prototype	2/5/16
Front End Analysis (FEA)	2/22/16
Business Case Analysis (BCA)	2/22/16
Instructional Media Design Package (IMDP) /CPM Project	3/11/16
Assessment Matrix/Testing Plan (AM/TP)	3/11/16
Reserve Procedures IMI (Lesson 7) Storyboards	6/3/16
Administrative Procedures IMI (Lesson 1)	6/17/16

Storyboards	
Module 1 - Administrative Procedures	6/20/16
Advancement & Promotion IMI (Lesson 4) Storyboards	7/8/16
Military Pay IMI (Lesson 3) Storyboards	7/22/16
PCS Travel IMI (Lesson 6) Storyboards	8/5/16
Manning & Manpower IMI (Lesson 5) Storyboards	8/26/16
Administrative Procedures IMI (Lesson 1) Alpha	9/1/16
Personnel Procedures IMI (Lesson 2) Storyboards	9/2/16
Legal Procedure IMI (Lesson 8) Storyboards	9/16/16
Advancement & Promotion IMI (Lesson 4) Alpha	9/23/16
Military Pay IMI (Lesson 3) Alpha	10/7/16
PCS Travel IMI (Lesson 6) Alpha	10/28/16
Personnel Procedures IMI (Lesson 2) Alpha	11/17/16
Manning & Manpower IMI (Lesson 5) Alpha	11/24/16
Module 2 - Personnel Procedures	11/30/16
IMI Learning Products	12/2/16
Reserve Procedures IMI (Lesson 7) Alpha	12/2/16
Legal Procedure IMI (Lesson 8) Alpha	12/2/16
Train the Trainer	1/13/17
GCAT (CHARMS)	4/19/17
Course Trial	6/29/17
Deliver all content/data/source files	7/11/17
Develop Course Management Documentation	9/26/17
Destroy/Return GFI/GFE	9/27/17

3.6 Stakeholders

Stakeholders	Summary of Requirements
Primary – Internal	
Naval Education Training Command (NETC)	Effort sponsor; overall cognizance for project development and delivery, as well as contract oversight and delivery requirements. NETC is the project sponsor.
Center for Service Support (CSS)	The CSS Learning Center is designated as the lead Learning Center for this effort in accordance with (IAW) Commander, Naval Education and Training Command (NETC) policies.
Primary – External	
URS Federal Services	Create the required analysis and design documents to support the NETC E2E process and create/modify existing measurable Terminal and Enabling Learning Objectives based on JDTA/FEA/BCA validated requirements in CPM as a project.

4.0 Strategic Alignment

4.1 Description

Goal from Initiatives	Level of Impact	Explanation (if required)
Provide an Electronic Classroom with access to the internet for student application of the administrative toolset.	High	The course content is structured to support interactive media primarily in the asynchronous phase of learner cognition. Media within the classroom will be used to support performance learning points and is based on intended delivery approach. The latest iteration of the Learning Objective structure is based on what the media can support and how it will be delivered. The interactive Navy e-Learning (NeL) content will use the predominant amount of media and is built into the framework of the LO structure, as part of Unit/Module 1. All KPL objectives will use interactive media for learner retention.

5.0 Analysis of Alternatives

5.1 Description

Key Parameter	Proposed Solution	Alternative #1	Alternative #2	Alternative #3
Costs (Initial projections from IMRD)	Provide an Electronic Classroom with access to the internet for student application of the administrative toolset. Total: $240K (Refer to Sec. 8.0)	Provide standalone media and internal classroom connection that will provide a similar or mirrored application as those currently maintained by the Navy. Total: $695K (Refer to Sec. 8.0)	Provide standalone media to consist of static screenshots or animated/interactive screenshots if a networked electronic classroom is unavailable. Total: $765K (Refer to Sec. 8.0)	Use current paper-based method of student application with the removal of the knowledge components. Total: $500K (Refer to Sec. 8.0)

Benefits	Performance-based environment where students will use the actual tools of administration.	Simulated performance-based environment where students will use simulated administration tools.	Simulated performance-based environment where students will use simulated administration tools.	Theory-to-practice environment where students will apply knowledge fundamentals using a paper TG.
Risk	AEC connection timeline. Network support personnel.	Internal connection timeline. Network support personnel. Continued contractor support.	Outdating of material. Limited tacit/psychomotor gain. Continued contractor support.	Outdating of material. No real tacit/ psychomotor gain. Continued contractor support.
Business/ Operational Impact	Positive operational impact. Slight negative business impact due to cost of installation. Business impact is recouped within the first year of operation.	Positive operational impact. Slight negative business impact due to cost of installation. Business impact grows as contractor maintenance requirement increases lifecycle costs.	Positive operational impact. Slight negative business impact due to cost of installation. Business impact grows as contractor maintenance requirement increases lifecycle costs.	Negative operational impact as students lack skill gain. Negative business impact as contractor maintenance requirement increases lifecycle costs.
Other				

1: Network support is already provided and allocated locally.
2: Cost will be affected based on the level of change to the reference material and supporting classroom systems.
3: Cost projections are anticipated to be over the course of three to five (3-5) years after contract end.

6.0 Business and Operational Impacts

6.1 Description

Impact & Description	Alternative #1	Alternative #2	Alternative #3
Stakeholder 1: NETC			
Operational Impact – Change from theoretical application of the material to actual use.	Medium	Medium	Low
Business Impact – Installation Costs installing the network.	Medium	Medium	Low
Business Impact – Maintenance and updates required for product lifecycle.	High	High	High
Stakeholder 2: CSS			
Operational Impact – Change from theoretical application of the material to actual use.	Medium	Medium	Low
Business Impact – Installation Costs installing the network.	Medium	Medium	Low
Business Impact – Maintenance and updates required for product lifecycle.	High	High	High
Stakeholder 3: URS Federal Services			
Operational Impact – Change from theoretical application of the material to actual use.	Low	Low	Low
Business Impact – Installation Costs installing the network.	High	High	Low
Business Impact – Maintenance and updates required for product lifecycle.	Medium	Medium	High

7.0 Risk Assessment

7.1 Risk of Initiative and Viable Alternatives

The overall risk to this initiative, or project, is the inability to provide adequate performance-based instruction to the learner. Although shown below as a screen capture of the YN/PS Advanced Administration Course Risk Management Register, the full risk assessment is located in Appendix A.

7.2 Risk of Not Proceeding with Initiative

The risk associated with not proceeding with the initiative/proposed solution may result in cost overruns, continued contractor reliance to update curriculum tools, and an inability to effectively allow students to perform as Administrative Professionals. Furthermore, by not proceeding with the intended initiative, the whole rationale for this change to the curriculum, as well as the current contract, will not obtain the desired level of training by CSS and NETC. Please see Appendix A, Risk Management Register for a full listing of the identified risks and their mitigation criteria.

8.0 Cost Benefit Analysis

8.1 Financial Cost and Benefit

Full Cost Analysis (From IMRD):

Activity	Initial Cost	Maintenance Cost	Total
	Facility With External Connection		
Network Classroom	$100K	$0	$100K
Equipment	$50K	$0	$50K
Network Support	$15K	$75k[1]	$90K[1]
	Facility with Internal Connection	Total:	$240K
Network Classroom	$100K	$0	$100K
Equipment	$50K	$15K	$65K
Network Support	$15K	$15K	$30K
Contractor Support	$0	$500K[2,3]	$500K
		Total:	$695K
	Facility With No Connection		
Network Classroom	$0K	$0	$0K
Equipment	$150K	$25	$175K
Network Support	$15K	$75k[1]	$90K[1]
Contractor Support	$0	$500K[2,3]	$500K
		Total:	$765K

1: Network support is already provided and allocated locally.
2: Cost will be affected based on the level of change to the reference material and supporting classroom systems.
3: Cost projections are anticipated to be over the course of three to five (3-5) years after contract end.

There are three viable *network* solutions for CSS and NETC regarding the use of the performance content in the classroom.

- An external or internal network is created to allow students to use the networked PCs to perform as administrative professionals.
- Standalone content is developed to support interactive content in the classroom that mirrors administrative content.
- Standalone media consists of static screenshots or animated/interactive screenshots if a networked electronic classroom is unavailable. These would be taken from the current rendition of the Navy systems and would mirror the system used.
- The lifecycle cost of the standalone content requires that updates be applied as Navy administrative tools and requirements grow and develop.

The external network connects to TRANET, or like network, to allow students access to the personnel databases, as appropriate.

- The internal network allows the instructor to load the latest version of an administrative website and students access an interactive version of the administrative documents.
    i. This will more than likely be an altered image of the webpage and will be accessible by the instructor. Software on the instructor console should include an application to be able to reset the learner's entered data, in the event they need to restart.
- The majority of the required access is to provide the experiential gain of accessing the functions of the various databases in a classroom environment, while using the Job Sheets, Problem Sheets, and Procedures to edit and manipulate data. This requires license to Microsoft Office, if not already acquired (it should be covered under NMCI contract).
- The external network has an initial cost of approximately $225,000, but has minimal maintenance costs, and the maintenance cost of Network Support may be possible to absorb under operational costs.
- The Integrated Learning Environment will continue to be the source for instructional hosting and will integrate with the Learning Management System (LMS). An additional cost for maintenance is not expected to be a factor in this consideration.

Timeframe:

The anticipated timeframe for the intended initiative will be over the duration of the Period of Performance (POP). Utilizing existing Navy infrastructure, the initiative can be achieved with minimal cost to the Government and minor impact to the developmental timeline. Alternatives, however, increase the overall lifecycle cost and management needs.

Summary of Quantitative Benefit	Proposed Solution	Viable Alternative #1	Viable Alternative #2	Viable Alternative #3
Present Value of Total Benefits:	$1296888[1]	$1296888[1]	$1296888[1]	$1296888[1]
Present Value of Total Costs:	$555000[2]	$1023800	$1326200	$532800
Net Present Value of Initiative:	$855103.59	$496311.55	$237686.20	$780153.84

1: This is the O&MN budget allocated to both learning sites.
2: Network support is already provided and allocated locally. The real cost is $0 beyond budget.

Quantitative Analysis – Proposed Solution	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Benefits:	Performance-based environment where students will use the actual tools of administration.					
Revenue	$216148[1]	$216148	$216148	$216148	$216148	$216148
Costs:						
Analysis	$15000	$0	$0	$0	$0	$0
Design	$50000	$0	$0	$0	$0	$0
Implementation	$100000	$0	$0	$0	$0	$0
Ongoing Operational Costs:						
Human Resources	$0	$0	$0	$0	$0	$0
Administration	$15000	$75000[2]	$75000[2]	$75000[2]	$75000[2]	$75000[2]
Net benefit or cost	+$36148	+$141148	+$141148	+$141148	+$141148	+$141148
Net present value 4%	+$855103.59	*1:* This is the O&MN budget allocated to both learning sites. *2:* Network support is already provided and allocated locally. The real cost is $0 beyond budget.				

Quantitative Analysis – Viable Alternative #1	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Benefits:	Simulated performance-based environment where students will use simulated administration tools.					
Revenue (x2 Learning Sites)	$216148	$216148	$216148	$216148	$216148	$216148
Costs:						
Analysis	$11200	$0	$0	$33600	$33600	$33600
Design x2	$67200	$0	$0	$89600	$89600	$89600
Implementation x 2	$44800	$0	$0	$112000	$112000	$112000
Ongoing Operational Costs:						
Human Resources	$0	$0	$0	$35000	$35000	$35000

Administration	$15000	$15000	$15000	$15000	$15000	$15000
Net benefit or cost	+$77948	+$201148	+$201148	-$69052	-$69052	-$69052
Net present value 4%	+$496311.55					

Quantitative Analysis – Viable Alternative #2	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Benefits:	Simulated performance-based environment where students will use simulated administration tools.					
Revenue (x2 Learning Sites)	$216148	$216148	$216148	$216148	$216148	$216148
Costs:						
Analysis x2	$11200	$0	$0	$44800	$44800	$44800
Design x2	$67200	$0	$0	$112000	$112000	$112000
Implementation x 2	$44800	$0	$0	$179200	$179200	$179200
Ongoing Operational Costs:						
Human Resources	$0	$0	$0	$35000	$35000	$35000
Administration	$15000	$15000	$15000	$15000	$15000	$15000
Net benefit or cost	+$77948	+$201148	+$201148	-$169852	-$169852	-$169852
Net present value 4%	+$237686.20					

Quantitative Analysis – Viable Alternative #3	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Benefits:	Theory-to-practice environment where students will apply knowledge fundamentals using a paper TG.					
Revenue (x2 Learning Sites)	$216148	$216148	$216148	$216148	$216148	$216148
Costs:						
Analysis	$0	$0	$16800	$16800	$16800	$16800
Design	$0	$0	$44800	$44800	$44800	$44800
Implementation	$0	$0	$56000	$56000	$56000	$56000

Ongoing Operational Costs:						
Human Resources	$0	$0	$35000	$35000	$35000	$35000
Administration	$15000	$15000	$15000	$15000	$15000	$15000
Net benefit or cost	+$201148	+$201148	+$48548	+$48548	+$48548	+$48548
Net present value 4%	+$780153.84					

8.2 Non-Financial Cost and Benefit

***This section does not exact bearing on this effort and has not been populated.**

Qualitative Summary	Description	Stakeholder(s) Impacted
Benefits:		
Benefit 1:		
Benefit 2:		
Costs:		
Cost 1:		
Cost 2:		

8.3 Assumptions

- The course is currently being delivered as ILT and all required materials are present with a 40 hour prerequisite IMI course delivered via Navy eLearning.
- The approved JDTA will not be modified.
- The intended course development will model the Navy Learning Objective Statements (NLOS) and content structure.
- The curriculum delivery will be skill based vice knowledge based.
- The delivery method and materials used at Norfolk, VA., will be mirrored by instructional staff at learning site San Diego, CA.
- Unclassified network access is required at both learning sites.
- Document editing tools are required for student use.
- The course content will be hosted on Navy e-Learning (NeL).
- Prerequisite IMI course content will ascribe to the requirements of the Integrated Learning Environment (ILE) Content Developer's Handbook (MPT&ECIOSWIT-ILE-HDBK-1C).

9.0 Conclusions and Recommendations

9.1 Conclusions

Solution & Alternatives	Business and Operational Impact	Project Risk Assessment	Cost/Benefit Analysis
Proposed Solution	The proposed solution of providing an electronic classroom will provide positive impacts to both the operational and business elements of this project.	Students will be able to operate actual Navy administrative toolsets. Risk of completion for use is minimal, as the current classroom setup will allow for full networking within the proposed timeline.	The proposed solution has the highest cost to benefit. It uses already present infrastructure and learning opportunities with no reproduction of assets or facilities.
Alternative #1	The first alternative of providing a simulative environment where students will manipulate media that mirrors the Navy toolsets provides a positive operational impact, but incurs greater cost over the life of the curriculum.	The use of simulative media that mirrors the actual Navy toolset increases development time, and may extend past the current contract. This increases cost-risk and the ability to Pilot within the current time window.	The first alternative has the third best cost to benefit. With recreation of current tools and the need to have an internal network, this alternative requires consistent updates to be practical and will require continued support.
Alternative #2	The second alternative of using standalone media, resident on each student terminal, to allow performance gain reduces positive operational impact, due to lack of credibility. The business impact is negative, as continued costs are incurred over the life of the curriculum.	The use of static imagery to provide performance related goals does not sufficiently achieve the performance goal of repetition. This directly impacts the operational goals of this effort as well as incurs further costs as changes are implemented.	The second alternative of using static and animated media housed on student terminals has the worst cost to benefit. It will require consistent updates to the material and does not provide the end skill gain as defined in NETC and CSS' vision.
Alternative #3	The third alternative of using paper-based Trainee Guides and media housed on the student terminal to	The use of paper-based Trainee Guides lacks functionality to provide the end performance goals. This results in an	The third alternative has the second best cost to benefit. However, due to the continued use of paper-

	build the performance objectives has negative operational impact, due to lack of credibility and loss of functionality. The business impact will incur costs over the lifecycle of the curriculum as changes occur.	operational impact that renders this effort obsolete. Coupled with the need to update curriculum as changes manifest, results in a risk to the end goal of a performance driven course curriculum.	based products and simple media, this option forces NETC and CSS to "continue on as normal" and does not provide the intended skill gain.

9.2 Unplanned Consequence

Using the Proposed Solution there are no tangible unplanned consequences. The proposed Solution decreases the possibility of unintended elements and provides the most cohesive path for skill gain by the student.

9.3 Recommendations

The recommended path forward is to continue development of the project as dictated in contract N00189-12-D-Z016 Delivery Order: 0012. This will follow the plan of design and development as articulated in the Integrated Master Schedule. Our primary recommendation is the integration of a networked classroom structure (Proposed Solution) that will allow students to use actual Navy administration tools, and provide the opportunity for instructors to provide mentorship and facilitation of skill gain. The whole purpose of this effort is to give student the ability to operate the necessary tools, and if that becomes overly restricted, it has been our experience that the end goal is not achieved. The current path forward requires the following:

- Training Managers are working CSS N6 to resolve system access issues
- Training Managers are working CSS N6 to resolve Microsoft Office issues

Once complete, the ability to create operational and performance driven content will be apparent. Developers will use the Navy toolsets as the benchmark for design and development and will purpose the instructional content to leverage these tools in the classroom. Students, with instructor input, will perform as administrative personnel using a series of Job steps contained in a Job Sheets, to operate the administrative tools. This will also use Instructional Media Materials (IMM) to provide visual cueing for students as needed. Content structure and intended ISD Considerations for each Lesson and corresponding Topic will be contained in the Instructional Media Design Package (IMDP).

9.4 Project Responsibility

Overall responsibility of this project's completion is under the Center for Service Support (CSS), and is being managed by Mr. John Smith.

9.5 Project Accountability

Overall accountability for this project's completion is under the Naval Education Training Command (NETC), and is being managed by Mr. Dwight Marsden.

10.0 Implementation Strategy

10.1 Description

The plan to execute the intended solution will require that both URS and CSS conjoin efforts to verify that the target date for Pilot, as well as system functionality, are met well ahead of the proposed deadline. CSS training managers will coordinate with learning site N6 personnel to establish the method for electronic classroom installation and management. Once established, CSS will provide URS with any technical data regarding executability of the performance objectives. URS will verify their learning plan and IMDP match the technical capability of the classroom, to prevent any unforeseen circumstances. Because the need for a full electronic classroom was identified in the infancy of this project, the ability to complete this solution as designed, will incur minimal risk to finish. Had this been identified during the process of development, risk would have been moderate to high.

10.2 Strategy

Major Phases:

Analysis – This stage or phase is in progress. It identifies the necessary floorplan requirements, equipment footprint, and connectivity of the network infrastructure. Final floorplan assessments will culminate in the blueprint for network structure. The cost considerations for this phase are contained within current budgetary constraints. Training managers and N6 personnel are in communication and are coordinating efforts. CSS will maintain cognizance for this phase and it is anticipated that the analysis will be complete by June of 2016.

Design & Development – These two phases occur after the blueprint for network infrastructure within the classroom has been reviewed and approved by CSS, NETC, and learning site N6. Learning site N6 personnel will interface with CSS training managers and local command shops to procure necessary equipment and personnel to achieve the design goals established by the approved blueprint. The expected cost can be contained within current budgetary considerations by using site personnel already established as part of CSS and local command's N6. CSS will maintain responsibility of this endeavor, and it is anticipated that design and development will be completed by August 2016.

Implementation & Evaluation – After all requisite equipment, personnel, and infrastructure has been procured (as identified in the approved blueprint), site technicians will implement the changes to the electronic classroom. Once the established changes have been complete, site N6 technicians coordinating with CSS, will evaluate all implemented changes to the learning site classrooms. The implementation schedule and evaluation will be completed no later than January 2017, to

accommodate course Pilot. Overall cost for procurement will be maintained within current budgetary considerations and by using resident personnel and equipment. CSS, N6 site personnel, and URS will maintain constant communication for developmental timelines and to verify the implementation and evaluation of the electronic classroom meets the goals for the end-user and will be able to interface with all Navy systems. As with the previous phases of development, CSS will maintain the overall cognizance and responsibility for this effort.

11.0 Review and Approval Process

11.1 Review Process

The process of review will be: URS Project (Mr. Pete Berns) manager to CSS Project Manager (Mr. John Smith), the NETC Project Manager (Mr. Dwight Marsden), and the NETPDTC Project Manager (Mr. Chris Ducker). CSS PM will disseminate to the CSS project team to gather feedback, and after all commentary has been aggregated, will submit back to URS PM for any change inclusion. URS PM will adjudicate any comments requiring further discussion and will submit for approval to CSS.

11.2 Approval Process

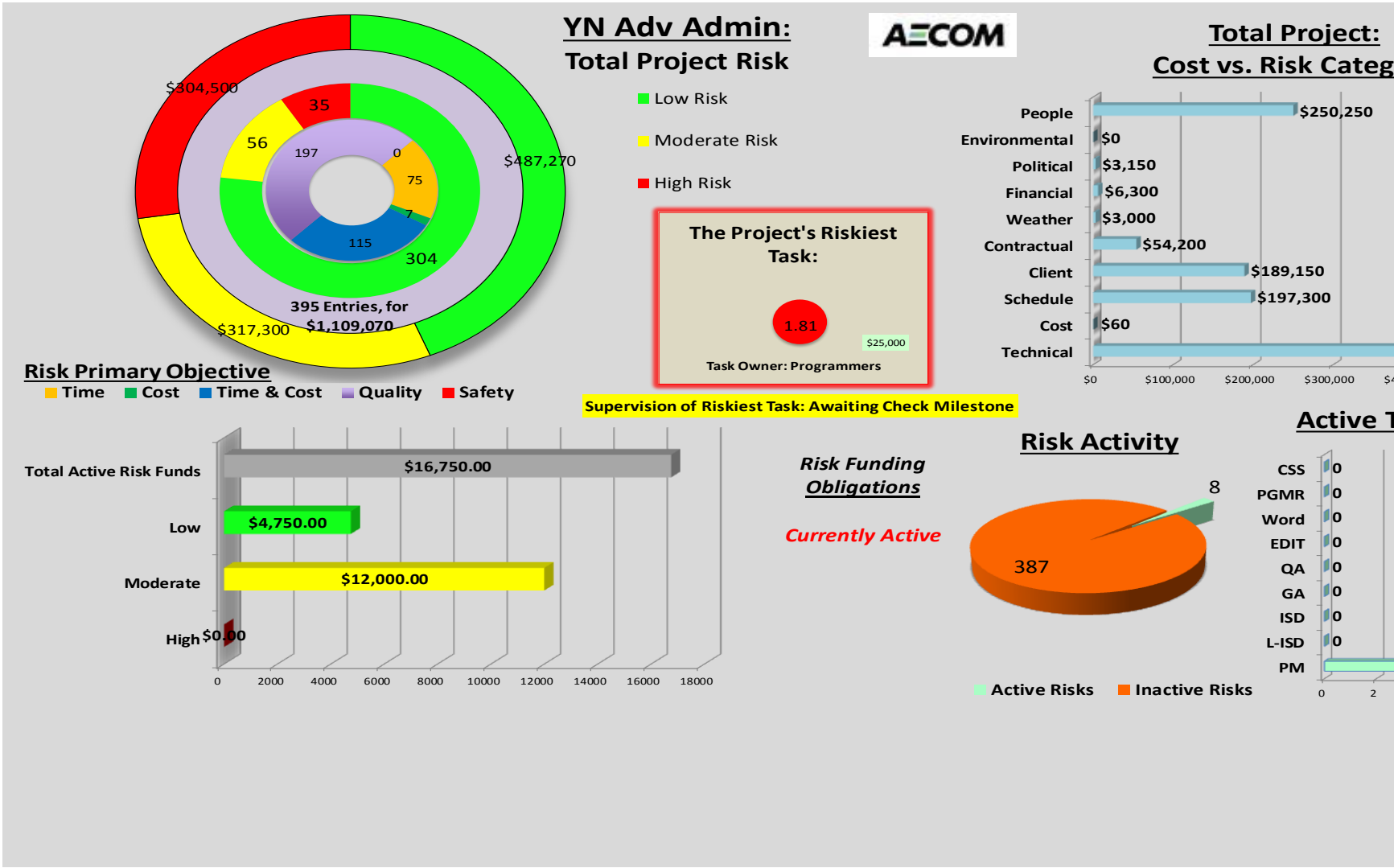
The process of approval will occur similarly to that of the review. The URS PM will submit, as part of the CDRL requirement, the Business Case Analysis to the CSS PM, NETC PM, and NETPDTC PM for approval. The CSS PM will maintain overall approval authority, with the NETC and NETPDTC PM acting in concurrence.

11.3 Business Case Signoff

Approved: ☐ Disapproved: ☐

CSS Project Manager: _____

NETC Project Manager: _____ (in concurrence)

NETPDTC Project Manager: _____ (in concurrence)

Appendix A: YN Advanced Administration Risk Management Register