Knowledge Worker

"Where the heck are the schematics?"

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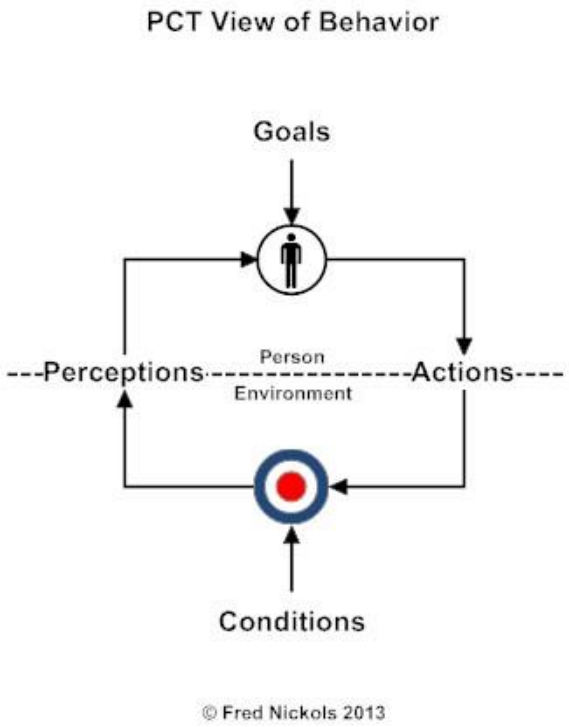
Imagine yourself as a technician who has just been asked to diagnose and repair a very large and complicated system that is not working properly. To your dismay, you learn that you will not be provided with any manuals, test equipment or schematics of that system – the major tools of your trade. In addition, your access to its subsystems is limited and, in some cases, denied. In short, your hands are tied, and your task is well-nigh impossible.

I started my Navy career as a Fire Control Technician, someone who was charged with operating, maintaining and repairing complex, shipboard weapons systems. I was subsequently trained as an instructor, a programmed instruction writer and an organization development (OD) specialist. As an internal OD specialist, my job was to study, analyze, diagnose and intervene in those even larger and more complex socio-technical systems known in the private sector as organizations and in the Navy as "commands." It was immediately obvious to me there was not much in the way of manuals or schematics of these systems. "Where the heck are the schematics?" I wondered. There weren't any and so I began a career-long effort of developing models, diagrams and other "schematics" for my own use.

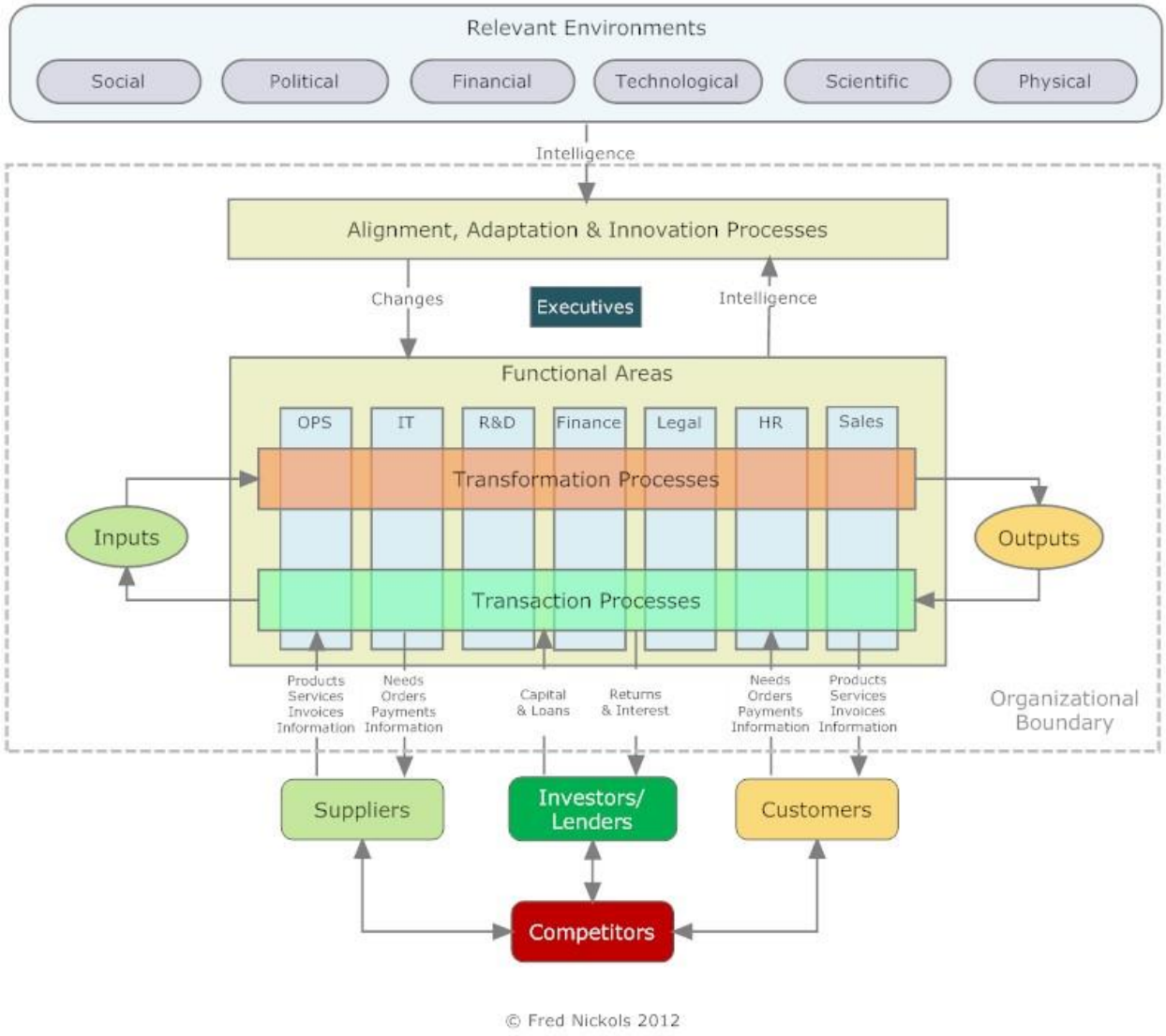
Upon leaving the Navy, I continued developing "schematics" for use in studying, analyzing, diagnosing and intervening in organizations so as to improve the performance of people, processes and organizations. To some extent I have been hampered by the fact that the parallels between shipboard weapons systems and organizations are far from a complete or perfect match. Weapons systems were and are designed and built to perform (i.e., behave) in specified ways under specified (and controlled) circumstances. Organizations are also designed – to some extent – but they also possess numerous, emergent characteristics that are a function of the specifics of the situation at hand, including the unique individuals who populate the organization at a given point in time. A weapons system does not adapt and adjust; it does not innovate; it does not think or ponder the consequences of its action. It simply does what it was designed to do. People do all those other things; they adapt and adjust; they innovate; they think and ponder the consequences of their actions. And thus, the organizations housing them are said to do those things, too.



Nevertheless, a good schematic still plays an important role in work related to understanding and improving the performance of people, processes and organizations. That's what a flowchart of a process is – a schematic of the process. That's what an

organization chart is, too: a schematic of the hierarchical relations of authority in that organization. And even models, such as the one shown above, are schematics; in this case, it is a schematic of human behavior that is based on Perceptual Control Theory (PCT).

What all schematics do is provide a map – a visual display – of the structure and organization of the system being studied. This is as true of organizations and people as it is of a shipboard weapons system or any of its subsystems. A schematic is a kind of map. The schematic or model depicted above shows the structure and organization of purposeful, human behavior. The schematic or model depicted below is a high-level view or map of the key elements of a sustainable organization.



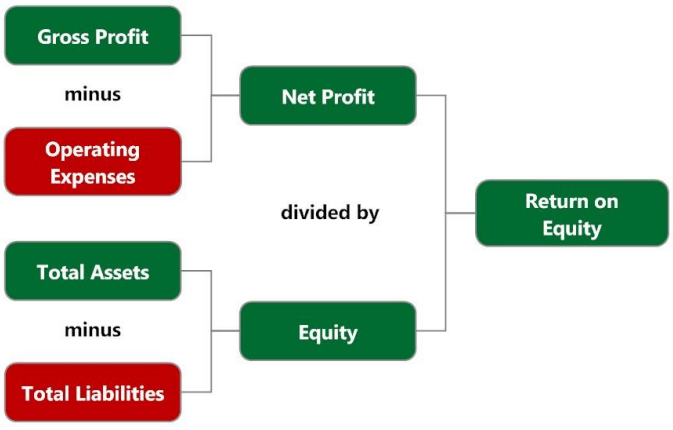
One of the areas in which I have been most interested in devising and developing schematics ties to what I call the "performance architecture" of an organization. Organizations can be viewed as having

three, related domains of performance: financial, operational and behavioral. Models of human behavior are quite useful in examining performance at the individual level and of teams or other kinds of work groups. Models of operational measures and process models are useful in examining performance at the operational level. And, of course, models of the various financial measures used by an organization prove useful in examining performance in that domain.

Those three domains – financial, operational and behavioral – can be mapped and linked. Key financial indicators can be tied to the organization's chart of accounts and that chart of accounts can be tied to its units and its processes. Key operational indicators can also be tied to process performance and, in some cases, to unit, group and even individual performance. All tie eventually to human behavior and performance. It is, then, not just conceivable – but also practical – to map an organization's performance architecture and, in so doing, provide a roadmap to results, a schematic that can be used to study, analyze, diagnose, intervene in and improve the performance of the organization, its processes and its people.

To be honest, I have never "mapped" an organization's performance architecture in its entirety. What I have done, on several occasions, is map the connections between and among those three domains so as to demonstrate the impact and value of various projects undertaken on behalf of my clients. I've been able to hook what I was doing to the organization's bottom line. As part of a project carried out for one client that wanted to position the voice-data systems it was selling as solutions to their customers' business problems, I also articulated a method its sales reps could use to do this. I described how to do this kind of mapping in articles published in ASTD's *Training & Development Journal* (Nickols, 1979) and in ISPI's *Performance Improvement* (Nickols, 2007). Having done several partial mappings, I know that a complete mapping is feasible. Training and development professionals, along with human performance technologists who are under pressure to demonstrate the ROI of their programs would benefit considerably from doing such mapping, even if only on a case-by-case or partial basis.

A good place to get started is with the organization's key financial indicators. The schematic on the left depicts the structure of the first two levels of detail making up a version of a commonplace financial measure known as Return-on-Equity (ROE). Many more levels of detail can be identified, mapped and, eventually, linked to the organization's chart of accounts and from there to units, groups, processes and individual contributors and their contributions. Other financial indicators can be similarly mapped. The same can be done for key operational measures.



So what are you waiting for? Go ahead. Check out the more detailed descriptions in the references and then get started. The payoffs are tremendous, and the costs are miniscule by comparison. If an old Navy technician like me can do it, you can do it.

References

1. Nickols, F.W. (1979), "Finding the Bottom Line Payoff of Training." *Training & Development Journal*, Vol 33, No 12, pp. 54-63. ASTD: Alexandria. Available at http://www.nickols.us/finding.pdf
2. _____(2007), "Roadmaps to Results." *Performance Improvement*, Vol 46, No 6, pp. 36-41. ISPI: Silver Spring. Available at http://www.nickols.us/roadmaps.pdf

About the Author

Fred Nickols, CPT, is a knowledge worker, writer, consultant, and former executive who spent 20 years in the U.S. Navy, retiring as a decorated chief petty officer. In the private sector, he worked as a consultant and then held executive positions with two former clients. Currently, Fred is the manager partner of Distance Consulting LLC. His website is home to the award-winning Knowledge Worker's Tool Room and more than 200 free articles, book chapters, and papers. Fred is a longtime member of ISPI and writes this monthly column for *PerformanceXpress*. A complete listing of all Knowledge Worker columns and access to them is available here.