Swim Lane Diagrams
Mapping and Improving the Processes in Your Organization

When thinking about your organization, have you ever said to yourself that the right hand doesn't know what the left hand is doing?

Chances are you have: Despite all the efforts people have made to streamline business operations and flatten organization structures, there are still a great many activities that involve more than one department or team.

Whether you organize your department or teams by function (marketing, accounts, operations), by purpose (for example, corporate customer management) or by any other means, the fact is that a department or team needs to work with other departments or teams.

This means connections, communications and hand-offs between departments and teams. And these create the risk of processing gaps, inefficiencies and duplications, which can contribute to reduced performance or higher costs.

Even well designed processes and interactions are at risk of inefficiency creeping in: It's a fact of human nature; and so, it's something that needs to be managed. By having a formal method for identifying and integrating processes between departments and teams, you can ensure the connections, communications and hand-offs are well-designed and well managed. One such approach uses "Swim Lane Diagrams," also known as "Rummler-Brache Diagrams."

Swim Lane Diagrams were proposed by Geary Rummler and Alan Brache in their book Improving Processes (1990). This method of diagramming allows you to quickly and easily plot and trace processes and, in particular, the interconnections between processes, departments and teams.

Like other process diagramming techniques, with the Rummler-Brache method, you map processes linearly as a series of tasks across the page. Lines and arrows between tasks represent the flow of information, goods or work-in-progress, and also represent changes in responsibility.

The identifying feature of Rummler-Brache is the use of "swim lanes", horizontal rows across the diagram page. Think of a swim meet where each competitor has his or her own lane to swim: In this diagramming method, each "swim lane" may belong to an individual, a team, a department, or any
other organizational unit you choose.

Process diagrams, in general, are a great tool to help spot processing gaps and inefficiencies. The added advantage of the Rummler-Brache or Swim Lane Diagram approach is that it focuses on the high risk interconnections between departments and teams, and helps you spot more clearly issues and risks associated with these.

**Example**

Here is a simple manufacturing example: XYZ Corp. makes Grommels. Grommels are made of three pieces of metal two of which are welded together and then joined with the third.

Click [here](http://www.mindtools.com/community/pages/article/newTMC_89.php) for figure 1 – the current swim lane diagram for XYZ Corporation, showing what the swim lane diagram for the manufacturing process currently looks like.

**Improving the Process**

Once the diagram is complete, it is easy to see who is responsible for what and it is also easy to start identifying potential inefficiencies. The diagram technique helps you break down your process so you can spot the bottlenecks, redundancies, and other causes of inefficiency, and so get on with improving your business process.

For example, when you look at the Grommel manufacturing process, there is potential redundancy in the raw material inspection. If the Receiver were to inspect the raw material before sending it on to Welder or Joiner, then both of those guys could concentrate on their main activities: welding and joining.

Click [here](http://www.mindtools.com/community/pages/article/newTMC_89.php) for figure 2 – the revised swim lane diagram for XYZ Corporation, showing this process improvement.

Figures from "Improving Performance: How to Manage the White Space in the Organization Chart" by Geary A. Rummler and Alan P. Brache. © 1995 Jossey-Bass Inc. Reproduced with permission of John Wiley & Sons Ltd.

**Creating and Using Rummler-Brache Diagrams**

The first step to spotting inefficiencies and making improvements is to break down your organization's processes into manageable pieces. If you tried to look at everything at once and in detail, you'd be overwhelmed. So before
you get started, it's important to clarify what you are trying to accomplish with the Rummler – Brache method, and so determine the right areas of focus and level of detail.

If you are trying to find strategic inefficiencies, then analyzing every process in detail is unnecessary and cumbersome. Here you might assign each main functional area to a swim lane and look at the interchanges in and between them. This would help you spot disconnects between functional areas of the business.

If you were trying to diagnose inefficiencies in your hiring and recruitment process then you would look at specific roles, departments and perhaps some key individuals and assign these to the swim lanes.

For a comprehensive approach, you may start by analyzing the processes and organization using high level swim lane diagrams. Then, once you have spotted areas you need to focus on, you can drill down there using more detail diagrams.

1. Determine what you aim to accomplish.
   - What business process do you want to analyze?
   - Is it operational, strategic, functional, etc.?
   - What organization units are involved and what level of detail do you want to analyze these to spot inefficiencies?

2. Clarify the processes you are focusing on.
   A process is defined for this purpose as a series of tasks that have a specific end result, such as hiring a staff member, producing a product, acquiring a new customer.
   - For each process you are analyzing, what is the end result?

3. Identify all participants in the processes you are analyzing.
   These include all the organization units participating in the processes, and anyone who provides inputs or receives outputs from it. Depending on the level of detail you have chosen, these may be by departments, teams or individual people; or even a computer system that performs certain parts of the process.
   - Which organization units participate?
   - Where do the inputs to the process come from?
   - Who receives the output of the process?
4. **Now it's time to start creating the diagram.**

List the participants in the far left column of the diagram.

Assign each of these participants to a horizontal band (swim lane). It is helpful to assign the swim lanes in sequence, with the first column assigned to the participant who provides the first input. (For customer facing processes, this is often the customer.)

5. **List the step or activities required at each stage of the process:**

   - Follow through the process sequentially.
   - Remember you are mapping how the process is currently being done – not how you think it should be done.
   - The key to creating a useful diagram is to keep it as simple as possible. Try not to include too many loop backs (unless you are focusing on exceptions) – and keep the process mapping moving forward.

6. **Analyze the diagram for potential areas of improvement.**

   - Are there any gaps or steps missing?
   - Is there duplication?
   - Are there overlaps, where several people or teams perform the same task or activity?
   - Are there activities that add no value?

Once you have identified potential areas for improvement, the next step is to decide how to address the issues and make changes. Rummel-Brache diagrams can also be used at this stage to map out the proposed process changes. As with any proposed changes in the organization, the pros and cons need to be analyzed, and any change that follow must be carefully planned.

For example, if you are considering removing duplicate processes, you must first look at whether there is a legitimate need and also what would be the impact of removing the duplication: A duplicate process may exist "legitimately" to provide, for example, proper financial or safety controls. (Techniques like **Brainstorming** and **Impact Analysis** can help you think through the consequences of a change.)

**Key Points**

Rummler-Brache diagrams are useful tool for identifying sources of inefficiency within, and between, processes and organization units. By using structured pictures to show how processes achieve their aims, you can see at a glance who is responsible for what, and whether there are potential areas for improvement in the process.

This is just one of the techniques within Mind Tools that can help you think
about the ways in which things happen within an organization. If you enjoyed this article, you'll also love our articles on Flow Charts, Systems Diagrams and Value Chain Analysis.

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