Resisting a Narrow Definition of Process

The idea of business processes has been around for a long time. It was a commonplace term at conferences in the 1930s when people met to discuss how to streamline manufacturing processes; it was a term used by Geary Rummler in the 80s to describe how organizations worked; and was used extensively by Michael Hammer and Tom Davenport in the 90s when they introduced Business Process Reengineering. There are published ISO, IEEE and OMG standards that seek to define various aspects of process. I have a bookshelf in my office with over 50 books on business process analysis or improvement. You would think, after all this time, that there would be an established definition of the term and general agreement on the role of business processes in organizations.

In fact, about once every three months another discussion breaks out on a LinkedIn discussion site regarding exactly what constitutes a business process, and the definitions offered by participants illustrate that there are widely varying opinions.

Most people seem to agree that a process transforms inputs into outputs. This is the "general systems" definition. A system transforms inputs into outputs. A process, by this definition, is a kind of system. To get a little more precise, most people use the term "business process" to refer to those systems or processes that occur in a business context. It's common to say that a business process transforms inputs into outputs that are valuable to the business. This avoids confusing business processes with chemical, natural, or software processes.

One problem arises when you think about the size or scope of business processes. Some want to confine the term business process to relatively small processes. Most, over the course of the last half century, have used process broadly, acknowledging that a given process is usually part of a larger process, and that a given process usually contains smaller processes. Following this logic, the largest process at a given organization is the organization itself. The organization is a system or process that takes inputs and transforms them into outputs.

Similarly, most, following Michael Porter, subdivide an organization into value chains. Some organizations only have one value chain—they only produce one set of products or services for an established group of customers—in which case the organization and the value chain are synonymous. Most large organizations have more than one value chain. Michelin, for example, produces both auto tires and restaurant guidebooks. Since the Nineties, when Business Process Reengineering became popular, it has been common practice to assemble a company board or committee and begin a process initiative by asking how many value chains a given company has. In other words, the first cut at process decomposition usually involves subdividing the organization into one or more subprocesses or value chains.
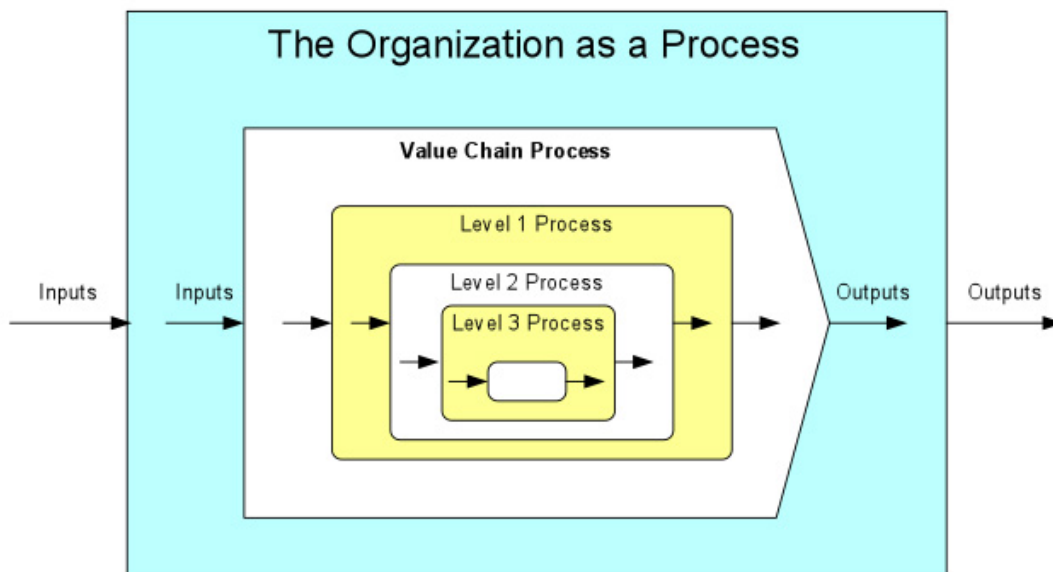

Figure 1. A hierarchy of processes

The next step, normally, is to focus on one value chain, and determine its major subprocesses. Following the Supply Chain Council's SCOR approach, we often refer to the subprocesses of a value chain as Level 1 processes. Following Lean, it is common to speak of the same subprocesses of a Value Chain as a set of Value Streams. Let's see if we can clarify this a bit.

There are two broad ways to think about a set of processes. One can either think of the subprocesses as forming a linear chain, or one can think of them as forming a circular lifecycle. In the first case, one thinks of a process starting when supplies arrive, of assembling the supplies into components, assembling the components in final products , moving the final products to distribution points and marketing, selling and delivering the products to customers. Looked at a different way, one can think of a process beginning when one conceives the idea for a new service, developing the service, implementing the infrastructure required to provide the service, and offering the service to customers. Considered still another way, one can think of a process as beginning when a customer requests a service, preparing and providing the service and concluding when the service is delivered and paid for. There is no sharp line between linear and lifecycle processes, but as a strong generalization, Value Chains focus on linear flows, usually beginning with the creation of the product or service and procurement of suppliers, while Value Streams begin and end with the customer (or other stakeholder) who wants a service. It's quite alright to have different names for linear or lifecycle patterns—the problem comes when one starts to term one a process and claims that the other pattern is something else.

Whether one thinks of a Value Chain as broken into Level 1 processes or Value Streams, one is really only using these terms to create a hierarchy of processes. The organization is the largest process, the Value Chains are the next level of processes, then value streams or Level 1 processes are the level below that. Value Streams and Level 1 processes can be subdivided into Level 2 processes, and Level 2 processes can be subdivided into Level 3 processes. To misquote William James, "it's processes all the way down."

The key takeaway is to realize that these are all variations on the same basic idea—a system that takes inputs and transforms them into outputs. The idea that a Value Chain or a Value Stream is somehow different from a process is silly. Process is the generic term. The various other terms are just specialized kinds of processes.

A major source of confusion, for many, is an IT-oriented understanding of process. If I speak of a software system as a process, I think of a software application that can be executed on a computer. Applications that can be executed on computers need to be precisely specified: At each point, the computer needs to know exactly what to do next. (The precise term for this is an algorithm.) This perspective is underlined by the latest version of BPMN which seems to suggest that a process is a set of activities linked in a specific manner. This definition is fine for a software process, but it hardly applies to business processes like Value Chains, Value Streams, or Level 2 business processes. Imagine a Level 1 business process: Sell Widgets. A comprehensive understanding of the sales process includes knowing what sales people and sale managers do, what software they use, but also how sales people organize their days, how they make calls on prospects, etc. That part of the sales process that can be precisely structured into an algorithm is only a subset of the overall process—the subprocess that can be automated.

The problem is compounded in other ways. Some IT people think of processes as models, as if a BPMN diagram is a process. A process model, be it represented in BPMN or otherwise, is just that—a model. Just as a map isn't the geography that is pictured, a process diagram isn't the way businesses transform inputs into outputs. Real processes result in real products or services. In fact, it is better to think of a business process as the way an organization gets work done. The work involves things, and people, and the expenditure of funds, and reports, and phone conversations with customers and staff people, all interacting together.

Another source of confusion, today, arises because people are interested in describing how dynamic processes are different from less dynamic processes. When most organizations began process work, they focused on manufacturing and tried to define processes that would result in the efficient and effective generation of products. Today many organizations have moved beyond manufacturing processes and are more interested in defining processes that deliver services to customers or processes that involve letting groups of employees coordinate via email or phone to generate unique solutions for customers. These processes are not well defined or linear in the sense that manufacturing processes were. And, thus there is a temptation to define these activities with a different term. Some seem to want to use the term "Value Stream" to define dynamic processes, and then to discriminate between "Value Streams" and "processes," using the second term to refer only to rigid IT processes.

Here is the bottom-line: We are either going to become a profession and accumulate knowledge, or we are going to be a fad, and change our terms every few years. Imagine where medicine would be if physicians decided to rename the parts of the body or the names

of chemicals every few years.

The idea of a business process—a unit of work that begins with a set of inputs and then proceeds to transform those inputs into outputs of value to the business—is pretty straightforward—and has been in popular use since 1900. Trying to change that definition today, trying to narrow it while promoting some alternative term, is destructive and creates confusion. Trying to substitute other terms may be the basis for a good consulting practice linked to the latest fad—be it Òbusiness architecture" or "case management"—but it undermines the collective approach to business management, business analysis and process improvement that Taylor, Deming, Juran, Porter, Rummler, Shingo, Davenport, Hammer and many others have all worked to create and sustain. These individuals have disagreed about many things, but they have all worked to get business people to understand the value of the process approach—which is based on getting managers to conceive of their organizations in terms of business processes.

I am a business process professional and proud of it! I'm not a Value Stream analyst, or a business architect, or a BPMN modeler. I'm a business process practitioner, and, as such, I use Value Chains, Business Architecture, Lean and Six Sigma, BPMN and lots of other process tools to accomplish my goals: To improve the business process that organizations use to accomplish their goals and achieve superior performance.

Till next time,

Paul Harmon

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