

Cost of Delay (CoD) is a technique to make value and urgency more visible. It quantifies an opportunity cost in economic terms when work is delayed.

Key reasons to create a Cost of Delay figure for your project or feature:

- Maximise overall ROI by prioritising projects or features.
- Make the urgency visible and communicated easily.
- Drive a focus on cycle time by recognising the value of time
- Enable objective decision-making and trade-off decisions.

There are three basic inputs required to work out the Cost of Delay:

1. **Value** – Calculate a dollar value of the benefits per week, based on an estimation of the work’s economic value to the organisation over a given time period. For example – total value of the project over 3 years, then divide to a weekly value.
2. **Urgency** – An understanding of the work’s urgency: when do the benefits start to accrue and/or decay? Different industries and products suffer different types of Cost of Delay patterns – for example, expected value may entirely disappear at a particular point in time, or benefits may shrink over time.
3. **Information value** – This is the effectively the cost of taking a potentially wrong path. The question you’re asking is, if we took the wrong path, what would we be willing to pay to know that up front?

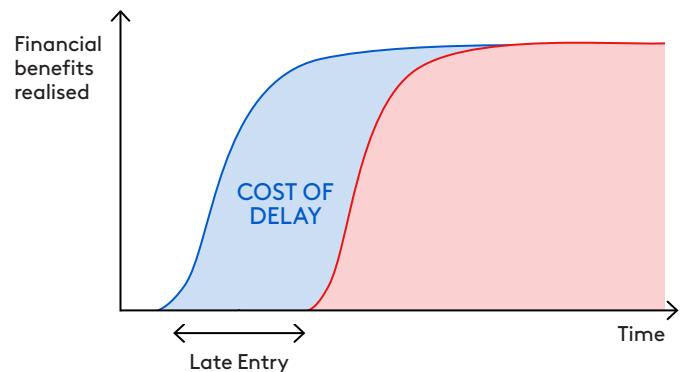
We will look briefly at two of the most common patterns in cost of delay and illustrate with a couple of examples.

① Perpetual peak benefits that are largely unaffected by when the feature is available

Most features designed to reduce or avoid costs have this profile. In effect, if the feature were available early it would generate benefits early. If it were late, it would still hit the same peak eventually.

Imagine a feature that will improve the accuracy of invoices. This will lead to an increase in the number of customers paying on time, with fewer queries to the accounts department. We calculate this is worth an additional £500,000 per annum in saved costs and reduced Average Collection Period.

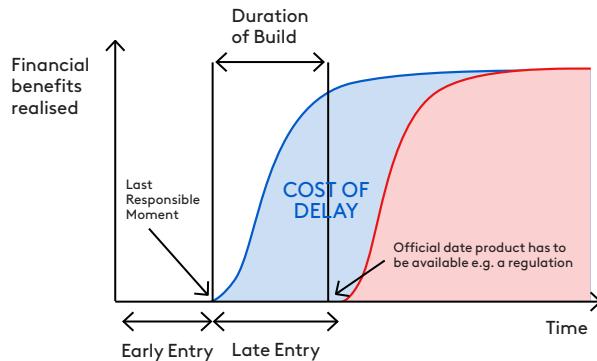
The requirement therefore has a cost of delay of £9,615 per week (£500k/52 weeks).



② Perpetual peak benefits that only start to accrue after a specific date

The second example is a requirement to automate a process in order to satisfy a new regulation that will come into effect from 1st September. Doing this work will avoid the need for additional manual processing headcount, which is estimated to cost £400,000 per annum.

At the LRM (Last Responsible Moment) – i.e. the point that the new regulation comes into force minus the time estimated to build and deploy the product – the CoD is therefore £7,692 per week (£0.4m/52 weeks). However, this example demonstrates one of the key benefits of using CoD. Delivering this work early does not deliver immediate value and may indeed pose an opportunity cost if there are other requirements that do deliver value immediately (such as the first example). Using CoD helps to expose the opportunity cost.



Implementation

In order to be able to calculate CoD quickly and ensure your calculations are reliable and comparable, you should use our fast benefits assessment model (see the Technique Library item) to quantify the benefits (financial figure) for a particular piece of work quickly.

When you have a new piece of work for which you want to calculate the Cost of Delay:

1. Calculate a benefits figure for the change (use your benefits model).
2. Work out when the benefits would start being accrued and when they would start to decay, if at all.
3. Calculate a Cost of Delay figure in weeks.
4. Make the figure visible (on the project, requirement etc.)

Potential pitfalls

- Accuracy of figures: a Cost of Delay figure is only as accurate as the information you have put into it. If your estimates of cost and duration are uncertain, so will your CoD be. To avoid this, you should make your assumptions visible and invite others to improve them. Testing and checking your assumptions, and going back to make changes to them in the light of new evidence, is essential.
- Length of time: calculating the figures should never be an excuse to be so bogged down in figures that the team is stuck in analysis paralysis. Once again – test your assumptions to improve your knowledge.

If you want to learn more, consider reading:
The Principles of Product Development Flow by Donald Reinertsen