

Dependency Game

by Dana Pylaeva & Ilja Vishnevski

Objective of the Game

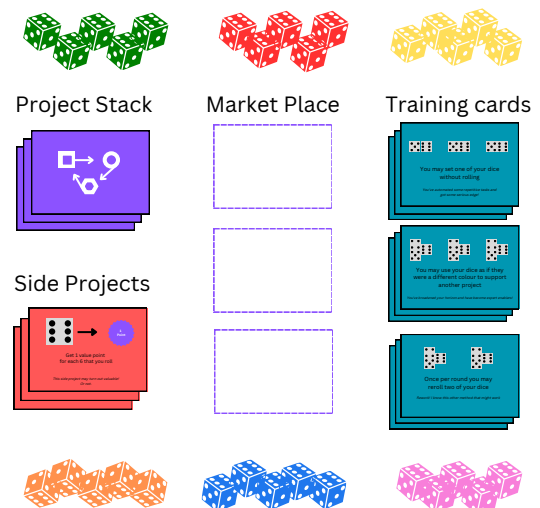
Each player represents a team or department in a company. Working together, players must find a golden path to delivering maximum value by benefiting from collaboration vs. getting stuck in dependencies

Game Setup

Each player gets 5 dice of one colour.

The best game experience is with 6 players. If there are less than 6 players in the game, remove extra colours (dice and project cards of corresponding colour).

Place cards on the table as shown in the picture (purple project cards face down, red side projects and turquoise training cards face up).



Game Flow

The game is played for 8-12 rounds (“months of work”). Each round consists of these 4 steps: Set - Plan - Work - Score.

Set: *1st Round:* Each player draws a project from the project stack. *Following rounds:* Players who have finished a project in the previous round draw up a new project from the project stack.

Players decide whether to keep (own) the drawn projects or put them into the market place in the middle of the table (face up).

Plan: Players choose what to work on and allocate dice (“capacity”) to projects, side projects or trainings (see types of cards). Players can agree to give each other dice (“support other teams”).

Work: Players roll the dice (“do the work”) as agreed. Dice must be assigned before they are rolled

Score: Calculate results - delivered projects, side projects, penalties - and note them on the score sheet

Types of cards (available work)

Project cards: Display required dice values to score value points (bottom right). **Grey** stands for the dice colour of the player who becomes project owner.

Players *may not* become owners of projects that display dice in their own colour. This means each project in the game depends on teams collaborating to succeed.

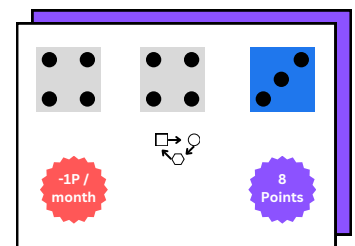
Some projects are “urgent”: If not delivered in the month (round) in which they are drawn, a penalty (bottom left) is induced each month until (including) the month when they are eventually delivered

Side projects: Worth 1 value point for each 6 that the players roll with the allocated dice

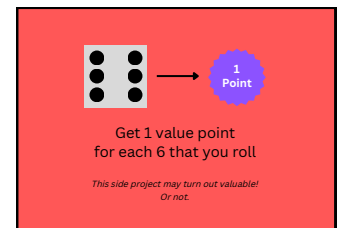
Training cards: Earn the players new permanent capabilities that can be used *after* the round in which the T-Card is solved (training completed).

End of the game

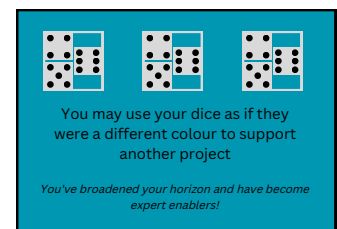
Calculate the sum of the points at the end of the agreed number of rounds (usually 8 to 12) . Follow up with a debrief.



Project Cards



Side Projects



Training Cards

Facilitator Notes

Going through all rules before the game starts can be a little overwhelming for some groups. Often some clarifications are needed in the first 1-2 rounds, before players get a feel for the game and are able to play on without much additional facilitation. One way to help players ease into the game is to play a rehearsal round. Another way is to instruct players through the first round step-by-step. In any case, the first rounds will require the most active participation of the facilitator. Here are some questions that may occur at the beginning or throughout the game:

Q: After I rolled the dice, can I distribute the dice numbers I rolled to the projects / side-project T-Cards the way I like?

A: The dice must be allocated before they are rolled, you may not re-allocate them after they are rolled

Q: Can I support an other player's Training with my dice?

A: No, each player may only train their own "people", in other words the training cards must be achieved with own-coloured dice. This is also true when another player earns the ability to support other player's projects - that does not apply to training cards.

Q: Can I remove a "locked" die from an unfinished project or training card to re-allocate it?

A: No, you must finish the project or training first, until then the die remains locked.

Note: Unfinished work is a type of lean waste, and the game can "punish" bad decision making where players choose to start several projects or T-Cards that are hard to finish. As it is a game of probabilities, getting stuck with a project can also be simply bad luck, but that is also something that models getting stuck with a seemingly simple project that turned out more difficult.

Q: Do I need the exact number shown on the card, or anything above the number?

A: For projects, the exact numbers are needed. For T-Cards, you need one of the numbers shown on the card, e.g. 4, 5 or 6.

Note: For projects, that means that from a probability perspective, the particular number doesn't really matter, since the probability for each number is always 1/6. The different numbers are basically just aesthetics. While it doesn't bother most players, some find it confusing. Eddy Bruin has been playing an alternative version of the Dependency Game where numbers displayed on the projects are interpreted as "any number equal or above" - this is an interesting twist that can bring some variability, but this version cannot be played with the original DG card deck.

Q: When do I get penalty points?

A: Let's say an urgent project is uncovered in the 1st round, and finished in the 3rd round. That means that the project was finished with a 2 months delay, so there are 2 penalty points. Whether they are noted in 1st and 2nd round, or in 2nd and 3rd round, doesn't really matter. Both is fine.

Game Debrief

When playing simultaneously with multiple tables, shuffle participants before debrief. Players can debrief at each table before sharing interesting insights with the whole group.

Some talking points that you may bring up in the debrief:

- The importance of **transparency** and the focus on a **common objective**. Invite players to compare how it feels to have all projects laid out in the middle of the table and decide collectively which one to work on, versus having each player make a decision about “their” project on their own. The instruction “trap” players into the latter approach, which is what usually happens in the workplace (teams or departments having little transparency and no say about other teams’ or departments’ projects)
- The importance of **upskilling** and **supporting others** in mitigating effects of dependencies and avoiding getting stuck. Teams that invest in training cards early should have a better chance to achieve higher scores. Earning the ability to support projects of any colour can give a decisive advantage, and it’s enough for one or maximum two players to earn the ability. This players can then focus on supporting others rather than working on their own projects.

Debrief Questions

- What were your biggest difficulties?
- How much attention did you pay to penalties?
- How did training cards influence the game?
- How did it feel to give away your dice?
- Was the spirit collaborative from the start?
- What did you notice in your communication, the way you made decisions?
- Did communication and decision making change during the game?
- What was the most effective change?
- What parallels can you draw from the game to your work experience?
- What learnings have emerged during or after the game?
- If you were to guess, what aspects of working with dependencies does the game try to make palpable? What could be the learnings?

Acknowledgement

by Ilja Vishnevski

This game emerged as an idea in the Play4Agile 2022 game design pre-event facilitated by Tim Yevgrashyn and Katrin Elster. From an idea to a playable version, the game evolved through rapid prototyping, daily (and evening) play-testing with the help, ideas, feedback and cheers from the group of fantastic agile game designers who we are inspired by and very grateful to!

A first “polished” version of the game was developed by Dana Pylaeva and Ilja Vishnevski during the workshop. Since then the game has evolved and has been modified to incorporate new ideas and feedback. A special shout-out goes to Eddy Bruin for his ideas and support over the past years.

Scoreboard Dependency Game

Team Name:

Round / Month	Value Delivered	Penalties	Sum
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
Year sum			