

Embry-Riddle Aeronautical University
PMGT611
Problem Analysis and Recommendations Project
Human Resource Plan
Group One
18 February, 2013

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Brief Project Description:

This project will provide research, analysis, and a recommendation for reorganization of the Forrest University (FU) Information Technology Department (ITD). The project will involve the use of both internal and external experts that will seek to provide alternative solutions to bring all departments of the university under a single information technology (IT) concept of operation that will serve to better manage all systems, applications, networks, and all developmental projects.

Staff Acquisition and Release:

Anticipated sources for staffing include internal resources from the ITD to include: the Chief Information Officer, Assistant Chief Information Officer, Director of Networking and Communications, Business Analysts, and Secretary.

In addition, external sources of staffing will include a contracted Subject Matter Expert (SME) who is certified in commercial networking technology. The SME will provide recommendations for technological solutions based on the results of survey, consultation, and gap analysis information. The project will also sub-contract Cisco Systems Incorporated to provide a recommended solution for hardware and network configuration requirements to meet the desired end state.

Planned Staffing Requirements:

Resource Type	Skill Level	No. People	Start Date	Finish Date	Total Hours	Rate
Chief Information Officer	Expert	1	4 Mar 13	15 Mar 13	20	\$52/h
Assistant Chief Information Officer	Expert	1	4 Mar 13	14 Mar 13	22	\$44/h
Network & Communications Director	Expert	1	4 Mar 13	11 Mar 13	18	\$36/h
Business Analyst	Advanced	1	8 Mar 13	14 Mar 13	10	\$22/h
Secretary	Intermediate	1	7 Mar 13	14 Mar 13	7	\$19/h
Subject Matter Expert	Expert	1	5 Mar 13	14 Mar 13	50	\$150/h
Sub-contractor (Cisco)	Expert	n/a	6 Mar 13	15 Mar 13	n/a	\$7000

Project Specific Training:

None required.

Staffing Qualifications/Certifications:

Sub-contractor of IT Systems must, at a minimum, provide a person(s) having Cisco Certified Network Professional CCNP Certification. The CIO, ACIO, and Network and Communications Director positions must have Project Management Professional (PMP) certifications. Additionally, the Network and Communications Director and SME will have Microsoft Certified Systems Engineer (MCSE) and Certified Information Systems Security Professional (CISSP) certifications.

Project Position Description	
Project Title Chief Information Officer	Date Prepared 13 Feb 13
<u>Position Description:</u> The Chief Information Officer (CIO) will be responsible for gathering and organization of information and leading efforts toward project completion. Deliverables will include: Review and Evaluation of IT firm Consultation, Conducting Meetings, and Project Plan Development and delivery.	
<u>Responsibilities:</u> The CIO will: A1.1c Consult IT firms A1.1d Review and Evaluate survey results and IT firm consultation recommendations A1.2a Review State of the Art/Identify Needs A1.3c Develop meeting agenda A1.3d Conduct decision Meeting A1.3g Develop final plan to present to the steering committee A1.3h Deliver Read-Ahead Packet.	
<u>Skill Requirements:</u> Senior level knowledge of IT and business processes. Senior level management skills and experience.	
<u>Qualifications/Certifications:</u> Project Management Professional (PMP) certification.	
<u>Specialty Training:</u> None	
Planned Position Start date: 4 Mar 13	Planned Position End Date: 15 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Project Position Description	
Project Title Assistant Chief Information Officer	Date Prepared 13 Feb 13
<u>Position Description:</u> The Assistant Chief Information Officer (ACIO) will be responsible for gathering information on current state of the art structures at universities and other institutions of higher learning. The ACIO will also analyze and evaluate survey results for submission of project team recommendations. Deliverables will include: Survey Organizational Structures, Evaluate survey results and recommendations, Perform Gap Analysis, Conduct Decision Meeting, and Develop Final Plan.	
<u>Responsibilities:</u> The ACIO will: A1.1a Survey universities ITD org. structures A1.1d Review and Evaluate survey results and IT firm consultation recommendations A1.2a Review State of the Art/Identify Needs A1.2c Identify Processes and Applications currently in use A1.2f Perform Gap Analysis A1.3d Conduct decision Meeting A1.3g Develop final plan to present to the steering committee	
<u>Skill Requirements:</u> Senior level knowledge of IT and business processes. Senior level management skills and experience.	
<u>Qualifications/Certifications:</u> Project Management Professional (PMP) certification.	
<u>Specialty Training:</u> None	
Planned Position Start date: 4 Mar 13	Planned Position End Date: 14 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Project Position Description	
Project Title Network and Communications Director	Date Prepared 13 Feb 13
<u>Position Description:</u> The Network and Communications Director is a senior manager in the IT department responsible for all budget, staffing, and technical issues and solutions within the organization. This position will research various university IT system configurations, identify facility needs, analyze and evaluate survey results, and provide a recommended project end state solution.	
<u>Responsibilities:</u> The Network and Communications Director will: A1.1b Survey universities IT configuration A1.1d Review and Evaluate survey results and IT firm consultation recommendations A1.2b Identify facility requirements and allotment A1.2e Baseline End State	
<u>Skill Requirements:</u> Senior level knowledge of IT and business processes. Senior level management skills and experience.	
<u>Qualifications/Certifications:</u> Microsoft Certified Systems Engineer (MCSE) Certified Information Systems Security Professional (CISSP) Project Management Professional (PMP) certification	
<u>Specialty Training:</u> None	
Planned Position Start date: 4 Mar 13	Planned Position End Date: 11 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone
Project Position Description	
Project Title Business Analyst	Date Prepared 13 Feb 13

<u>Position Description:</u> The Business Analyst (BA) will be responsible for conducting cost analysis and budget constraints of the project. The BA will also provide budget and cost analysis inputs during the project team decision briefing.	
<u>Responsibilities:</u> <i>The BA will:</i> A1.2d Perform economical/technological value point trade study A1.3d Conduct decision Meeting	
<u>Skill Requirements:</u> This position is an intermediate level position and requires budget analysis and cost accounting acumen.	
<u>Qualifications/Certifications:</u> None	
<u>Specialty Training:</u> Organizational internal budgeting and cost training.	
Planned Position Start date: 8 Mar 13	Planned Position End Date: 14 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Project Position Description	
Project Title Subject Matter Expert (SME)	Date Prepared 13 Feb 13
<u>Position Description:</u> The SME will be responsible for surveying results and recommendations, preparing reports, identifying technology needs, performing gap analysis of current network status, organizing research and the desired end-state information, and contributing to the conduct of the decision meeting.	
<u>Responsibilities:</u> <i>The SME will:</i> A1.1d Review and Evaluate survey results and IT firm consultation recommendations A1.1e Prepare report detailing findings and recommendation A1.2a Review State of the Art/Identify Needs A1.2b Identify facility requirements and allotment A1.2c Identify Processes and Applications currently in use A1.2d Perform economical/technological value point trade study A1.2e Baseline End State A1.2f Perform Gap Analysis A1.3a Gather and organize research A1.3d Conduct Decision Meeting A1.3g Develop final plan to present to the steering committee	
<u>Skill Requirements:</u> This position will be an expert in commercial networking technology.	
<u>Qualifications/Certifications:</u> Microsoft Certified Systems Engineer (MCSE) Certified Information Systems Security Professional (CISSP)	
<u>Specialty Training:</u> None	
Planned Position Start date: 5 Mar 13	Planned Position End Date: 14 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Project Position Description	
Project Title Secretary	Date Prepared 13 Feb 13
<u>Position Description:</u> The Secretary will be responsible for assisting in the compilation of research results and needs identification, as well as, meeting scheduling and minutes.	
<u>Responsibilities:</u> <i>The Secretary will:</i> A1.2a Review State of the Art/Identify Needs A1.3b Schedule meeting A1.3e Capture meeting minutes and final decision A1.3g Develop final plan to present to the steering committee	
<u>Skill Requirements:</u> This position will be qualified in performing administrative style tasks to include organizational note taking skills.	
<u>Qualifications/Certifications:</u> None	
<u>Specialty Training:</u> None	
Planned Position Start date: 7 Mar 13	Planned Position End Date: 14 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Project Position Description	
Project Title Sub-contract Cisco	Date Prepared 13 Feb 13
<u>Position Description:</u> Sub-contract Cisco to identify hardware/software and facility upgrade requirements as a result of the desired end state and final plan.	
<u>Responsibilities:</u> The project team will: A1.3f Contract Cisco for hardware, software and facilities upgrades	
<u>Skill Requirements:</u> This position requires expertise in commercial networking technology.	
<u>Qualifications/Certifications:</u> Cisco Certified Network Professional CCNP Certification	
<u>Specialty Training:</u> None	
Planned Position Start date: 5 Mar 13	Planned Position End Date: 14 Mar 13
Project Contact Person Name/Title: Dr. Sum Yung Guy/Chief Information Officer	
Contact Email Address	Contact Phone

Appendix: Work Breakdown Structure (WBS) Dictionary

WBS Structure

1 Problem analysis and recommendations

1.1 Research

1.1.1 Current State of the Art

1.1.2 Current Organization Structure

1.2 Current Shortfalls

1.2.1 Desired End State

1.2.2 Gap Analysis

1.3 Recommendation

1.3.1 Decision Meeting

1.3.2 Research

1.3.3 The Plan

WBS Basis of Estimate	
<u>WBS Element No./Name:</u> WBS 1.1/Research	<u>Date:</u> 13 Feb 13
<u>Author/Organization:</u> Duane Graham/Forrest University	
<u>Email Address:</u>	<u>Phone:</u>
<u>Estimate Summary:</u>	
Labor	\$3,720.00
Total	\$3,720.00
<u>WBS Element Description:</u> After attending the project kick-off meeting, a rapid, yet concerted effort will be made to survey other universities within the newly formed alliance to determine both the organizational structure of their information technology department (ITD) and the composition/configuration of their hardware/network. Additionally, no less than two firms specializing in information technology (IT) infrastructure layout and configuration will be consulted to determine what constitutes a state of the art system. This element will also serve to review and assess the current organizational structure of the Forrest University (FU) ITD, and the IT configuration of all university departments, to suggest where improvements might be made to effectively and efficiency impact project development.	
<u>Activities Description:</u> A1.1a Survey universities to ascertain their ITD organizational structure. A1.1b Survey universities to ascertain the composition of their IT hardware/network. A1.1c Consult IT firms specializing in infrastructure layout/configuration. A1.1d Retain subject matter expert (SME) to review and evaluate organizational structure and configuration of surveyed universities. A1.1e Prepare report detailing finding and recommendation for FU to become “state of the art.”	
<u>Key Cost-Driving Assumptions:</u> Major costs considerations for this basis of estimate are funds required for subject matter expert (SME) consultation on short notice.	
<u>Task Entry/Exit Criteria:</u> Task Entry: Participate in kick-off meeting to ensure objectives are clearly defined and understood. Task Exit: Compose a comprehensive report detailing the requirement needed for FU to operate in a state of the art environment.	

				Labor Hours By Labor Category					
Labor	Detailed Task Description WBS 1.1	Start Date	End Date	CIO \$52.00 hr.	ACIO \$44.00 hr.	Dir. Network & Communications \$36.00 hr.	SME \$150.00 hr.		Activity Cost
A1.1a	Survey universities ITD org. structures	4 March, 2013	4 March, 2013		8				\$352.00
A1.1b	Survey universities IT configuration	4 March, 2013	4 March, 2013			8			\$288.00
A1.1c	Consult IT firms	4 March, 2013	4 March, 2013	8					\$416.00
A1.1d	Review and Evaluate survey results and IT firm consultation recommendations	5 March, 2013	5 March, 2013	2	2	2	8		\$1464.00
A1.1e	Prepare report detailing findings and recommendation	6 March, 2013	6 March, 2013				8		\$1200.00
		Total Hours by Category:		10	10	10	16		
		Total Labor Cost by Category:		\$520	\$440	\$360	\$2400	Total Cost:	\$3720.00

WBS Basis of Estimate	
<u>WBS Element No./Name:</u> WBS 1.2/Current Shortfalls	<u>Date:</u> 13 Feb 13
<u>Author/Organization:</u> Chris Blackwell	
<u>Email Address:</u>	<u>Phone:</u>
<u>Estimate Summary:</u>	
Labor	\$4770.00
Total	\$4770.00
<u>WBS Element Description:</u> In order to move to an effective ITD, a list must be compiled of shortfalls in the current information technology plan. After the state of the art of IT is defined, trade studies must be done to decide which elements are required by the new ITD. After an expected end state is baselined, a gap analysis must be done. This will identify the usage gap. Once the gap is identified, a trade study can be done to ascertain the best HR plan to efficiently integrate a new system.	
<u>Activities Description:</u> A1.2a Review the state of the art/identify needs A1.2b Identify facility allotments and requirements A1.2c Identify all IT processes and applications currently in use A1.2d Perform economical/technological value point trade study A1.2e Baseline desired end state A1.2f Develop Gap analysis	
<u>Key Cost-Driving Assumptions:</u> The major cost drivers for this WBS are the trade study and the gap analysis. These will require a high number of labor hours.	
<u>Task Entry/Exit Criteria:</u> Entry Criteria: Report detailing the state of the art of IT A synopsis of the current organizational structure Exit Criteria: A baseline end state shall be established A gap analysis shall be documented	

				Labor Hours By Labor Category						
Labor	Detailed Task Description WBS 1.1	Start Date	End Date	CIO \$52	ACIO \$44	Business Analyst \$22	SME \$150	Dir. Network & Communications \$36.00 hr.	Secretary \$19	EST Total Cost
A1.2a	Review State of the Art/Identify Needs	7 March, 2013	7 March, 2013	2	2		2		2	\$530.00
A1.2b	Identify facility requirements and allotment	7 March, 2013	7 March, 2013				2	4		\$444.00
A1.2c	Identify Processes and Applications currently in use	7 March, 2013	7 March, 2013		2		2			\$388.00
A1.2d	Perform economical/technological value point trade study	8 March, 2013	8 March, 2013			8	8			\$1376.00
A1.2e	Baseline End State	11 March, 2013	11 March, 2013				4	4		\$744.00
A1.2f	Perform Gap Analysis	12 March, 2013	12 March, 2013		2		8			\$1288.00
		Total Hours by Category:		2	6		26	8	2	
		Total Labor Cost by Category		\$104	\$264	\$176	\$3900.00	\$288	\$38.00	\$4770.00

WBS Basis of Estimate							
<u>WBS Element No./Name:</u> WBS 1.3/Recommendation	<u>Date:</u> 13 Feb 13						
<u>Author/Organization:</u> Morgan Evans							
<u>Email Address:</u>	<u>Phone:</u>						
<u>Estimate Summary:</u> <table> <tr> <td>Labor</td> <td>\$2019.00</td> </tr> <tr> <td>Subcontracts</td> <td>\$7000.00</td> </tr> <tr> <td>Total</td> <td>\$9019.00</td> </tr> </table>		Labor	\$2019.00	Subcontracts	\$7000.00	Total	\$9019.00
Labor	\$2019.00						
Subcontracts	\$7000.00						
Total	\$9019.00						
<u>WBS Element Description:</u> <p>After gathering of all research and data present the different options to the team. Once all options have been defined the team will make a final decision on what to present to the University Steering Committee for a recommended organization structure. Once the organization structure is defined research on required hardware, software and facilities upgrades needs to be conducted to determine the cost of implementing the recommended changes.</p>							
<u>Activities Description:</u> <p>A1.3a Gather and organize research A1.3b Schedule meeting A1.3c Develop meeting agenda A1.3d Conduct decision Meeting A1.3e Capture meeting minutes and final decision A1.3f Contract Cisco for hardware, software and facilities upgrades required A1.3g Develop the final plan to present to the University Steering Committee A1.3h Deliver Read-Ahead Packet</p>							
<u>Key Cost-Driving Assumptions:</u> <p>Major cost drivers will be the contract work by Cisco and labor hours required to write and review of the final plan document.</p>							
<u>Task Entry/Exit Criteria:</u> <p>WBS 1.1, 1.2 has to be completed prior to the decision meeting (WBS 1.3.1). The final report from Cisco on the required upgrades needs to be completed prior to the plan (WBS 1.3.3) can be created.</p>							

				Labor Hours By Labor Category					
Labor	Detailed Task Description WBS 1.1	Start Date	End Date	CIO \$52.00	ACIO \$44.00	Business Analyst \$22.00	SME \$150	Secretary \$19.00	Total Cost
A1.3a	Gather and organize research	13 March, 2013	13 March, 2013				2		\$300.00
A1.3b	Schedule meeting	13 March, 2013	13 March, 2013					1	\$19.00
A1.3c	Develop meeting agenda	13 March, 2013	13 March, 2013	1					\$52.00
A1.3d	Conduct decision Meeting	14 March, 2013	14 March, 2013	2	2	2	2		\$536.00
A1.3e	Capture meeting minutes and final decision	14 March, 2013	14 March, 2013					2	\$38.00
A1.3g	Develop final plan to present to the steering committee	14 March, 2013	14 March, 2013	4	4		4	2	\$1022.00
A1.3h	Deliver Read-Ahead Packet	15 March, 2013	15 March, 2013	1					\$52.00
		Total Hours by Category:		8	6	2	8	5	
		Total Labor Cost by Category		\$416	\$264	\$44.00	\$1200.00	\$95.00	\$2,019.00
Subcontract	Task Statement/Activity				Con- tractor	Location	Total \$		Est. \$\$\$
A1.3f	Contract Cisco for hardware, software and facilities upgrades				Cisco		\$7,000		\$7,000