Project title: Online Price Lists Management

Project ID: BTS-730 GRP 5 (LAB 7)

Authors: Oluwaseyi Aketepe(134971159) Khai Phan (100901164), Marco Rico (111708178), Julian Boyko (111404174)

Variance:

Task Mode	Task Name	Start	Finish	Baseline Start	Baseline Finish	Start Var.	Finish Var.
	Group 5 - Small Business Solution	Mon 00-01-03	Tue 00-07-18	Mon 00-01-03	Tue 00-07-18	0 days	0 days
	Scope	**Mon 00-01-03**	**Thu 00-01-06**	**Mon 00-01-03**	**Thu 00-01-06**	**0 days**	**0 days**
	Analysis/Software Requirements	**Fri 00-01-07**	**Fri 00-01-21**	**Fri 00-01-07**	**Fri 00-01-21**	**0 days**	**0 days**
	Design	**Mon 00-01-24**	**Wed 00-02-09**	**Mon 00-01-24**	**Wed 00-02-09**	**0 days**	**0 days**
	Development	**Thu 00-02-10**	**Wed 00-03-08**	**Thu 00-02-10**	**Wed 00-03-08**	**0 days**	**0 days**
	Testing	**Tue 00-03-07**	**Wed 00-04-12**	**Tue 00-03-07**	**Wed 00-04-12**	**0 days**	**0 days**
	Training	**Thu 00-04-13**	**Wed 00-05-24**	**Thu 00-04-13**	**Wed 00-05-24**	**0 days**	**0 days**
	Documentation	**Thu 00-05-25**	**Tue 00-06-27**	**Thu 00-05-25**	**Tue 00-06-27**	**0 days**	**0 days**
	Pilot	Wed 00-06-28	Tue 00-07-11	Wed 00-06-28	Tue 00-07-11	0 days	0 days
	Deployment	Wed 00-07-12	Tue 00-07-18	Wed 00-07-12	Tue 00-07-18	0 days	0 days
	Post Implementation	Tue 00-07-18	Tue 00-07-18	Tue 00-07-18	Tue 00-07-18	0 days	0 days
	Software development	Tue 00-07-18	Tue 00-07-18	Tue 00-07-18	Tue 00-07-18	0 days	0 days

What we noticed was that there was no variance between tasks throughout the project.

Cost:

Task Name	Fixed Cost	Fixed Cost Accrual	Total Cost	Baseline	Variance	Actual	Remaining
Group 5 - Small Business Solution WBS	$0.00	Prorated	$36,072.00	$35,752.00	$320.00	$10,670.00	$25,402.00
Scope	**$0.00**	**Prorated**	**$920.00**	**$920.00**	**$0.00**	**$920.00**	**$0.00**
Analysis/Software Requirements	**$0.00**	**Prorated**	**$3,080.00**	**$3,080.00**	**$0.00**	**$3,080.00**	**$0.00**
Design	**$0.00**	**Prorated**	**$3,380.00**	**$3,620.00**	**-$240.00**	**$3,380.00**	**$0.00**
Development	**$0.00**	**Prorated**	**$6,160.00**	**$5,600.00**	**$560.00**	**$3,290.00**	**$2,870.00**
Testing	**$0.00**	**Prorated**	**$6,120.00**	**$6,120.00**	**$0.00**	**$0.00**	**$6,120.00**
Training	**$0.00**	**Prorated**	**$8,660.00**	**$8,660.00**	**$0.00**	**$0.00**	**$8,660.00**
Documentation	**$0.00**	**Prorated**	**$4,800.00**	**$4,800.00**	**$0.00**	**$0.00**	**$4,800.00**
Pilot	$0.00	Prorated	$1,968.00	$1,968.00	$0.00	$0.00	$1,968.00
Deployment	$0.00	Prorated	$704.00	$704.00	$0.00	$0.00	$704.00
Post Implementation Review	$0.00	Prorated	$280.00	$280.00	$0.00	$0.00	$280.00
Software development template complete	$0.00	Prorated	$0.00	$0.00	$0.00	$0.00	$0.00

The total cost for the project was about 36 thousand dollars. Additionally, training ended up costing the most out of the whole project, which is surprising as we figured development would cost the most. For our design, because we removed some days from the baseline schedule, we have cut our costs by $240 for paying employees on those days. For development, we have added days and that has caused us to pay employees an extra $560 for the new days that they are coming in. This leaves us with a variance so far for the budget of $320

Work:

Task Name	Work	Baseline	Variance	Actual	Remaining	% W. Comp.	Cost
Group 5 - Small Business Solution WBS	1,112 hrs	1,104 hrs	8 hrs	330 hrs	782 hrs	30%	$36,072.00
Scope	**28 hrs**	**28 hrs**	**0 hrs**	**28 hrs**	**0 hrs**	**100%**	**$920.00**
Analysis/Software Requirements	**96 hrs**	**96 hrs**	**0 hrs**	**96 hrs**	**0 hrs**	**100%**	**$3,080.00**
Design	**112 hrs**	**120 hrs**	**-8 hrs**	**112 hrs**	**0 hrs**	**100%**	**$3,380.00**
Development	**176 hrs**	**160 hrs**	**16 hrs**	**94 hrs**	**82 hrs**	**53%**	**$6,160.00**
Testing	**104 hrs**	**104 hrs**	**0 hrs**	**0 hrs**	**104 hrs**	**0%**	**$6,120.00**
Training	**284 hrs**	**284 hrs**	**0 hrs**	**0 hrs**	**284 hrs**	**0%**	**$8,660.00**
Documentation	**192 hrs**	**192 hrs**	**0 hrs**	**0 hrs**	**192 hrs**	**0%**	**$4,800.00**
Pilot	80 hrs	80 hrs	0 hrs	0 hrs	80 hrs	0%	$1,968.00
Deployment	32 hrs	32 hrs	0 hrs	0 hrs	32 hrs	0%	$704.00
Post Implementation Review	8 hrs	8 hrs	0 hrs	0 hrs	8 hrs	0%	$280.00
Software development template complete	0 hrs	0 hrs	0 hrs	0 hrs	0 hrs	0%	$0.00

The total project totalled 1,112 hours which is about a month and a half. Training took the longest, clocking in at almost 300 hours, which would make sense considering it also cost the most out of the whole project. Additionally, documentation came in second for the most time-consuming part of the project, being about 20 hours longer than development. In terms of changes, the design had one work day removed which removed 8 hours from our projected project time. Development on the other hand has added 2 days to the total project time, this has created in the end a variance of 8 hours at this point in the project.

Earned value:

Task Name	Planned Value - PV (BCWS)	Earned Value - EV (BCWP)	AC (ACWP)	SV	CV	EAC	BAC	VAC
Group 5 - Small Business Solution WBS	$35,752.00	$10,350.00	$10,670.00	-$25,402.00	-$320.00	$36,857.38	$35,752.00	-$1,105.38
Scope	**$920.00**	**$920.00**	**$920.00**	**$0.00**	**$0.00**	**$920.00**	**$920.00**	**$0.00**
Analysis/Software Requirements	**$3,080.00**	**$3,080.00**	**$3,080.00**	**$0.00**	**$0.00**	**$3,080.00**	**$3,080.00**	**$0.00**
Design	**$3,620.00**	**$3,620.00**	**$3,380.00**	**$0.00**	**$240.00**	**$3,380.00**	**$3,620.00**	**$240.00**
Development	**$5,600.00**	**$2,730.00**	**$3,290.00**	**-$2,870.00**	**-$560.00**	**$6,748.72**	**$5,600.00**	**-$1,148.72**
Testing	**$6,120.00**	**$0.00**	**$0.00**	**-$6,120.00**	**$0.00**	**$6,120.00**	**$6,120.00**	**$0.00**
Training	**$8,660.00**	**$0.00**	**$0.00**	**-$8,660.00**	**$0.00**	**$8,660.00**	**$8,660.00**	**$0.00**
Documentation	**$4,800.00**	**$0.00**	**$0.00**	**-$4,800.00**	**$0.00**	**$4,800.00**	**$4,800.00**	**$0.00**
Pilot	$1,968.00	$0.00	$0.00	-$1,968.00	$0.00	$1,968.00	$1,968.00	$0.00
Deployment	$704.00	$0.00	$0.00	-$704.00	$0.00	$704.00	$704.00	$0.00
Post Implementation Review	$280.00	$0.00	$0.00	-$280.00	$0.00	$280.00	$280.00	$0.00
Software development template complete	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

For our earned value table, we noticed that our VAC column has a negative number overall. This tells us that the project currently is over budget and looking into more detail, our development is the reason for this. Also, looking at the SV column, we have a negative number for our project currently. This is telling us that we are currently behind schedule on the entire project.

- **BAC (Baseline Cost) Khai:** This one is a total planned cost for each of the tasks. This will give Project Manager a sense of their budget and resources for each task.
- **VAC (Variance at Completion) Khai:** This will show the differences between the Baseline Cost and the Estimated Cost for each of the time.

  For example: If tasks A is budgeted at $100 per day and planned for 2 days, it leaves the Baseline Cost and Estimated Cost at $200. However, if the task took longer than expected, let say 3 days, now the Estimated Cost will be at $300W and Baseline Cost at $200 only. The $100 difference is the VAC. Generally, the Project Manager only considers VAC as a whole because there are some tasks that will take fewer hours to work and some take more hours (let it balance itself).

- **Earned Value - EV (BCWP) Seyi:**

  Earned value looks at the percentage of the work actually completed and tells us how much that work costs according to the baseline. The cost is calculated up to the status date. So if half of the work has been completed and the status date is set at halfway through the task then the PV, EV and Actual Cost (AC) values will all be the same assuming no additional costs have been incurred. EV = baseline cost of the task multiplied by the percentage of the task completed.

- **AC (ACWP) Seyi:** the cost incurred and recorded for work completed within a given time period. AC = Amount spend for work done
- **BCWS (Budgeted Cost of Work Scheduled):**

  This cost is the total cost of every task for a goal including changes to the budget, timeframes, etc.

  This is calculated by adding up the cost of all the tasks in a certain goal.

  In our chart, development is $5600 which includes a cost change of $2870 because we have increased the timeframe of development

- **EAC (Estimate at Completion)**

  This value is the projected cost at the end of a goals time frame. This includes predicting the final value that our goal is going to cost when 100% complete.

  The formula to calculate this is EAC = ACWP + (Baseline cost X - BCWP) / CPI

  When looking at our table, development is currently at 5600 at 80% complete. So EAC is projecting that our final cost when the goal is 100% done is going to be $6748.72

- **SV:** SV which stands for earned value schedule variance shows the difference in cost terms between the current progress and the baseline plan of a task.

  It is calculated by doing the following formula: SV = BCWP – BCWS

  What this means in terms of time/cost management is that something like development which has a $-$2,870 SV, shows that, that's there is a negative difference between the current progress and the baseline plan for development.

- **CV:** CV which stands for earned value cost variance contains the difference between how much something should have cost and how much it actually costs to achieve the current level of completion.

  It is calculated by doing the following formula: CV = BCWP – ACWP

  What this means in terms of time/cost management is that something like design that has a $240 CV shows that it actually costs less to do the design than we had anticipated. This means that we had money left over.