

Think About How You Organize Your Work

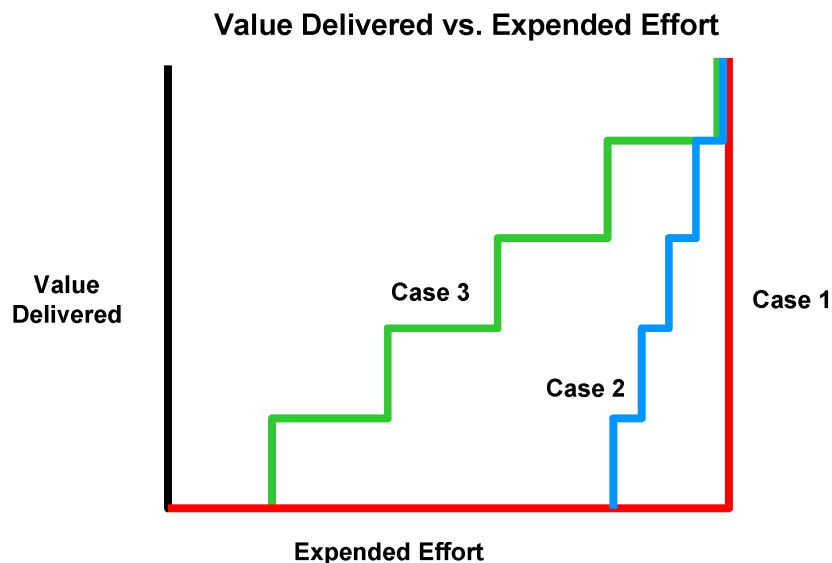
This simple game should make you think about how you organize tasks. The order you choose will affect how value is delivered and what costs are incurred.

Let's look at value first. It is useful to think of the amount of value delivered as a function of effort expended. Let's say we have a sentence with 5 words of 4 letters each. We can consider three general profiles for value delivery, which I will call Case 1, 2, and 3.

Case 1: If there is no value until the full sentence is completed, then the order in which I write the letters and words has no effect on value. All of the value finally arrives when the final word is completed. (The red line)

Case 2: If I write only one letter of each word and proceed to the next word, then no value arrives until the first word is completed, which occurs slightly after 80 percent of effort is expended. (The blue line)

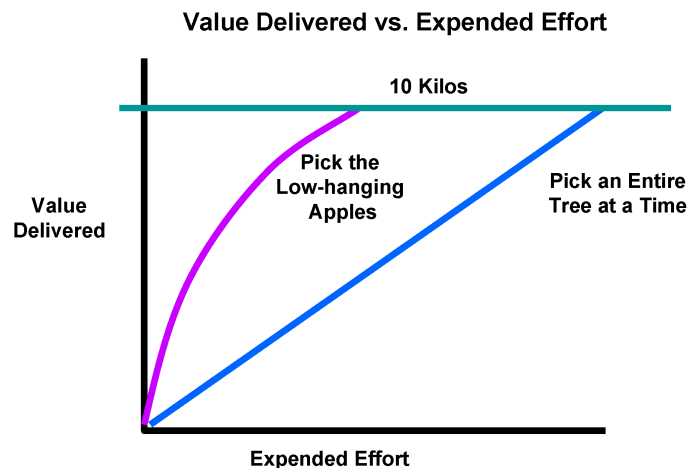
Case 3: If I complete every word that I start before moving on to the next word, then the first value arrives when 20 percent of effort is expended. Importantly, if, for some reason, you had to terminate the effort halfway through, then Case 3 is the only one that would have added any value. Thus, if there is value delivered when each individual word is completed, then once I start a word, I should sustain my effort until I complete it.



Note that Case 1 has very high mutual dependence between work items, and Case 2 and 3 can deliver value with one word at a time. The more you reduce dependence and decouple the value of individual items, the more value is added by delivery in small batches.

Note also that the way I organize tasks may also affect the cost of doing the tasks. What would happen if each letter in the word had to be written in a different color ink and the pens for doing so were located in different rooms. In such a case, there would be scale economies achieved by writing all the first letters before writing all the second letters. In such a case one must compare the savings coming from scale economies with the Cost-of-Delay losses created by delaying value delivery.

Finally, another very interesting case occurs when the value curve is concave. In such cases, it often makes sense to cram as much value as possible into the available time. Imagine you wanted to pick 10 kilos of apples from your uncle's apple orchard. Should you set up your ladder to pick all the ripe apples from one tree and then move to adjacent trees until you reach 10 kilos? You might decide that getting ripe apples from the highest branches takes too much effort. Instead, you might fill your buckets with the most accessible low-hanging fruit from many trees. When you've got 10 kilos, without ever using your ladder, you would thank you uncle and go home.



So, when you deal with real-world problems where work items have interdependencies, scale economies, and non-linear value functions, you won't be able to make your decisions with slogans alone, but slogans are a very good place to start. They will equip you with a vocabulary for examining the issues more carefully.

Don Reinertsen