



Why Multitasking is a Bad Idea

Patrick Onions, The Knowledge Studio discussion forum, 30 April 2011

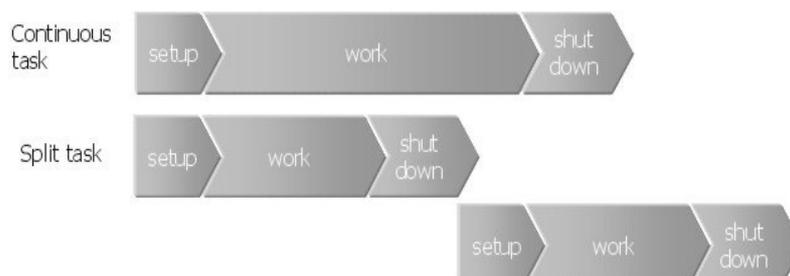
I was recently asked why I thought multi-taking does not work. The problem is not trivial, but the answer is relatively straightforward.

Deadlines and scarce resources will always affect projects, driving planners and managers to find more efficient ways of working. Multitasking is often resorted to to get more done or to placate more customers, but anecdotal evidence suggests that it is not efficient. Is there a rational argument to be made against multi-tasking?

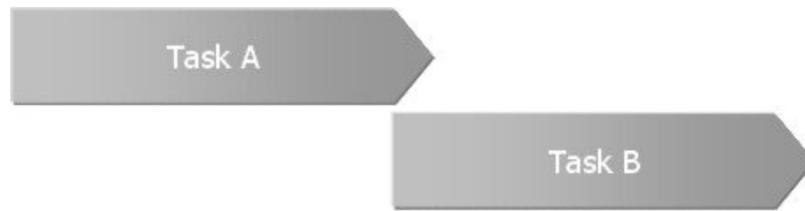
The first reason why multi-tasking doesn't work is that **interrupted work takes longer**. This is easily observed in the way that people work. Tasks may be considered as a sequence of three phases. A task begins with *setting up*, where workers will prepare themselves with activities like getting acquainted with the work to be done, thinking about how to do the work, collecting documentation, opening files, collecting materials and tools, setting up the work area and configuring machines. *Doing the work* then commences. Once the task is complete, workers will *shut down* by performing activities like saving their work, handing over to someone else, reporting on progress, switching software, cleaning machines or packing away their tools.



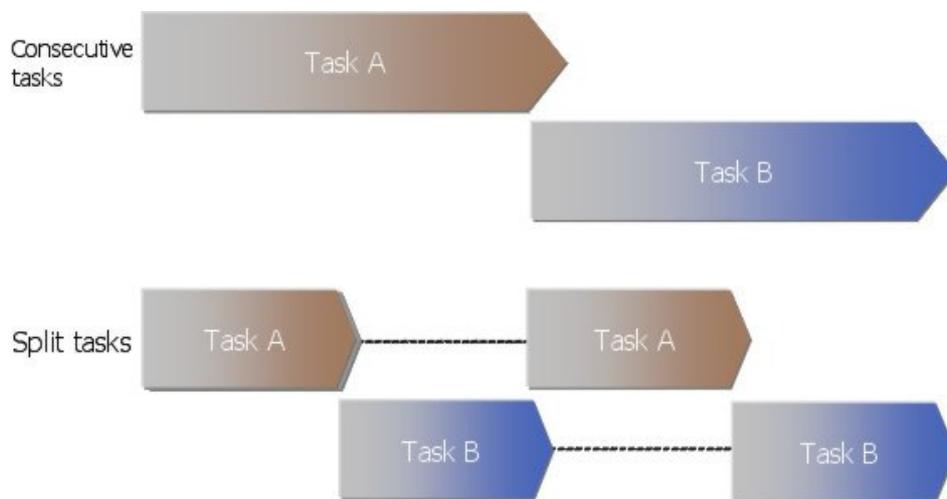
Setup and shutdown times are necessary and generally do not vary much according to the length of the task. For example it takes roughly the same amount of time to find a document or save a file irrespective of whether the task takes fifteen minutes or five hours to complete. Splitting tasks therefore increases the cumulative number setup and shutdown times, so as a single task that is split just once will frequently double the cumulative setup and shutdown times.



The second reason why multi-tasking doesn't work is that **some tasks will have to be delivered late** because people cannot realistically perform more than one task at a time. Consider the case of two consecutive tasks A and B:



Splitting each task into two and performing them consecutively will result in Task A being delivered later than it would have and taking 50% longer from start to finish. Task B may start sooner, and give the appearance of being completed concurrently, but it is still completed at the same finish time as the consecutively executed task and therefore it takes 50% longer to finish.



These two examples illustrate why multitasking is not an optimal solution to project delivery problems, and why planners and managers should rather protect the team from pressure to multi-task. If multi-tasking is unavoidable, then managers should focus some of their attention on reducing or offloading the setup and shutdown times, and managing the delivery expectations of customers. Readers wishing to learn more about this phenomenon and related concepts will find Eliyahu Goldratt's books such as *The Goal* useful and interesting.