

PRECEDENCE DIAGRAMMING METHOD (PDM)

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Sequence Activities

Sequence activities are known to be the process of identifying and documenting relationships among particular project activities (PMI, 2013, pg. 562). The sequence activities process takes all the activities you defined in the activities process and orders them by precedence. It creates the relationship between these activities and identifies the order in which they need to be done. This process does not create the schedule itself during this process, and therefore it does not assign any start or finish dates to these activities. The inputs for this process include: activity list, activity attributes, milestone list, project scope statement and organizational process assets. The activity list contains the schedule activities and needs to be arranged into the order they should be performed for your diagram. The activity attributes provides additional insight into which activities need to be performed before others. The milestone list provides the key milestones that might influence the order of your activities. The project scope statement helps ensure nothing is missed, and could often influence the activity performance order.

There are four tools used in this process: Precedence Diagramming Method (PDM), dependency determination, applies leads and lags and schedule network templates. The PDM creates a graphical representation of your activities list and the order they must be performed. This diagram is often shown as a simple flow chart, with rectangles representing activities, the arrows their dependencies and units of duration listed above the nodes. The outputs from this process are the project schedule network diagrams and any project document updates as necessary. The network diagram is not the schedule, merely a representation of activity dependencies. The schedule is developed in a different process. This diagram can include summary nodes of activities, or a complete representation of all activities, depending on the needs.

Most of these processes share similar relations in a global setting, only being affected by the knowledge base and experience of the project managers. Culture practice can become a constraint when tackling such projects in particular countries. Relative similarities can be shared and seen from taking over failing projects. Retracing the relationships created between failing project activities and identifying the order in which they were done, can be some techniques required to restore failing projects. Understanding the tendencies of the failing areas will retract the project team to some more positive directions. The dependency determination tool will manage to find the lags within the schedule network of the failing projects.

References

Larson, E. & Gray, C. (2014). *Project Management: The Managerial Process* (6th ed.). New York, NY. McGraw Hill Education.

Project Management Institute (PMI). (2004). *A guide to the project management body of knowledge (PMBOK guide)*. Newtown Square, Pa: Project Management Institute.