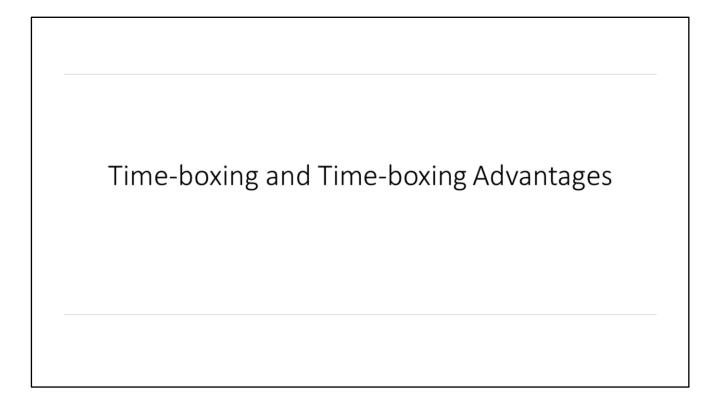# Mastering Agile Project Management

Learn to how to blend Agile and traditional project management to create an adaptive approach to project management

Time-boxing and Time-boxing Advantages

Time-boxing and Time-boxing Advantages

In this lesson, I want to talk about time-boxing and the advantages of time-boxing which is important to understand as a foundation for further discussion on estimation.

Time-boxing

Difference Between "Time-boxing" and "Scope-boxing"

Scope-boxing	• The length of the development effort is scaled to fit the items to be developed
Time-boxing	• The duration of a sprint is fixed (typically 2-4 weeks) and • The items that can be taken into a sprint and developed are selected based on the capacity of the team to develop the items in that fixed amount of time

Agile development processes like Scrum typically use time-boxing while a traditional project management approach is based on "schedule boxing".

In the traditional approach scope-boxing approach, you would let the interval of time expand or contract as necessary to accommodate the work to be done. Time-boxing is the opposite of that – the time to complete work is broken up into fixed-length increments of time called "Sprints" and the work is broken up into small enough chunks so that no single chunk of work is bigger than the work that can be accomplished in a single sprint.

The challenge with the time-boxed approach is to see how many increments of work you can fit into a fixed-length period of time called a "sprint". This approach may not seem to be intuitive to many project managers and takes some getting used to; but once you've done it for a while, you begin to see why it is a very good approach and can be a lot more efficient than a conventional scope-boxing approach.

Time-boxing Advantages

Focus

- The great advantage of time boxing is you learn how to focus your attention on the job at hand for the specified period of time

Increased productivity

- When you set a timer and work diligently and in a focused manner on only the task you have identified, you work smarter and harder, and you get more done
- Breaking up the work into small chunks also makes the overall process more efficient

Timeboxing, http://www.agilehardware.com/pages/Timeboxing.html

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This slide identifies some of the key advantages of time-boxing:

- Breaking the work up into small chunks has a big advantage in that the person performing that work is very focused on that particular item of work to be done. It's the same principle as an manufacturing assembly line where work is broken up among different people to make it flow as smoothly as possible.

- Limiting the time to complete the work to a relatively short, fixed-length time-box can also increase productivity by reducing the amount of slack time that might be present in a more open-ended scheduling process and it makes the worker more aware of the time required. When you set a timer and work diligently and in a focused manner on only the task you have identified, you work smarter and harder, and you get more done

- Breaking up the work into small chunks also makes the overall process more efficient because it becomes easier to distribute the work evenly among a team of people and that should significantly smooth the flow of work through the process. It is well-known that large chunks of work that cannot easily be broken up tend to cause bottlenecks.

Time-boxing Advantages

Realization of time spent

- When you use time blocking to get a job done, you realize how much time you might normally waste when working

Time available

- Time boxing makes you consciously aware of something you previously weren't consciously aware of - how much time you can give to a particular project

Timeboxing, http://www.agilehardware.com/pages/Timeboxing.html
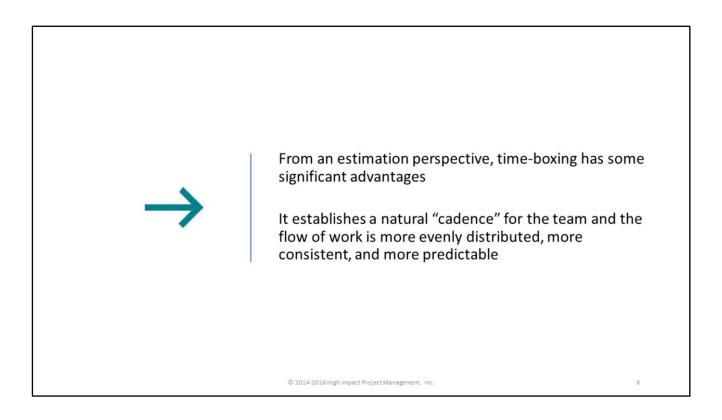
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Here are a couple of additional advantages of time-boxing:

- Realization of time spent

  When you use time blocking to get a job done, you realize how much time you might normally waste when working

- Time available

  Time boxing makes you consciously aware of something you previously weren't consciously aware of - how much time you can give to a particular project

From an estimation perspective, time-boxing has some significant advantages

It establishes a natural "cadence" for the team and the flow of work is more evenly distributed, more consistent, and more predictable

From an estimation perspective, time-boxing has some significant advantages. It establishes a natural "cadence" for the team and the flow of work is more evenly distributed, more consistent, and more predictable

Additional Time-boxing Advantages

Time-boxing addresses two common productivity issues:

Parkinson's Law

- Says that *"Work expands so as to fill the time available for its completion".* Fixing the time allowed eliminates wasted slack time that might be built into a scope-boxing approach[1]

The Student Syndrome

- "...Refers to the phenomenon that many people will start to fully apply themselves to a task just at the last possible moment after a deadline. This leads to wasting any buffers built into individual task duration estimates"[2]

1. Parkinson's Law, http://en.wikipedia.org/wiki/Parkinson's_Law
2. Student Syndrome, http://en.wikipedia.org/wiki/Student_syndrome

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Here are two other factors to consider in the advantages of a time-boxing approach:

- The first is Parkinson's Law that says work expands to fill the time available for its completion. Limiting the time available should eliminate potential slack time.

- The second factor is what's called "The Student Syndrome" which we have all observed in an academic environment that many students will put off the work or studying for a test until the last minute and that also can result in a lot of wasted slack time.

How Does Time-boxing Impact Estimation?

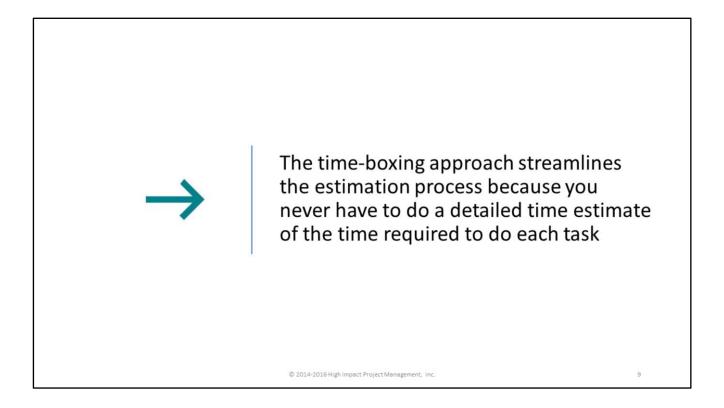| Traditional Scope-boxing Approach	Time-boxing Approach
• Estimate the time required for each task • Total the time required for all tasks to calculate an overall estimate	• Estimate the level of effort for each task in relative terms • Determine how many tasks can be done in a sprint based on the expected velocity • Total the number of sprints required to arrive at an overall estimate

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This slide shows how a time-boxing approach would effect the estimation process. In a traditional, scope-boxing process:
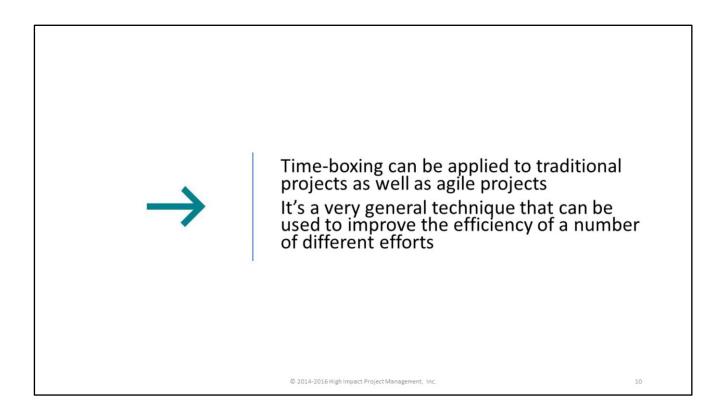
- Estimate the time required for each task

- Total the time required for all tasks to calculate an overall estimate

In a time-boxing approach, it is a little different:

- Estimate the level of effort for each task in relative terms

- Determine how many tasks can be done in a sprint based on the expected velocity

- Total the number of sprints required to arrive at an overall estimate

The time-boxing approach streamlines the estimation process because you never have to do a detailed time estimate of the time required to do each task

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Time-boxing can be applied to traditional projects as well as agile projects

It's a very general technique that can be used to improve the efficiency of a number of different efforts

An important point is that time-boxing can be applied to traditional projects as well as agile projects. It's a very general technique that can be used to improve the efficiency of a number of different efforts. Applying it to meetings is an example. How many times have you been involved in meetings that went on-and-on without limit? Fixing the amount of time allocated for the overall meeting and for discussion of specific topics can have a big impact on making meetings much more productive.

NEXT LECTURE...
GENERAL AGILE ESTIMATION APPROACH

In the next lecture, we're going discuss a general Agile estimation approach