FPD Drinking Metrics – Project Crash

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Project Type

The FPD Drinking Metrics Dashboard project resources are plentiful as project team members are undergoing training and receiving the necessary support for project completion, thus making this project time-constrained. More specifically, AI cloud training, the data pre-processing protocol, and the two-person analyst sub-teams provide a significant advantage to completing the project on time. However, this may not be the necessary conditions to address unforeseen issues that may arise and their impact to each phase of project completion. The 6-month schedule and budget constraint limit the potential contingency of issues that may arise during the project. Potential disruptions and scope creep could have an immense impact on timely completion. Despite this, management and stakeholders, and personnel are stressing the importance of completing this project within the agreed timeframe.

Business Compression & Compression Target

ERP and Database Analysts have noticed data quality issues whilst completing some preliminary data analysis to create the data pre-processing protocol for the entire analyst team to adhere to. The issues are proving to be extensive and are predicted to be time consuming. This delay will increase the total data preparation of the project, thus effecting the phases following. Data cleansing and validation with quality issues will increase the source/data cleaning phase by an additional 2 weeks. This time is necessary as the results found from the data used during dashboard construction and testing will inform decision making.

Activity Compression

The phase/activity of the project the 2-week delay will "crash" is the testing phase the time constraint will involve assigning additional staff and equipment, and minimizing unnecessary processing time to complete activities. Currently, there are 10 work days (2 weeks) allotted to complete this activity. Including another employee who can complete tasks concurrently will cut completion time by half, as well as running the testing at the fastest speed for completion will decrease total activity time. It is important the analyst employee is as proficient as the current to minimize the need for communication between the employees. The executive analyst will now be working with the team to ensure the training can be expedited. His current hourly wage is 117/hour. The current cost for completion of this phase is $2,397, the new cost is $4,137.
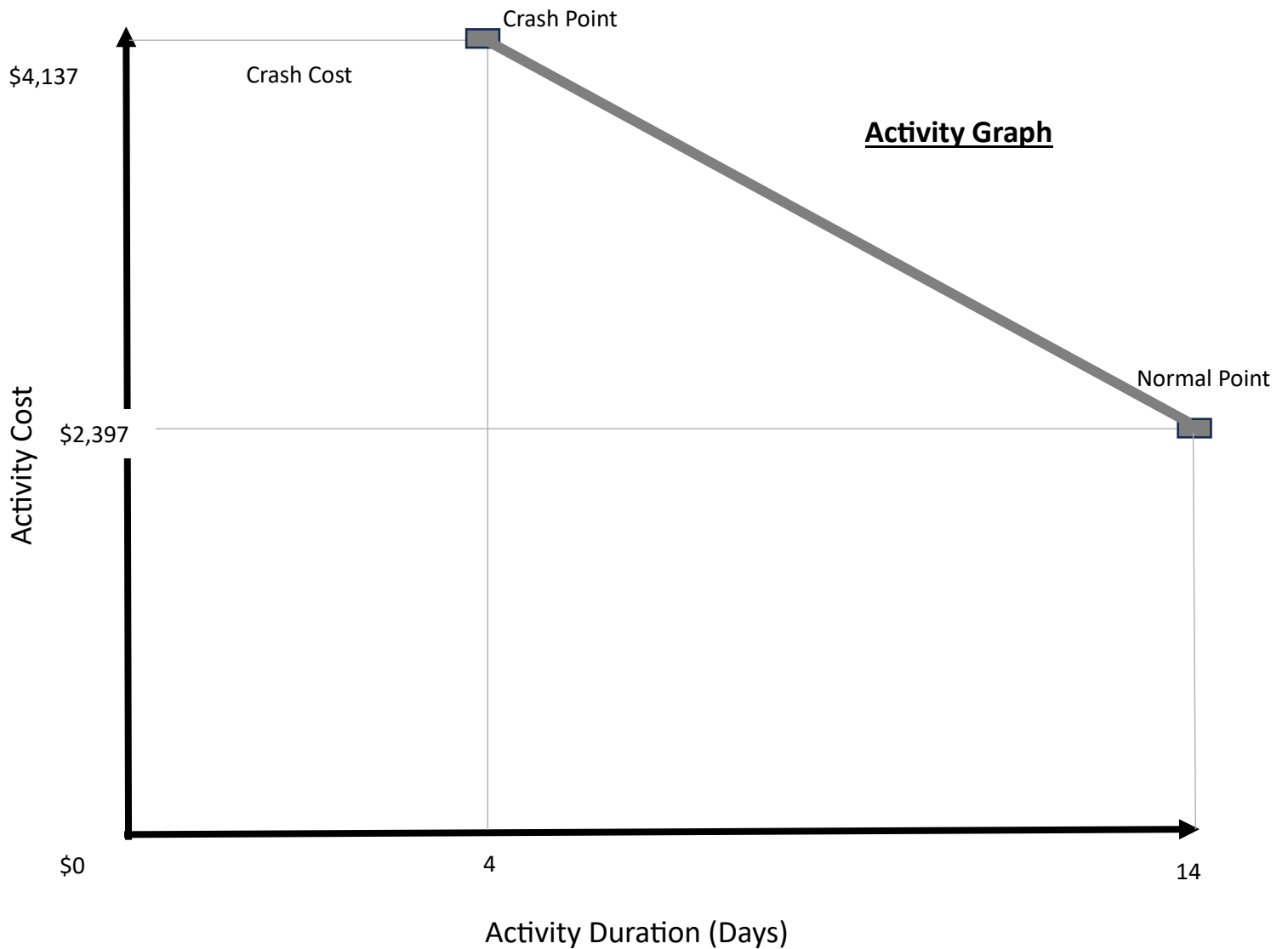
Compression Alternate

An alternate to compressing the user training would be to compress 1.6 User Training. Compression could take place during the guide creation, and personnel training phases, again having another skilled employee take on the role to minimize task time. There may be complications with employee interpretation, due to the speed of training, but they can always reference guides and reach out to IT employees for assistance.

Crash Impact

The impact of crashing the testing phase has an impact on the price of the project. Seen below the crash slope is $174 per day to compensate for the time loss due to data quality issues. There is a reduction in cost to crash the project which is $14,500 (direct), and ($13,000) indirect. In my opinion, it is not

favorable to crash the project to see such small changes in cost. This can have a negative effect on project team morale. Feasibility of timely, and quality project completion is the goal.

Crash Point

Activity Graph

$4,137   Crash Cost

Normal Point

$2,397

Activity Cost

$0   4   14

Activity Duration (Days)

Cost Slope = Crash Cost – Normal Cost/ Normal Time – Crash Time

Cost Slope = $4,137-$2,397/14-4 = $174 per day

Summary Cost By Duration Table Critical Path – ABDEFH (13 weeks)

Project Duration	Direct Cost	Indirect Costs	Total Costs
13 weeks	140,000	1,000	141,000
12 weeks	129,250	1,000	139,250
11 weeks	126,250	3,000	127,250
10 weeks	102,350	2,000	104,350
9 weeks (crash)	89,483	2,000	91,483
8 weeks	71,717	500	72,017
7 weeks	67,068	5,000	72,068
6 weeks	62,480	4,000	68,480
5 weeks	57,892	2,000	59,892
4 weeks	53,304	2,000	55,804
3 weeks	49,152	1,500	52,152
2 weeks	34,152	1,500	36,152
1 week	15,000	500	15,500

Project Cost-Duration Graph