



PDQ Project Estimation

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Assumptions



- **Requires Top-Down estimating, because there is simply not enough time to do Bottom-Up**
- **Create Estimates that primarily involve:**
 - Contracts for the Federal Government.
 - Services as opposed to Other Direct Costs or materials
 - Cost/price build-up that is approved and submitted
- **You have access to some performance data on prior contracts/projects through you colleagues**
- **Familiar with Basic Estimating Terms**

The Basic Process



- **Outline High-Level Tasks**
- **Collect Reference Materials as Needed**
 - Standard Schedules
 - Prior Estimates
 - Status Reports from Prior Projects
- **Sketch Duration and Phasing of High-Level Tasks**
- **Assign FTE Levels to Each of the Tasks.**
- **Determine Average Hourly Rate**
- **Produce High-Level Basis of Estimate/Price**

Example Statement of Work



The contractor shall design, develop and deploy the Human Resources Subject Area (HRSA) of the Enterprise Data Warehouse. The HRSA shall include all the code values used to analyze HR data within the agency and will provide a defined number of standard reports.

The contractor shall also develop training materials to train the end user community and deliver 8 training sessions.

Conceptual Tasks



- 1. Project Management**
- 2. Requirements Gathering/Validation**
- 3. Data Modeling**
- 4. Extraction, Transformation and Load Development, Testing & Deployment**
- 5. Query and Reporting Development, Testing & Deployment**
- 6. Training Development & Delivery**
- 7. Incremental Data Warehouse Loads (Optional)**

Conceptual Task Start and End Dates?



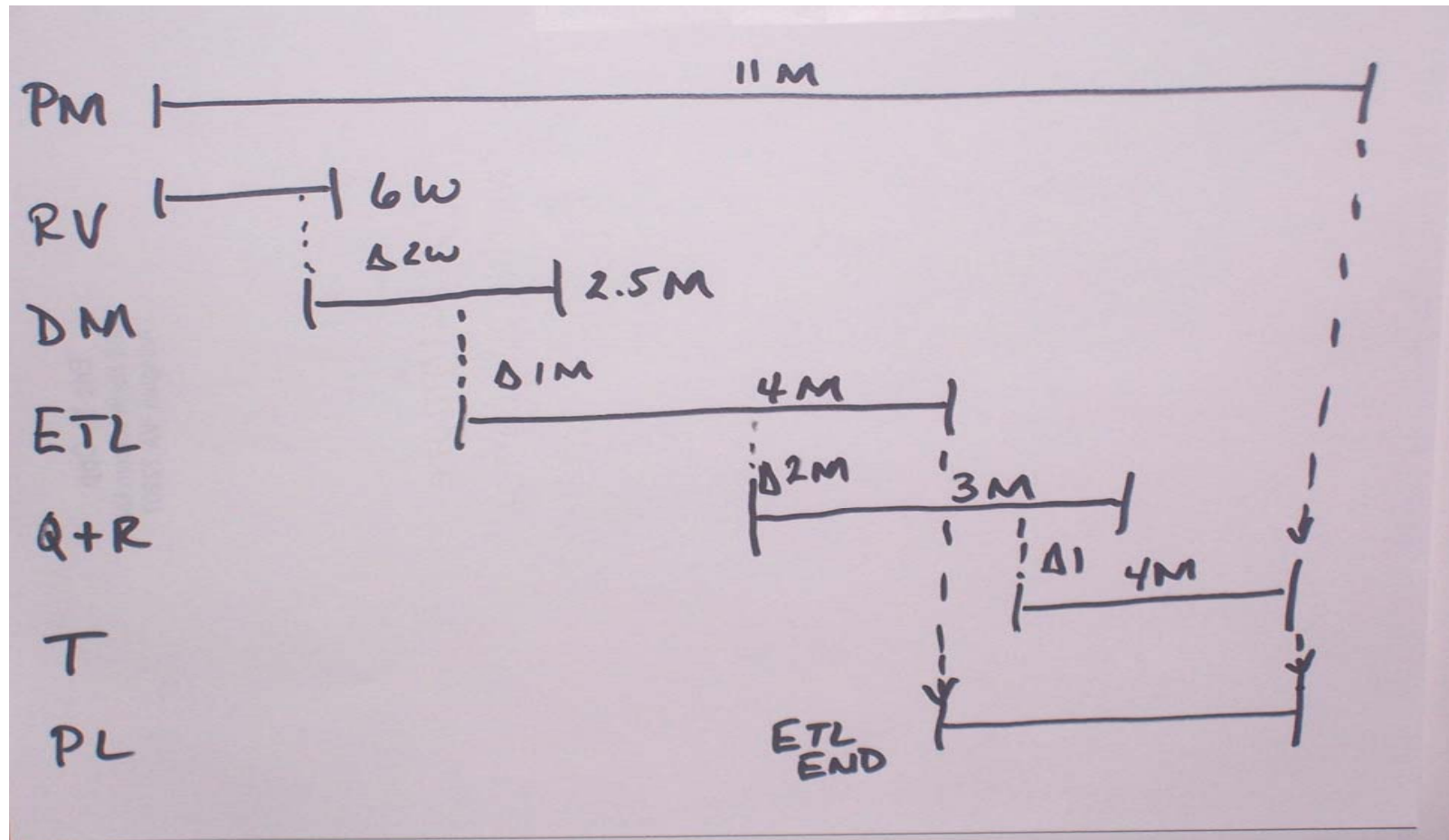
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- **If you have no clue how to estimate a particular task, look in some old project status reports and/or report submissions:**

6/1/2004 – “Started development of module X of application Y.”

9/15/2004 – “Delivered module X of application Y to the customer (testing).”

- **If you have the raw submissions, you will know the rough start and end dates as well as how many people worked on the task.**

Phasing and Duration



FTE Levels



- **PM**
 - .75 FTE's for 11 months (.25 PM, .25 QA, .25 CM)
- **Requirements Validation**
 - 3 FTE's for 1.5 months (1 DWA, 1 DM, 1 Q&R Dev)
- **Data Modeling**
 - 3 FTE's for 2.5 months (1 DWA, 1 DM, 1 Q&R Dev)
- **ETL**
 - 5 FTE's for 4 months (1 DWA, 1 ETL, 2 ETL JR, 1 DQA)
- **Query and Reporting**
 - 4 FTE's for 3 months (1 DWA, 3 Q&R Dev)
- **Training**
 - 2 FTE's for 4 months (2 Trainers)
- **Periodic Loading**
 - 1 FTE for 4 months (.25 DWA, .5 ETL, .25 DQA)

High-Level Estimate



- **Parameters**
 - \$100/hour average run rate
 - 160 hours per month
- **Estimate**
 - $(8.25 + 4.5 + 7.5 + 20.0 + 12.0 + 8.0 + 4.0)$ FTE Months
 - 64.25 FTE Months
 - 64.25 FTE Months * 160 hours/FTE Month
 - 10,280 hours
 - 10,280 hours * \$100/hour
 - \$1,028,000 total
- **Second Cycle Adjustment of Assumptions**

Informal Survey



How many people use:

- XL for estimating?
- MS Project for estimating?
- Neither?