New Perspective – Call it out

Quote Article

Pose A Question

Apply the principle at hand with real life

Build on multiple posts

Session 4:

No Such Thing as Free Slack

The pun in my title is referencing the economic phrase “no such thing as free lunch”, rather than actually saying there is no free slack.

Why is slack important to a project manager and what is the difference between free and total slack?

Slack is important to a project manager because it numerically demonstrates the flexibility and rigidity of a specific project, highlighting potential bottle necks. Free Slack pertains to a specific activity and the number of days it can be delayed before affecting the next task. For example, on my projects the free slack between SAS code running and when I need to write the analysis is where my free slack can be calculated without it cutting into my writing. I found this blog <http://pmbypm.blogspot.com/2011/08/total-float-vs-free-float.html> explains visually how free float works.

Total Slack is the same as Free Slack with the difference being instead of next activity it pertains to the whole project. For example, if my SAS code is taking too long I can calculate the total slack of the whole project and subtract the extra hours from the SAS taking too long, and this will let me know how the entire project is going to be affected.

I have only used slack calculations on small projects, how does slack affect large scale multi work package projects?

Ease of Use Software

There are numerous precedence diagramming software packages available. Select one, preferably one that another student has not already reviewed, and check it out. Write a brief review of it for the class.

Smartsheet.com offers online Gantt Chart software that is very helpful for precedence diagramming. The graphical user interface (GUI) is very user friendly and allows for point and click operation. Another pro is the feature that allows different vantage points. One can navigate at any level of the project with very few clicks. In addition, project iterations are automatically calculated down the chain to move deadlines and progress with ease. The x-axis is easily customizable to see timeframe, deadlines, and hierarchical priorities. The weaknesses I found were along the lines of lack of customization. Given that the GUI is point and click, one cannot easily operate outside of the programmed functions. Also, this tool seems to handle single variable change starting from the top down, which is not always realistic for project management.

Given that I work on rather small projects that are finished within a few weeks, this software would be a great first step in better organizing my project. For an experienced project manager with projects that are larger in scope, this software is probably too simplistic and will not allow the needed customization.

For the experienced project managers, do you see this software being too simplistic for you?

https://www.smartsheet.com/c/online-gantt-chart

The longest path through a network also indicates the minimum amount of time needed for a project. What concept does this statement refer to and why is it important to know? How can the longest path determine the shortest project duration?

Spreadsheets for Critical Path

The concept being referred to above is Critical Path or Critical Path Method (CPM), and is important based on the following:

* Shows the level of flexibility and amount of scheduling through different paths of the project (PM Chap 6).
* The forward pass calculation is established from the longest path, and early start and finish times are drawn from the longest path as well.

In addition to the importance of critical path, the journal *Management Science and Engineering* published an article titled “The Implementation of Spreadsheet Modeling for Generalized Critical Path Method”. This article highlights many different spreadsheet techniques for modeling critical path, which makes the whole process a lot easier and efficient for project managers. I’d recommend taking a look at a few of the different techniques in the attached document (Pages 2-6). I personally want to become more familiar with the VLOOKUP/HLOOKUP functions in Excel on my next project that requires building a critical path. In my current work I do not have projects long enough for a critical path, but 2014 will be a year where I get access to bigger projects where I can apply this technique.

Has anyone used a spreadsheet to apply critical path modeling, how was the experience?

How can the longest path determine the shortest project duration?

From the forward pass calculation based off of the longest path, one can establish the shortest project duration.

Annua, A. K., Azlan Wan, H. W., Fahmi Mohamad, A. M., Suziyanti, M. M., & Ahmad, T. N. (2012). Add to e-Shelf The Implementations of Spreadsheet Modeling for Generalized Critical Path Method . *Management Science and Engineering*, *197*(1), 235-238. Retrieved January 26, 2014, from the ProQuest ABI database.

Often top management dictates the deliverables for a project, telling the team what the scope will be, the available budget, and the deadline. In many situations, what they want is not realistic.

How might you use the estimates from a work breakdown structure to help them see what is and is not realistic?

From working on multiple USAID projects and private industry projects, I have seen disparate expectations from management and the implementation team. A major contributing factor was the transition from strategy to tactic and management often was too embedded in overall strategy that their grounding was lost. A pithy work breakdown structure visualization (WBSZ) is a great way to bridge the strategy/tactic divide. Timeliness is key, and utilizing team members is key for a broad reaching WBSZ. Take for example a USAID project. Please refer to the attachment for the WBSZ. Management consists of beneficiaries and the CEO, and the Housing WBS is a high level overview of the actual costs bases on actual contractor estimates. The goal is to get this document in front of key management with the intent to let them iterate as necessary. This takes a great deal of agility, but it keeps ownership and decision making at the same level. Also, in my experience, the WBSZ is a great way to manage up.

When I was in Afghanistan, conflict was handled very differently in regard to the implementation of deliverables. Quoting the article “*Islamic perspectives on conflict management within project managed environments”*  from the *International Journal of Project Management*,

“from an Islamic perspective, conflict is characteristic of an unhealthy situation as it is a threat to cohesiveness and conformity of the group”

Because conflict was viewed as unhealthy, it took a lot more time to dance around issues within the WBS that changed. We had to continually make sure people were not disrespected or cut out of a certain task. The saving grace was introducing ambiguity in the WBS such that individual assignment of tasks were not divulged until the very last moment, thus saving face.

Has anyone faced this type of cultural difference in your projects around the WBS? How do you handle different cultural expectations?

Have any of you faced such a situation? If so, how have you handled it and how did it work out?

I was working as a Project Manager in Alaska with the beneficiaries (B) on site and senior management (SM) was in the lower 48 states. Having a modified WBSZ allowed me to stay out of the strategic grid-iron that took place between B and SM. Ultimately the project faced major financial cut backs, a common occurrence in the Non-Profit industry, and since the WBSZ had been in the hands of SM I did not have to deal with the stemming issues. Rather, I was able to focus on project management and collaboration with SM to make iteration from the WBSZ.

DB2

Linear estimates and financial estimates should be handled in completely different systems. The standardization of metrics is essential to establishing key performance indicators (KPIs). Having a day metric is not suitable for standardization across a project, and simply should not be used given that it is ambiguous, prone for miscommunication, and does not acquiesce with payroll.

In a journal article titled, “*An exploratory project expert system for eliciting correlation coefficient*

*and sequential updating of duration estimation”* the basis for establishing mathematical formulas is a common standardization of estimates. If one does not establish standardization sophisticated estimation techniques cannot be used, or are built on false expectations.

The cool thing here for us predictive modelers is that stochastic Bayesian modeling can be used to establish the best critical path in a real time setting (Sungbin Cho). In a study from the *European Journal of Operational Research*, it was found that using this approach resulted in an increase prediction accuracy of 38.36% from the PERT approach (Sungbing Chow). The article essentially outlines how activity duration coupled with resources and risk are used as variables to establish a predictive model.

Has anyone used correlation coefficients in project estimation? Is this introducing more process with little purpose, or could this be the wave of the future for project estimation?

Cho, S. (2006). An exploratory project expert system for eliciting correlation coefficient and sequential updating of duration estimation. *Expert Systems with Applications*, *30*(4), 553-560. Retrieved January 20, 2006, from [http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0957417405001442#](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0957417405001442)

Cho, S. (2009). A linear Bayesian stochastic approximation to update project duration estimates. *European Journal of Operational Research*, *196*(1), 585-593. Retrieved January 20, 2014, from http://hopper.library.northwestern.edu/sfx?ctx\_ver=Z39.88-2004&ctx\_enc=info:ofi/enc:UTF-8&ctx\_tim=2014-01-20T07%3A24%3A52IST&url\_ver=Z39.88-2004&url\_ctx\_fmt=infofi/fmt:kev:mtx:ctx&rfr\_id=info:sid/primo.exlibrisgroup.com:primo3-Article-sciversesciencedirec

Think of a situation, perhaps on a project team, where you had to make some estimates. How did you go about deriving them?

In my line of work, estimates for analytical projects are derived from complexity and similarity of past projects, as well as urgency of due date. Bear in mind that these project are often a few days to a few weeks long in duration, and involve about four team members. The approach is both bottom up and top down for the following reasons:

I work with management to drive timeframe, key deliverables (is this project going to be delivered in a PowerPoint, Excel spreadsheet, or Tableau), and big picture processes (where is this project going two weeks after were done with it, why does this project matter, where is it adding value). This helps to establish the project from an ideation concept into actual project estimates.

In addition, I work with the programmer and specialists to define reasonable timetables as well as further scoping past projects that were similar to the request.

Did you gather information from other sources? If so, who or what?

Other teams and business pyramids are often viable sources for gathering estimates. Our work often coincides with the Marketing Business Intelligence team, and I often need to partner with other project advisors in order to not reinvent the wheel for certain analyses.

What did you find was most helpful in developing realistic estimates?

On analytical projects, I continually keep the beneficiary in the communication loop and factor in about a 30% unforeseen delay for risk. I know padding is discussed on page 131, but with the analytical projects I work on there is constant ambiguity based on IT nature of our projects. I am looking at assuaging this with a forced project scope statement with every project request.

And conversely, what methods did you try that you did not find helpful? What would you do differently if you had to repeat this estimating?

Trying to build an estimate from the ground up is often too “micro” of a process that ends in wasted time and frustration. In a past project, I drew out how long I thought writing the code would take, iterations to the code, as well as errors from the code, but this proved to be grossly miss-stated based on a lack of direction on what the code was going to entail. I have also estimated in areas where I do not have expertise which proves to be inaccurate. As a result of the above failures, I estimate from top down and seek the advice of subject matter experts where applicable.

After reading this chapter, page 149 discusses Estimating Databases. Given that in this class we are all MSPA students, I am intrigued by this idea/tool. Has anyone, Jank Vora IBM, worked with an estimating database?

There was a short article by Vance Publishing in regard to a cabinet company that utilizes an estimating database to quickly estimate projects both custom and pre-built. Could this be the future for project estimation? Is there a way to use confidence intervals as well as predict project timelines from past projects?

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From reading quite a few posts above, I have found a correlation between negative meetings and certain actions as well as positive meetings and specific actions:

Poorly Run Meetings

Lack of necessity to meet

Irrelevant information being discussed at the meeting

Unnecessary events like an ice-breaker ☹

Lack of preparation

Lack of engagement

Lack of attender preparation

Ambiguous title to meeting

Well Run Meetings

Participant involvement

Prior knowledge of meeting

Positive exchange of information that is relevant to topic at hand

Timeliness

Staying on topic

Follow up asks

These are a few of the main points I have seen in the above posts.

Has anyone tried putting together a Responsibility Matrix (RM) prior to a meeting?

This is a new perspective for me, but I was thinking it might help to sidestep the negative attributes and focus on the positive attributes outlines above. The main hurdle I see from the RM is getting people to read it, and then deliver. To counter these preliminary hurdles I would have managements support of the RM, and word the email in such a way that deliverable would be expected.

In an article from *Industrial Management*, the authors state, “The key to the responsibility matrix, however, is not simply to identify who participates in a particular step. Instead, the key is to specify the nature of each individual's participation.” I think this applies really well in a meeting context.

I want to try the RM the next time I am responsible for a meeting.

Is there any input on whether a RM is a good idea for a meeting?

References

Bush, K., & Davies, W. (1996). Managing product development in the high-tech industry. *Industrial Management*, *38*(1), 5. Retrieved January 17, 2014, from http://go.galegroup.com.turing.library.northwestern.edu/ps/i.do?action=interpret&id=GALE|A18482507&v=2.1&u=northwestern&it=r&p=AONE&sw=w&authCount=1

In previous posts, including David’s quote to Annette, the issue of complaining has surfaced multiple times. I researched the topic of complaining from the American Psychological Association Journal, and found an entry authored by Robin Kowalski titled *Complaints and complaining: Functions, antecedents, and consequences.* This article shed a new perspective on the consequences of complaining and I am applying it to a setting devoid of a functional WBS.

The model below highlights the emotional flow leading up to complaining. Notice how Self-Focus is the starting block. A WBS seeks to dissolve the starting step by being outward focused, how am I going to contribute to this project, rather than internal focused, what don’t I like about “x”. Robin Kowalski concludes that self-focus is at the heart of complaining, which can be very destructive to a collaborative effort, whether it be academic, work based, or personal.

Whether in a personal setting or work setting, I have experienced very little post productivity once the complaining begins. For example, the team I am on has around 15 members and my manager asked for feedback in regard to a better work/life balance. There were a few good contributing remarks like the benefit of working from home, but one of my co-workers complained about a work structure that did not make sense. From that point on, the meeting turned into nothing but complaining, and we ended talking about how the soda machine needs to carry more flavors. While this does not directly relate to the WBS, in my opinion the issue of complaining is a negative byproduct of a lack of WBS.

Fellow classmates, what has been your experience with complaining in a work setting where a WBS was not put in place?

http://web.ebscohost.com.turing.library.northwestern.edu/ehost/detail?sid=04b4f45b-5a21-434d-b6a9-3f658cf3b8a3%40sessionmgr111&vid=3&hid=123&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=pdh&AN=1996-02773-001&anchor=bul-119-2-179-EBDA