Module 2 Case Study: Scheduling

Ben Hanson

University of Minnesota Crookston

Additional Activities

There are several additional activities that would help in estimating resources and duration. First is the PERT Method, otherwise known as the Program Evaluation and Review Technique. This method is a weighted average of three scenarios. First, I would compute the averages for optimistic, pessimistic and most likely time scenarios. Since the PERT method gives more weight to the most likely scenario, I would then multiply the average by four. Next, I would combine the result with the optimistic and pessimistic averages, and then divide the result by six, giving me a final estimate. The optimistic scenario assumes that all goes well and you can complete the activities without any issues. On the other hand, The pessimistic scenario assumes everything will go wrong and it will take longer to complete the activity. The most likely scenario assumes you can complete the activity without any surprises. The PERT method could be a strong additional activity in order to help estimate resources and durations while considering all risks.

Another additional activity is the Analogous Estimation which relies on information from other projects that hold a similar value in order to determine the activity duration for the current project. To complete this activity there would be a need for historical data as well as a degree of expertise regarding the similar projects because the reliability of the estimation does depend on how closely the activities match the projects which are being used for comparison. This should be a very strong activity to use and the early stages of this project's development. The estimates should be adjusted as more is learned about the tasks and how long they can be expected to take with available resources.

A third additional activity that could help estimate resources and durations is known as the Parametric Estimation. To ask you this activity I would multiply the number of units which

are needed by the time it takes to produce the units. Similar to the last activity there will be a need for historical information regarding similar activities in order to complete the estimate. Furthermore this method is scalable. If this additional activity was to be executed it is very important to account and take regard for all tasks that impact the activity.

A final additional activity which could be used to estimate resources and durations is the Delphi Technique. This method utilizes group intelligence to determine activity duration and involves gathering opinions from several different experts and then sending their responses back to the experts for their review. They can change their opinions after reviewing the responses and the process might involve a few rounds in order to investigate different opinions and to get a valid consensus. In order to reduce the potential for bias and prevent experts from overly influencing the results, they should submit their own opinions anonymously. Also you can use a third party to gather the opinions.

Milestones

Listed below are eight milestones for the Recreation and Wellness Intranet Project. Each Milestone is also described using the SMART criteria. The first milestone first project is market analysis of the product completed. What will be estimated here will be the relevance and scope of the product as well as how much the product will have an impact on the market and risk assignment. Another item of importance that will be addressed in this Milestone is the market competitions. Although each iteration can be considered as a milestone this important step will go on throughout the lifetime of the project. The second milestone for this project is to develop the actual plan and model. First, detailed analysis of requirements will take place in this milestone. Also the plan can be developed based upon the requirements If the product

development is by following a specific plan that will be systematic. This Milestone is where the plan will be introduced to to develop the project. The third milestone for this project will be the Prototype developed. This is where the first version of the product or project will be developed. This Prototype may not have the accurate user interfaces and there will not be a test for errors or real-time tests. Next, the fourth milestone is the prototype test clear, where The product will be tested with various tests and the potential errors will be detected. The fifth milestone for this project is to develop the product with GUI and user interfaces. This will be based on the Prototype and the actual product in development will be created with user interfaces and all other required components. The sixth milestone is to release the beta version which is where the created project will be released as a beta. This Milestone is where the test will be implemented into the real world and more prospective feedback will be generated which can be used to make the project more user friendly. The next milestone in this project is to start maintenance. Further testing will take place which will be based on the feedback received in the beta version. The appropriate maintenance will take place in this milestone. The eighth Milestone is quality control test completion where various quality assessments will take place. Also there will be a need for internal and external teams to perform this task. The final Milestone of this project is the product release where the actual project release will take place. After determining these eight milestones for the project several activities may be added to the Gantt chart. These Milestones can be used to determine the activities completion and activities parallel execution. Although milestones normally have no duration, if a milestone is achieved an ongoing activity may be considered as completed meaning the next activity can begin. Gallstones may also be used to isolate the activities involved within a product life cycle. This means that once an activity is completed there could potentially be one or more milestones that are achieved.

Gantt Chart

GANTT CHART

PROJECT TITLE	Recreation and Wellness Intranet Project	COMPANY NAME	MYH
PROJECT MANAGER	Ben Hanson	DATE	2/1/21

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	Duration (days)	PCT OF TASK COMPLETE	PHASE ONE									
							WEEK 1					WEEK 2				
							M	T	W	R	F	M	T	W	R	F
1	**Initiating**				**30**											
1.1	Stakeholder Identification	TBD	2/1	2/10	10											
1.2	Project Charter	TBD	2/10	2/20	10											
1.3	1st meeting after accurate staffing	TBD	2/20	2/30	10											
2	**Planning**				**50**											
2.1	Team planning meeting	TBD	3/1	4/20	3											
2.2	Team charter/project requirements	TBD	3/4	4/20	4											
2.3	Market Analysis of Project															
2.4	Scope statement/company standards	TBD	3/8	4/20	4											
2.5	WBS	TBD	3/12	4/20	6											
2.6	Schedule and cost baseline	TBD	3/18	4/20	3											
2.6.1	Task resources	TBD	3/21	4/20	3											
2.6.2	Task durations	TBD	3/26	4/20	5											
2.6.3	Task dependencies	TBD	3/30	4/20	3											
2.6.4	Draft Gantt chart	TBD	4/2	4/20	6											

A	B	C	D	E	F	G	H	I	J	K
	2.6.3	Task dependencies	TBD	3/30	4/20	3				
	2.6.4	Draft Gantt chart	TBD	4/3	4/20	6				
	2.6.5	Final Gantt chart	TBD	4/10	4/20	7				
	2.7	PERT Method Activity								
	2.8	Analogous Estimation								
	2.9	Develop the plan and model								
	2.1	Risk prioritization	TBD	4/17	4/20	3				
	3	**Executing**				**50**				
	3.1	Survey	TBD	4/21	6/10	2				
	3.2	User inputs	TBD	4/23	6/10	2				
	3.3	Intranet site content	TBD	4/25	6/10	3				
	3.3.1	Temlates and tools	TBD	4/28	6/10	2				
	3.3.2	Articles	TBD	5/2	6/10	3				
	3.3.3	Links		5/5	6/10	3				
	3.3.4	Registration for recreational program	TBD	5/8	6/10	5				
	3.3.5	Registration for classes and program	TBD	5/13	6/10	4				
	3.4	Tracking system/Incentive system	TBD	5/17	6/10	5				
	3.5	Intranet site design	TBD	5/22	6/10	3				
	3.6	Intranet site construction	TBD	5/25	6/10	5				
	3.7	Prototype developed								
	3.8	Intranet site testing		5/28	6/10	3				
	3.9	Prototype test clear								
	3.1	Develop product with GUI and UI								
	3.11	Intranet site roll-out		5/30	6/10	5				
	3.12	Release beta version								
	3.13	Project benefits measurement	TBD	6/5	6/10	5				
	4	**Monitoring and Controlling**				**30**				
	4.1	Progress reports	TBD	6/11	7/10	10				
	4.2	Start a maintenance								
	4.3	Quality control test completion								
	4.4	Delphi Technique		6/20		10				
	4.5	Change requests	TBD	7/1	7/10	10				
	5	**Closing**				**20**				
	5.1	Project release								
	5.2	Final project report	TBD	7/11	8/1	10				
	5.3	Final project presentation	TBD	7/20	8/1	10				

https://docs.google.com/spreadsheets/d/1jC741Bf9Smp1xHrHIND-sMS2MZ6qI5fxQmFKAhmP_QY/edit?usp=sharing