

Success with a little Help from my Friends

In Project Management, even very simple projects, tasks and activities are likely to be constrained by and are dependent on the environment in which they are taking place. This includes; other project activities, the day to day activities that drive the business environment and/or, especially in larger projects, external influences and controls from the wider environment, possibly outside project control.

This short blog aims to give practical advice on how to recognise and manage project dependencies.

To begin with we need to recognise and understand what dependencies are. A project dependency



is the logical link between two tasks or activities where a predefined output or product from one is required before the initiation of the other. This is also true, but vice versa for the complimenting activity or task. Dependencies within projects have links that flow both ways.

When producing the project plan or schedule, dependencies are depicted as the relationships between individual tasks. Preceding tasks must be completed before moving on to the next or succeeding tasks. All of the tasks required to achieve the project's scope are sequenced according to their dependencies for each other, and then resources are linked to the tasks and a project schedule constructed.

For example, part of digital transformation project could have the following activities:

1. Install IT equipment and infrastructure
2. Install applications and software
3. Test IT operating environment
4. Issue Test certificates as acceptance criteria to the customer.

Here it is easy to see the dependencies between the activities and understand that activity 2 cannot be started until activity 1 is complete and to start activity 3, activity 2 must be complete. The final activity can only be conducted once activity 3 is complete. This concept can also be understood in terms of assumptions, constraints and risk:

Situation. The Project Manager appreciates that full integration testing of the capability is required before a valid test certificate can be issued as proof to the customer that this milestone is being met. The Project cannot move ahead without this Approval.

The PM will “**Assume**” that the testing will take 2 weeks and will plan accordingly, however this part of the project cannot progress until it is complete. As such the Project Team is “**Constrained**”. There is a “**Risk**” of that the project might get delayed if the testing is not completed as per the schedule.

The key to managing dependencies in project management is twofold:

1. Build relationships early between dependency owners and spend time ensuring that teams understand their part in the bigger picture. Each team should appreciate the links and importance for the activities they are responsible to deliver, how they interact and support other teams and how important these relationships are.
2. Always try to reduce the number of dependencies as low as possible, this will reduce the complexity and as such the time and effort of management and reduce any associated risk. Work with all the project teams to creatively think of ways to reduce dependencies, for example, full stack teams are better than having a web team and a database team if you're working with software.