

TWiG

The WIP Game



- This is **version 1.5** of the TWiG simulation.
- Updates are available under www.LEANability.com/en/twig
- Thanks for helping with the English translation to **Joanne Perold** (twitter.com/joPerold), **Julia Wester** (twitter.com/EverydayKanban), and **Mike Freislich** (twitter.com/MikeFreislich).
- For discussions and questions about the simulation we use #twig* channels within the LEANability Slack community. You can sign-up here for the Slack community: www.LEANability.com/en/slack



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DAY 6



DAY 5



DAY 8



DAY 7



DAY 5

Feedback from Marketing: The prioritisation workshop with you was not only super productive, but also a lot of fun. Marketing thinks it's a great improvement for you to deliver the tickets in the options in order A to P.

DAY 6

Lawmakers got creative! We need to incorporate Fix15 functionality into our system by Day 15. All Stakeholders agree that we will implement Fix15, because we must comply with the new legal regulations.

Create a Ticket Fix15 and deliver it by Day 15. Don't forget to record the Start time when you start working on the ticket!

DAY 7

A new technology named ChainBlock is propagating quickly at the moment. If what it promises is true, using this technology could mean an enormous increase in efficiency for us. We have decided to evaluate ChainBlock to determine how much effort and benefit implementing it would mean for us.

Create a **Ticket ChBl**. The work on this ticket is important, but not urgent. Don't forget to record the Start time when you start working on the ticket!

DAY 8

Everything flowing?

DAY 10



DAY 9



DAY 12



DAY 11



DAY 9

Bad News: A fatal error has occurred! **Customers cannot use our service!** It is believed that this is a hacker attack, but you do not know exactly. Solve the problem as soon as possible - the situation is really serious!

Create a **ticket** with the ID **EMERGENCY** and deliver it **as soon as possible**. Of course you can also exceed WIP limits with this work! Remember to enter start time when you start working on the ticket! Note on the metrics sheet on which day you delivered the ticket EMERGENCY.

DAY 11

A quality issue has been detected on the **first non-blocked ticket in column B** and we need the **expertise** (dice) of **work step A** in order to solve it. Place a **Defect sticker** on the ticket. The sticker can only be removed once the Effort points on the Defect sticker have been crossed off, at which point work can continue on the ticket.

If there is no ticket in Column B, place the Defect sticker on the first tickets that arrives in column B. In the case that the ticket is blocked, the Blocker can be exchanged with the Defect sticker.

DAY 10

A delegate from Legal asks about the work on Fix15, which has to be completed by day 15. He reminds again that failure to deliver on time is not an option!

DAY 12

In a spontaneous team meeting we analyzed the charts and we are really proud of ourselves - our system is really stable. But we want to get even better and that's why we decided to **reduce the WiP limits**. Yes, it will feel weird and we will probably have to do more pairing and swarming, but we want to try it.

Lower the WiP limit to 3 in step A and to 2 in step B. Do not start any new work until you are within the limits in A and B.

DAY 14



DAY 13



DAY 16



DAY 15



DAY 13

There was a Replenishment meeting (prioritisation meeting), and all relevant Stakeholders met to update the order of work. You received **new tickets Q, R and S**. Create the new tickets and add them to the system.

DAY 14

It is time to reflect on how things are going. Hold a short **retrospective** that takes a maximum of three minutes:

- (1) What is running well at the moment?
- (2) What should you improve?

Using keywords, write down your results on the Metric sheet.

DAY 15

Today the legal regulations must be implemented. Make a note on the Metric sheet whether or not you have delivered ticket **Fix15**.

DAY 16

Calculate for all tickets in columns A and B the **WIP age** (Today - Start + 1) and enters the numbers on the retrospective sheet.

Calculate **departure rate, arrival rate, average realization time** and the **90 percent quantile** of the realization time.

The departure rate tells you how many tickets you have completed on average per day.

The arrival rate tells you how many tickets per day on average you have moved from the option to the WIP-limited area.

To determine the 90 percent quantile, you need to find a horizontal line on the X-axis below which 90 percent of the points are found.