The Faces of Productivity:
Collaborative Behaviors to Measure & Drive Effectiveness Across an Organization

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The holy grail of management, a single behavioral metric that can encapsulate every facet of productivity, unfortunately does not exist. There are thousands of theses, books, and even more academic papers on the subject of performance at work, so attempting to cover the topic in its entirety here is impossible. However, we can take a high-level view of productivity, and how behavioral metrics can help us make sense of it.

First, it would be helpful to define productivity:

“The degree to which a person or group delivers high-value output over a specific time period.”

One of the key elements to focus on here, and something that is often overlooked, is that productivity can be both an individual and a group metric. We feel like we are being “productive” if we individually answer lots of emails or are able to write reports without interruption. While that may be productive in certain circumstances, in many (arguably most) organizations it is the output and coordination at the group-level that matters more. The code written by a single software developer is most often not a fully functioning product. The retail store manager does not market, sell, and stock the shelves. As we create more and more complex things, it becomes increasingly difficult to produce anything meaningful as an individual unit.

This increased complexity means we also have to think about productivity over different time periods. Often times when people think about productivity, they equate that with short-term efficiency – the volume of work that is done at the end of the day or week. If employees are working on simple, repetitive tasks that do not benefit from training or expertise, the goal of management should be to maximize the employees’ working time. However, for tasks that require a high degree of creativity and require long periods of time to complete, maximizing short-term efficiency can easily lead to burn out and disengagement, which can hinder productivity in the organization long-term.

In many organizations, tasks can span months (if not years), often relying on frequent handoffs to and from other colleagues and teams. For this reason, it is impossible to have a single Productivity metric tied to a single individual or specific date. In cultures outside of the United States and Europe, this is better understood, although not necessarily explicitly rewarded. For
example, in Japan you are expected to eat lunch, and often dinner, with your coworkers. Although employees lose precious minutes or hours in favor of socializing, this time is not viewed as wasted. Rather, it is treated as a responsibility and investment in the long-term cohesion of your team. Compare that mealtime expectation to that of workplaces in the US, where eating your lunch while working at your desk is often the norm.

One Humanyze customer, a major IT firm that configures multi-million dollar server systems, pays its employees based on individual performance. They measure how long it takes employees to complete tasks (which can take anywhere from 5 minutes to 8 hours) by capturing the exact start and end times. At the same time, using a combination of fully anonymous data from next-generation ID badges and digital communications, we were able to analyze how work actually gets done.

The data revealed that a small group of employees spoke with almost everyone quite regularly – we will refer to these individuals as “informal experts”. It was also discovered that workers who consulted with these informal experts for tips during tasks tended to complete them 66% faster. By spending just a few hours of their day helping others, each informal expert saved around 265 hours of their coworkers’ time per month. Since the company was only evaluating individual-daily performance, however, the informal experts were receiving very average compensation while the immense benefits of spending time training their colleagues were not being accounted for.

As can be seen from the above example, there are various types of collaborative behavior and the degrees of impact will vary depending on the organizational context. For this reason, it is imperative to consider what specific behaviors we are trying to optimize for. To name a few, the following is a list of collaborative behaviors that almost all roles should have a mix of:

- **Cohesion**: How tightly connected a team is
- **Exploration**: How much a person needs to reach outside their team
- **Focus time**: A stretch of time for uninterrupted solo work
Emphasizing just one of these will not necessarily come at the expense of the others. These behaviors are explained in-depth by a number of sources (a good primer can be found here), but below we have summarized a few areas where these behaviors are impactful:

- **Cohesion**
  - Project delivery
  - Alignment, being on the same page
  - Fast task iteration in teams

- **Exploration**
  - Research
  - New idea generation
  - Check assumptions
  - Company-wide coordination
  - Long term career
  - Sales, marketing, new business

- **Focus time**
  - Efficient production
  - Rest
  - Preparation

Now we will examine varying types of work through this same lens in order to understand what behaviors can be effective where, and why.

### Isolated Execution Tasks

To complete a job that is only dependent on a single person, one behavior stands above the rest in its predictive power: "Focus Time". As a matter of mathematics, if an individual is wholly responsible for their work output and requires almost no external input, the amount of time they can spend on their work strongly correlates with the amount they can output.

This time can, of course, also be used for important things like rest and recuperation. Both of these behaviors have been shown to be critical for proper execution of individual tasks.
Collaborative Execution Tasks

While there is some work that falls in the isolated category, it is a somewhat rare practice within knowledge-intensive organizations. Based on the data gathered by Humanyze over tens of millions of “people days”, even individual contributors on engineering teams max out at roughly 60% focus time over a month, with an average closer to 40%. Especially when considering other team members, the bulk of time is spent on collaboration.

The type of collaboration occurring matters. Here, we shall consider tasks where the group is working to create something with a desired output that has been very well-defined. Imagine a team reading a technical document that is able to create that output with nearly no outside explanation.

Effective collaboration in this scenario cannot occur with just anyone. In this particular case, it must be focused much more within the team to ensure internal alignment, working towards the same goal, and troubleshooting problems quickly. These requirements are tailor-made for tight knight group cohesion which, particularly in face-to-face communications, relates very strongly to performance – even more so than focus time. Therefore, pulling the whole team away from focus time to join a team-building exercise could affect a shorter term deadline that is a week away, but may very well be worth it for the success of the whole year-long project.

In situations where dependencies or output are harder to define, however, this is often not enough. Bugs will still occur with alarming frequency, and development may grind to a halt. Here, organizations must also measure alignment – the degree to which exploration scores match with technical dependencies and processes.

A mismatch here can be disastrous, as we have seen that lack of communication about a dependency lowers productivity by over 30%. Combining communication data and dependency information is critical not just for measuring performance, but also for predicting major issues before they escalate.

Creative Work

Effectively creating fundamentally new products or ideas requires very different behaviors. Here the output is ill-defined (or unknown often) and may not have a clear result for years, which requires breaking out of current modes of thinking and working. That is not to say that no focus work should happen, but the need for it is much lower than in other contexts. Cohesion is similar - people need a small group to commiserate with and trade notes, but groupthink or other undesirable outcomes can result if it gets too high.
Within this scenario, exploration is paramount both within and outside of the organization. Interacting with colleagues in other parts of the organization helps generate new ideas, knowledge-transfer, and perspectives on a problem. You may not be able to directly identify how chatting with a random colleague can benefit your task today, but breakthrough ideas are often born out of cross-pollination. Communicating with people outside a company can help too, although eventually this information needs to be socialized within the organization as well.

**Conclusion**

There are many different types of productivity, and single teams or even individuals often have multiple projects and tasks underway concurrently. Individuals need to understand how to nimbly shift between different behaviors to be as effective as possible, while managers must identify what behaviors are lacking in order to create an environment where the necessary collaboration is fostered to balance short-term and long-term productivity. We must remember that needs are constantly in flux, so even if an optimum is reached, it is unlikely that those exact same behaviors will be optimal. The search for productivity, much like the search for a single productivity metric, is a continuously evolving journey.
References:


