Pacific Gas and Electric Company®

Legend

- Enterable/Modifiable
- Overwritten
- Not Updatable
- Default Value

Application Development Project Complexity and Sizing Worksheet

Date Checklist Completed:	3/1/2009
ITWR # (if applicable):	
Proposal Description:	Enterprise Knowledge Management
Client Portfolio Lead:	Brent Altman
Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2011
Anticipated End Date of Project (MM/DD/YYYY):	12/31/2012

Please provide a response for ALL criteria! The responses provided impact the Total Score for the proposed project, which helps determine the Preliminary Project Cost.

#	CRITERIA	RESPONSE	ASSUMPTIONS	SCORE
1	Expected duration of the project (in weeks):	104	(Calculated Based on Anticipated Start/End Dates, above)	4
2	Anticipated ISTS Application Development Labor Days			FALSE
3	How many 3rd party vendor firms will provide services for this project?	1-2	(Please Enter An Assumption)	4
4	If the technology is known, has it been successfully implemented before at PG&E?	Yes	(Please Enter An Assumption)	6
5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Medium	(Please Enter An Assumption)	6
6	Is there a pre-existing PG&E support group to maintain/support the application?	Yes	(Please Enter An Assumption)	2
7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Low	(Please Enter An Assumption)	1
8	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	No	(Please Enter An Assumption)	4
9	What is the level of criticality of the system to the users and PG&E customers?	Business Standard	(Please Enter An Assumption)	6
10	How many internal PG&E users will be impacted by this project?	>500	(Please Enter An Assumption)	9
11	What is the anticipated amount of formal training that will be required for PG&E users?	Medium	(Please Enter An Assumption)	6
12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	(Please Enter An Assumption)	9
			TOTAL SCORE:	**57**

Cell: B18
Comment: Duration is calculated based on the above start and end project dates.

Cell: B19
Comment: High level estimate of application development labor days (project management through service introduction/deployment) including middleware, integration, configuration, etc.

Cell: B20
Comment: This indicates the number of 3rd-party vendor firms, NOT individual contributors and is intended to reflect potential additional project management effort to manage external vendors

Cell: B21
Comment: Has the technology to be implemented during the project been previously implemented at PG&E? How familiar are the project resources with the technology?

Cell: C21
Comment: Yes = The technology has been successfully implemented before at PG&E. Resources are very familiar with the technology.

No = The technology has not been attempted or implemented successfully previously. Resources have little or no familiarity with the technology.

Cell: B22
Comment: Does the Business fully understand their needs in completing the project? Have their needs been agreed to and documented?

Cell: C22
Comment: Low = The Business has no knowledge of the Requirements for the proposal; no Requirements have been discussed or documented.

Medium = The Business has minimal knowledge of the Requirements for the proposal; some of the Requirements have been discussed and documented.

High = The Business has a good understanding of the Requirements for the proposal; many of the Requirements have been discussed and documented.

Cell: B23
Comment: Can the proposed project/application be maintained and supported by an existing PG&E support group (Help Desk, Operations Group, System Administrators, etc)?

Cell: C23
Comment: Yes = The project/application can be maintained and supported by an existing PG&E support group

No = The project/application cannot be maintained and supported by an existing PG&E support group

Cell: B24
Comment: Are any of the proposed project's resources, deliverables, processes, or technology dependent on any other project or initiative?

Cell: C24
Comment: Low = The proposed project has little or no dependency on other projects or initiatives

Medium = The proposed project has some dependency on other projects or initiatives

High = The proposed project is highly dependent on other projects or initiatives

Cell: B25
Comment: Is data being passed through the PG&E firewall? May impact project risk and complexity.

Cell: C25
Comment: No = No data will be passed through the PG&E firewall

Yes = Data will be passed through the PG&E firewall

Cell: B26
Comment: A measure of the criticality of the system to users and PG&E customers

Cell: C26
Comment: Business Critical: requires the highest possible availability; outage/failure recovery time is minutes or hours (e.g., SCADA systems)

Business Important: requires high availability; outage/failure recovery time is less than 24 hours

Business Standard: default category, most systems will fit this category; does not require high availability; outage/failure recovery time is less than 2 days

Business Historical; does not require high availability; outage/failure recovery time is 2-5 days (e.g., storage systems)

Cell: B27
Comment: Measures the degree of change/impact to the organization. Higher numbers imply greater need for change management, training, and number of new/modified business processes.

Cell: B28
Comment: A measure of the total effort required to formally train all users, considering that multiple users may be trained concurrently (e.g., classroom)

Cell: C28
Comment: Low = <7 Hours of Deliverable Content
Medium = 8-14 Hours of Deliverable Content
High = >14 Hours of Deliverable Content

Cell: B29
Comment: The PG&E Lines of Business are:

Energy Delivery
Engineering & Operations
Customer Care
Generation
Energy Procurement
Finance
HR
Risk & Audit
Shared Services

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Application Development Preliminary Project Costing Checklist

Legend
Enterable/Modifiable
Overwritten
Not Updatable
Default Value

Date Checklist Completed:	3/1/2009
ITWR # (if applicable):	0
Proposal Description:	Enterprise Knowledge Management
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Anticipated End Date of Project (MM/DD/YYYY):	12/31/2012

		Weight
PG&E ISTS Labor Blended Daily Rate per Resource	$941.16	70%
External ISTS Labor Blended Daily Rate per Resource	$1,481.52	30%
COMBINED ISTS BLENDED DAILY RATE PER RESOURCE	$1,103.27	

		Weight
PG&E Business Labor Blended Daily Rate per Resource	$995.28	75%
External Business Labor Blended Daily Rate per Resource	$1,992.69	25%
COMBINED BUSINESS BLENDED DAILY RATE PER RESOURCE	$1,244.63	

APPLICATION DEVELOPMENT LABOR

			PRELIMINARY EFFORT (DAYS)			PRELIMINARY COST		
PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS		LOW	MID	HIGH	LOW	MID	HIGH
ISTS APPLICATION DEVELOPMENT								
ISTS Application Development Labor Days (Project Management through Service Introduction/Deployment), including Middleware, Integration, Configuration, etc.	(You Must Enter An Assumption)		150	225	450	$165,490	$248,235	$496,471
		Default Calculated Labor Days:	0	0	0	$165,490	$248,235	$496,471
PG&E BUSINESS	% of App Dev Labor							
PG&E Business Labor	20%	(Default = 20% of App Dev Labor)	30	45	90	$37,339	$56,008	$112,017
TECHNICAL ARCHITECTURE	% of App Dev Labor							
Technical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	30%	(Default based on Number of Users Impacted)	45	68	135	$49,647	$74,471	$148,941
USER TRAINING & PERFORMANCE SUPPORT	% of App Dev Labor							
User Training and Performance Support Labor Days (Analyze/Design/Build/Test) for the effort to create Training Material and Communications Plan to support the Application rollout.	20%	(Default based on Anticipated Amount of Formal User Training)	30	45	90	$33,098	$49,647	$99,294
		LABOR DAYS SUBTOTAL:	255	383	765	$285,574	$428,361	$856,723
		Project Complexity and Size Factor:	51	77	153	$57,115	$85,672	$171,345
		TOTAL LABOR DAYS:	306	459	918	$342,689	$514,034	$1,028,067

Application Development Preliminary Project Costing Checklist

Default Value

Date Checklist Completed:	3/1/2009
ITWR # (if applicable):	0
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HARDWARE LABOR, MATERIALS, AND OTHER COSTS

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY COST LOW	MID	HIGH
INFRASTRUCTURE				
Hardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	$800,000	$1,050,000	$1,300,000
System/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	$400,000	$525,000	$650,000
USER TRAINING				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	$14,875	$21,250	$27,625
MISCELLANEOUS COSTS				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	(You Must Enter An Assumption)	$0	$0	$0
	COST SUBTOTAL:	$1,214,875	$1,596,250	$1,977,625
	Project Complexity and Size Factor:	$242,975	$319,250	$395,525
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	$1,457,850	$1,915,500	$2,373,150

	LOW	MID	HIGH
TOTAL PRELIMINARY PROJECT COST:	$1,801,000	$2,430,000	$3,401,000

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy Days
1/1/2011	12/31/2012	918	730	10%	92	826

Stage	Start Date	End Date	Typical Work Allocation Percentage by Stage	% of stage effort (do not change)	Override stage effort (override Col C)	Stage Work Days	% stage duration	Duration in days	Net Work Days
Project Mgmt	1/1/2011	12/31/2012				92			521
Plan	1/1/2011	2/28/2011	1-5%	8%	8%	66	8%	58	41
Analyze	2/28/2011	5/12/2011	5-10%	10%	10%	83	10%	73	54
Design	5/12/2011	10/5/2011	15-35%	20%	20%	165	20%	146	105
Build	10/5/2011	5/11/2012	25-60%	30%	30%	248	30%	219	158
Test	5/11/2012	10/4/2012	10-25%	20%	20%	165	20%	146	105
Deploy	10/4/2012	12/31/2012	3-5%	12%	12%	99	12%	88	63
				100%	**100%**	**918**	**100%**	**730**	

	Roles	Workday	FTE's															
resource pools:			various	various	various	Env CoE	various App Services	Software QA	DBA CoE	SP&A	Infrastru cture	various App Services	Env CoE	Env CoE	various	Business	Deployment CoE	
	Percentage Total	Workday Total	Business Analyst	Project Manager	Application Designer	Configuration Manager	Programmer	Test Lead & Tester	Database Administrator/ Data Architect	Technical Architect	Technical Architect	Technical Architect	Technical Architect	Technical Operations Support Specialist	Integration Solution Architect & Designer	Human Performance Architect Training Administrator	Deployment Lead & Specialist Service Introduction Lead	Max FTE's (rounded to the nearest .5 fte)
		918	1.0	-	0.5	-	0.5	1.0	-	0.5	-	-	-	-	-	0.5	1.0	
	100.0%	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	100.0%	66	1.0	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	1.0
	100.0%	83	0.5	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	165	-	-	0.5	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	248	-	-	-	-	0.5	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	165	-	-	-	-	-	1.0	-	-	-	-	-	-	-	0.5	-	1.0
	100.0%	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	1.0