



Performance Architecture

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A Walk on the Human Performance Side – Part II

Performance Architects are in the business of investigating human performance issues in the workplace and determining how best to help their client organizations meet business goals. That said, it is our experience that consultants of any stripe can fruitfully employ a few basic architectural models and tools to provide significant added value to their clients.

With this edition of our Column, we continue the three-part series we introduced in July. This series explores the three organizational levels – Worker/Individual/Team, Work/Process/Practice, Workplace/Organization – and introduces proven models and tools for each level that can help process experts with the human performance side of work.

Part I Recap: The Worker/Individual/Team Level

In [Part I](#), we investigated the Worker/Individual/Team level and shared the **Performance Map**, a visual and diagnostic model that helps clients focus on performance issues and possible solutions to them, rather than making the almost automatic request for training. We showed the value of involving clients early in the investigative process so that their ownership of the performance issue and selected solutions would carry through the project's implementation and beyond.

We related a success story about being asked to train customer-facing employees in service skills and using the **Performance Map** with our client. The **Map** showed her that solutions other than training were most likely to build the service culture she wanted to create.

The Work/Process/Practice Level

Paul Harmon's timely [Advisor](#) discussing process definitions resonated with us. We favor Geary Rummler's view that a *process* is "a construct for organizing value-adding work to achieve a business-value milestone in a way that meets three specific criteria: effective and efficient performance, effective management, competitive advantage" (Rummler, G., Ramias, A. Rummler, R. p. 40). To that, we add the definition for *practice* – the way the process is performed. It is what a worker says and does while following a process. Practices are habitual behaviors.

At the Work/Process/Practice Level, Performance Architects are concerned with how the work of the organization produces the desired results. They develop maps of workflow and identify the supporting practices for each step. They partner with their clients and colleagues to make the work processes and practices visible. They leverage the information they gather about the workers at the Worker/Individual/Team level and factor it into their work at this second level, to determine what changes will improve organizational performance.

Typical Performance Issues at the Work/Process/Practice Level

Performance Architects look for signs that performance issues are getting in the way of optimum performance. At the Work/Process/Practice Level, these often include:

- Products and services are slow getting to the customer
- Complaints from customers and employees

- Excessive use of overtime
- Production bottlenecks
- Process delays
- Duplication of activities
- Failed or non-existent back-up systems
- Manual verification of automated processes
- High turnover
- Increase in accidents
- Safety violations
- Procedures not followed

When one or more of the listed items is present, it is time for the Performance Architect to more closely investigate the work being done to determine the likely cause of the performance problem. For a more extensive discussion of process and practice, please see our [Column of February 2010](#).

Observing how the work is done is critical to understanding the processes and practices workers follow. Reading reports and talking with supervisors and workers provides important information. However, seeing with your eyes, and hearing with your ears, will quickly make the work visible to you while clarifying or challenging what you have already learned. There is truly no substitute for observation because you will see the *processes* used, and you will see and hear the *practices* workers follow as they do their jobs. And, you may find important differences from what you were told by management.

Armed with a complete picture of the processes and practices that comprise the work, you will be ideally positioned to identify obstacles to performance and then recommend possible solutions. While there are a number of tools that help make work visible, we have a personal bias toward simplicity and often rely on the **Time and Motion Workflow** chart to help us follow and record the steps in a work process.

The Time and Motion Workflow Chart

The **Time and Motion Workflow** chart combines the work of Frederick Taylor and Frank and Lillian Gilbreth. They used time and motion studies to determine the time it took to complete a work task and the number and types of motions used to increase productivity. We learned about this approach some years ago when we were charged with increasing business efficiencies at a client company. We needed information about how work was being done so we could recommend ways to streamline specific tasks to save time. This is the generic chart we used.

Figure 1. Time and Motion Workflow Chart

WORKFLOW CHART

DETAILS OF PRESENT METHOD IMPROVED		OPERATION	TRANSPORT	INSPECTION	DELAY	STORAGE	DISTANCE IN FEET		IMPROVEMENT NOTES
							QUANTITY	TIME	
1		○	⇨	□	D	▽			
2		○	⇨	□	D	▽			
3		○	⇨	□	D	▽			
4		○	⇨	□	D	▽			
5		○	⇨	□	D	▽			
6		○	⇨	□	D	▽			
7		○	⇨	□	D	▽			
8		○	⇨	□	D	▽			
9		○	⇨	□	D	▽			
10		○	⇨	□	D	▽			
11		○	⇨	□	D	▽			
12		○	⇨	□	D	▽			
13		○	⇨	□	D	▽			
14		○	⇨	□	D	▽			
15		○	⇨	□	D	▽			
16		○	⇨	□	D	▽			
17		○	⇨	□	D	▽			
18		○	⇨	□	D	▽			
19		○	⇨	□	D	▽			
20		○	⇨	□	D	▽			
21		○	⇨	□	D	▽			
22		○	⇨	□	D	▽			
23		○	⇨	□	D	▽			
24		○	⇨	□	D	▽			
TOTALS									MINS.

TASK	<input type="checkbox"/> PERSON <input type="checkbox"/> PAPER
CHARTED BY	DATE

To complete a **Time and Motion Workflow Chart**:

1. Name the task to be charted.
2. Are you observing a person performing the work or the work being processed on paper or by computer?
Tip: Record the observation steps for a person on one Workflow Chart and the steps for a paper or computerized process on a separate Workflow Chart.
3. Are you documenting the current or an improved method?
4. Describe each step of the process.
Tip: Use the active voice to describe a person doing the job, e.g. Mary Ann lifts the dish. Use the passive voice to describe a paper or data entry, e.g. The insurance document is filed.
5. Classify each step as follows:
 - *Operation:* Work is accomplished, information is given or received
 - *Transportation:* Something is moved, usually more than three feet
 - *Inspection:* Something is read, reviewed, examined, or confirmed
 - *Delay:* Record if wait time is longer than 30 minutes
 - *Storage:* Something is filed, stored, removed
6. Enter the distance in feet the worker or object (paper) moves.
7. Enter the quantity; the amount being processed.
8. Enter the time, in seconds, required to complete each step.
9. Identify any possible improvements in the step.
10. Motion: Total the number of times each symbol appears, to assist you when you compare the current and improved process.
11. Time: Total the time (seconds) and divide by 60 to get total minutes.

Along with a stopwatch and a pencil, the **Time and Motion Workflow** chart lets you record what you observe and the time it takes to complete each step. The completed chart will help you see what can be changed, eliminated, or done differently to increase efficiency. You can follow either a person or a paper/automated process; however this tool is basic and can't capture a process in the context of related functions that may impact overall efficiencies.

Success Story

As Performance Architects at a large financial institution, we managed a major project to increase efficiencies in branch offices by reducing the time needed to perform routine tasks. We had numbers of models and tools at our disposal as we investigated a range of tasks and the processes and practices used to complete them. We spent many days in branch offices observing as people and paper followed process steps.

In one eye-opening observation, we visited a large branch with a 50-foot long teller line that spanned almost the entire width of the building. We were documenting the process for giving a customer access to his safe-deposit box, using the **Time and Motion Workflow** chart, and were able to watch the process for three different customers.

The lead teller, located at one end of the teller line, had primary responsibility for safe deposit box access. For each transaction, we watched her walk the entire length of the line to get to the boxes in the vault at the opposite end. We timed her walk, estimated the distance to and from the vault, and charted the steps she followed to grant entry to each customer.

We showed the lead teller and the service manager our finished charts and asked how frequently customers requested access to their boxes. Then we calculated the average time per week spent "commuting" to the boxes and noted that relocating the lead teller in front of the vault could save her hours each week. The service manager was surprised and immediately agreed to make the change. The total time savings was equivalent to one full-time employee. The branch manager decided to allocate that FTE to the sales team, potentially increasing sales and revenue.

Tips for Success with the Time and Motion Workflow Chart

Use the **Time and Motion Workflow** chart to document the steps in a task. An obvious obstacle to efficiency may be immediately apparent to you as someone new to the task, but a surprise to employees who work around it every day.

Comparing what a worker or supervisor tells you about a task with what you see when you observe it being done can uncover a wealth of detail about the work. Charting it gives you access to critical information that can save time and ultimately reduce costs.

Sharing your charts with your clients gives them another opportunity to add more information and helps them see routine tasks from a different perspective. With the new view you have provided, your client will likely have other good ideas for improving the way work is done. We also like this technique because we found that chart line people could easily start using it to make improvements.

Next: The Workplace/Organizational Level

Join us when our next Column concludes our Human Performance walk with an investigation of performance improvement opportunities at the Workplace/Organization Level.

References

Rummler, G., Ramias, A., Rummler, R. (2010). *White space revisited: Creating value through process*. San Francisco, CA. Jossey-Bass.

BPTrends LinkedIn Discussion Group

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