



NAC Executive Insights

Parkinson's Law

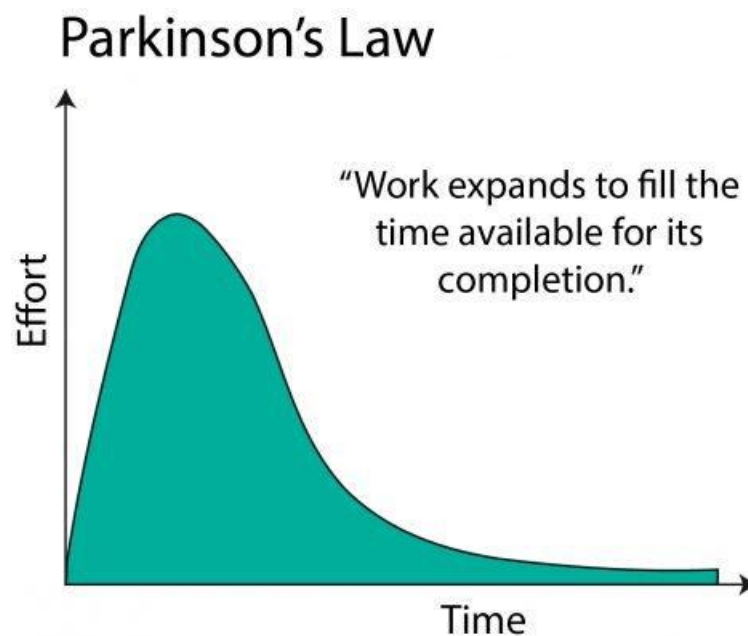
Key Points

- Work expands to fill available time.
- Early finishes do not accumulate; late finishes do.
- Appreciation of Parkinson's Law is essential when project schedules are being developed.
- Quantify and budget the various components of "time not on tool."
- Utilize contingent execution.

Introduction

Parkinson's Law states "work expands to fill available time for its completion." It was originally developed in the 1950s by C. N. Parkinson, a British naval historian and author of more than 60 books.

Parkinson's Law can be seen in project performances where many tasks complete exactly on schedule with no real early finishes noted. This disparate behavior is even more significant in program settings where numerous multi-month or multi-year projects all finish exactly on schedule. Late finishes, however, do in fact occur. Parkinson's Law also is evident in organizations that have been known to



operate at a relatively constant throughput, but over time the organization requires more resources for the same outputs. Productivity drops steadily over time. This effect occurs when resources are added to activities already behind schedule, making the performance worse as team dynamics and complexity grow and the “red tape” to defend responses and the lack of progress also grows.

Parkinson’s Law Examples

Parkinson’s Law is something practically everyone has experienced. Think of the engineer who is given a month to prepare a report. It will take a month. Yet the same engineer, with the importance of having the report by the end of the week communicated to them, will likely complete an equal quality report, and if he is late it will not be by the three extra weeks originally assumed.

Consider three real life examples. The first is the Fernald nuclear waste cleanup project. Plans, developed over years, called for decades-long cleanups at costs over \$10 billion. When focus was shifted to getting the work done faster rather than just meeting the schedule, the results were almost unrecognizable. The project was delivered 12 years faster and \$7.8 billion less when compared to the original, DOE-approved plan.

A second example is a nationwide fiber rollout. Accepted permitting and right-of-way schedules would have added almost another year to the schedule, effectively doubling it. When the focus was placed on getting it done sooner, engineers, planners, permitting and right-of-way acquisition staff found a way, delivering a project in 13 months that conventional thinking and approaches said should take 24 months.

A third example centers on a fire at a major textile plant, destroying it. The plant, which initially had a multi-year engineering, procurement, and construction schedule, was rebuilt and operating six months after the fire. Initial layouts for the new facility were drawn within five days. Before the smoke had cleared, bulldozers began clearing the way for rebuilding. Associates and suppliers worked non-stop to fabricate parts for equipment so the plant could be operational in short order. In some cases, assembly was done on site to expedite this process. Similar examples are seen after many disasters, where expedited schedules are delivered in record time by often understaffed teams.

Parkinson’s Law in Project Schedules and Project Management

An understanding and appreciation of Parkinson’s Law is essential when project schedules are being developed and projects are being managed. Impacts of Parkinson’s Law flow from individual and team psychology and include the following:

- Worker effort slows when deadlines and task completion are comfortably in the future.

- Expansion of effort often results in unneeded complexity being introduced, with broader “network” effects (efforts of others are needlessly impacted).

In staffing a crew, the analysis might be made regarding the benefit of having a smaller crew working at optimal productivity versus adding additional resources to the crew that may or may not actually increase productivity or cost per unit. The issue is will the marginal resources actually decrease productivity for the entire larger overall crew because of interference and conflicts between the crew members? Work will expand to consume available time, but at a higher cost.

- Abundant time (mismatch between work demands and worker’s capability) can introduce stress as workers strive to justify their lower productivity.
- Time saved on individual tasks tends not to accumulate and seldom offsets delayed task completion.
- Early task completions often do not enable early starts on subsequent activities.
- Workers seek not to establish productivity rates that will be required on a sustained or subsequent basis.
- Acceleration of an effort already underway meets with difficulty.

Parkinson’s Law and Project Schedules

Addressing Parkinson’s Law when developing project schedules requires the following:

- Estimate output for actual “time on tool,” not hours worked (standard hour of work).
- Quantify and budget the various components of “time not on tool.”
- Incorporate contingent execution provisions into project schedules.

Contingent execution activities foster keeping the work crew productively engaged when a “time not on tool” situation arises. Contingent execution can range from significant schedule advancing activities able to be performed at an earlier point in time to more simple ones such as staging materials and equipment for a subsequent task, policing the area for safety and efficiency, inspecting and maintaining tools and equipment, to the often deferred training.

- Define activities by trade that have an early start date associated with them.
- Ensure distributed float (including “late” dates) is not owned by tasks.

Parkinson’s Law and Project Management

In managing projects, Parkinson’s Law can be addressed by doing each of the following:

- Estimate productivity against a standard hour of work.
- Measure and manage the various components of time not on tool with highly detailed time sheets.
 - Management is responsible for attacking these elements of time.

- Identify recurring “time wasters.”
- Link performance incentives to “time on tool” productivity (worker’s effort), not to associated reductions in “time not on tool.”
- Monitor employee workloads constantly and keep workers challenged.
- Avoid unnecessary multi-tasking.
- Set intermediate milestones to keep team completion focused.
 - Clearly define completion or milestone achievement. (*See the Parkinson’s Law Examples above*)
- Utilize contingent execution to keep the workforce challenged and productive.
- Be prepared to capture early completions by being ready to go on to what is next.
 - Contingent execution plans can provide a bridge
- Reward achievement of goals.
- Reward value creation suggestions by the workforce.

Workforce Value Creation Suggestions

Scaffolding is preplanned using 3D models to plot out dimensions that will help avoid modifications or a teardown/rebuild. The process allows for assessment of future items such as permanent piping, power stations, pumps, instrumentation, and lighting.

Identify platforms that can be incorporated in permanent works to eliminate temporary scaffolding during construction and support subsequent O&M activities.

- Provide visible and transparent feedback on real productivity.
- Beware of the Law of Triviality, an argument by Parkinson that members of an organization give disproportionate weight to trivial issues rather than more difficult and complex tasks.

With regard to committees, there appears to be an inflection point of committee size when the time spent on the actual subject matter topic begins to decrease geometrically as the committee size increases. This loss of time spent on the subject matter topic is now being taken up with interpersonal and inter-committee matters not related to the subject matter topic.

Summary

A degree of uncertainty and variability is present in the performance of all tasks. Some will be completed early and some will be completed late. Completion exactly on time, time after time, is actually an unlikely outcome. Parkinson’s Law recognizes the tendency of work to expand to fill available time. This Executive Insight identifies some considerations to take into account during schedule development. It also highlights some aspects for the project manager’s consideration, including the need for management to focus on reducing “time not on tool.”

About the Author

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