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Articles



Enabling Resource Productivity in Project Environments

by Vector Consulting Group



Managing projects by comparing the planned task duration with execution is a widespread practice. In most cases, it is also one of the parameters in the appraisal of resources working in projects. Despite the widespread use, managers are also aware that the uncertain reality of project environments can cause actual durations to be different. The difference has potential for erroneous decisions and consequent disharmony in work place.

According to Error Management Theory, when making decisions under conditions of uncertainty, two kinds of errors can occur – “false positives”, i.e. deciding that a risk or benefit exists when it does not, and “false negatives”, i.e. failing to notice a risk or benefit that exists. If managers use the planned durations as way to evaluate resource performance, there is a chance of managers being unfair because of a “false negative” measurement bias: declaring an efficient person as inefficient. The fact that a person was late as per planned duration does not necessarily mean that he was inefficient. Maybe he gave his super best despite the uncontrollable uncertainties and his special efforts prevented potential additional delays. One cannot deny the presence of “false negative” measurement bias but there could be an argument on the extent of bias (or its statistical significance). Well there is no study in public domain evaluating the statistical significance but we can refer to our collective experience. It is not uncommon for most resources with lower grades blaming systemic reasons for their low performance. We cannot just ignore them as “excuses”. The unfairness of most appraisal systems in the project environment is perhaps one of the “open” secrets of the project environment. We call it a secret, because whenever you confront managers with the problem, many claim that, with adequate experience, they can arrive at a “right” or the “correct” reference single point task duration. Statistically speaking, the words “right” or “correct” estimate sound like oxymoron. With few clarity questions, one can understand that word “accurate” is usually interchangeably used for the word “realistic”. So what is realistic estimate? It is a duration considered achievable in a typical environment of uncertainties. This implies that the estimate is adequately protected (or buffered). If most task durations are buffered to protect from uncertainties, then a resource completing a work on planned time does not necessarily mean that he is efficient. So there could be the second error in decision making: the “false positive” measurement bias or declaring the inefficient person as efficient.

A resource completing a task as per planned duration could also mean that the resource was lucky in execution (no uncertainties hit the task) but expanded work to use all the hidden buffers in the task. Now how big is this bias? Well let us again refer to our experience. Most resources grudge the high efficiency ratings of their colleagues. The star grades are almost always debatable.

Managers are intuitively aware about these biases. So in many cases, they rely more on their experience about resources to “curve fit” the mathematics behind the efficiency ratings.

The challenge before us is to evaluate the efficiency of the resources or in other words check if the task was done by the resource in the fastest possible way. How do we know if the task was done in the fastest possible way? One yardstick could be the shortest time ever achieved in the past, for the same or similar task. Is this the correct measure? Let us look deeper.

The “shortest time” for any task can be achieved very rarely because a lot of uncertain things that influence the task time have to turn out favorably, all at the same time. This is very rare indeed. Thus, in almost all instances “as fast as possible” would still be longer than the “shortest time” ever achieved. Now, if the “shortest time” ever achieved in the past is the measure of “as fast as possible”, how many times can we claim that the resources completed their tasks “as fast as

possible”? Almost never!!!

Let us try a radically different approach.

In execution, we just do away with any reference point to planned task duration. Let the resources & the management close their eyes to the task level planned “targets” along the road to project completion. But when we remove the mile-stone dates they find themselves in an environment without targets. Then how does one control?

What is needed is a new working culture to suit the new environment. Let us borrow the new work culture from a relay race, where in execution, each runner runs as fast as possible. So we want a relay race culture, wherein execution, resources move “as fast as possible” or in other words the planned task durations best assumed as Zero in execution.

But we still need a mechanism to know whether a task was done “as fast as possible”? We know that we cannot use any benchmark duration because each time level of uncertainties effecting task are different.

So let us add a small caveat to our goal – Do your tasks “as fast as possible – under the given circumstances”. Now the picture is completely different. “Given circumstances” will always be different for different projects (although the task may be same). Managers have a role to play to ensure an environment of enabling circumstances. One of chronic reasons for delays at task level is the environment of frequent priority changes, where resources are forced to multi-task, while the elapsed time goes up for tasks. The other reason for chronic delays is lack of preparedness before start of the task which in turn leads to resources waiting for specs or decisions or even worse frequent rework. As a first step towards ensuring right circumstances, managers should eliminate bad-multitasking and then ensure resources have all necessary preparations ready before start of a task.

Even after ensuring the two steps, there could still be some uncontrollable Murphy which can cause tasks to be delayed. If that is the case, then the factor which determines the task time is the speed & quality of resolving obstacles that come in the way of task completion. So what is required is a daily review process that will ensure speedy & effective decision making to resolve obstacles. It should facilitate quick surfacing of obstacles followed by quick removal of the same.

If the process ensures that obstacles are immediately highlighted to appropriate level of management who then takes immediate steps to remove those, we can safely presume that the all systemic reasons are in place for ensuring task is done “as fast as possible – under the given circumstances”.

If the enabling processes are put in place, one should see a drastic reduction in elapsed time of tasks and only after that the problem, if any, of resource efficiency is surfaced. Or in other words, if there is an issue with individual resource efficiency, it can only be observed after putting the enabling processes in place. When we have all the enabling processes in place, what we now need from resources is a commitment to stay focused on the task till the agreed completion criteria. A manager who is actively involved with the task execution (and hence understands all circumstances associated with the task) knows exactly which resources displayed the desired behavior. We can have an evaluation and feedback method focused on identifying and encouraging the right enabling behaviors and discouraging the wrong dysfunctional behaviors. Without an easy calculable numeric,

the suggested evaluation may not look “objective” but it will not be disputed if the resources are given an immediate direct feedback on observation of the behavior. The method suggested is exactly the way a football coach evaluates the individual performance of the players – only by observing them. The players do not have any individual output based measures. The only output measure is for the team as a whole.

With enabling processes, and an effective feedback system and a team goal, we should not only enhance resource productivity but also bring about harmony in work place.

Vector Consulting Group (www.vectorconsulting.in), is the largest Theory of Constraints (TOC) consulting firm in Asia. The firm has been working closely with well-known companies across industries to help them build unique operations and supply chain capabilities that can be leveraged as a competitive edge in the market. Vector now has the highest number of success stories in Theory of Constraints Consulting and has also won several national and international awards for their work.