System of Work Audit

What is the System of Work Audit?

The System of Work Audit is a powerful tool and process within icube™ to help leadership teams identify the constraints in the business. This tool consists of four main functions, each one dependent on the next. The first step in the exercise is to layout the four functions as steps in a process flow from left to right. (*See Figure 1*)

Figure 1: The Flow of Work

As you can see in Figure 5.2, the output of **Marketing** flows into **Sales**, **Sales** leads to **Operations**, and **Operations** feeds **Finance**. Thinking about the business this way enables us to start identifying the important aspects of each of the steps, which are as follows:

1. Input or Drivers
2. Desired Output
3. Current Capacity
4. Processes
5. Tools and Resources
6. Functions
7. Time in the System
8. Variability
9. Internal Constraints
10. External Constraints

The System of Work Audit can be implemented easily by any leadership team simply by following this detailed guide. During this introduction, we will define each aspect of the four steps and how they play a role in the process as a whole. As previously mentioned, each one of

the four steps is dependent upon one another and is supported by the 10 aspects listed above. We will take the time to discuss each aspect below in detail.

Defining the Aspects

1. ***Inputs or Drivers:*** *Inputs or Drivers* are the work or initiative that comes into each step.
    - **Marketing:** Since this is the start of the flow, it is usually a marketing plan that clearly outlines the campaigns that can be supported by available capital.
    - **Sales:** The inputs are the leads that are generated by Marketing.
    - **Operations:** The inputs are the orders generated by Sales, and Finance takes the value generated by Operations as its input.
    - **Finance:** Ultimately the output of finance is profit in the form of a return on the investment in the company. The profit is then reinvested back into Marketing for the cycle to continue.

2. ***Desired Outputs:*** *Desired Outputs* are the outcomes or work produced by each step. As we saw in the definition of *Inputs or Drivers*, the output of each step is the input of the following step.

3. ***Current Capacity:*** *Current Capacity* informs us as to the amount of work that each step can produce in a given amount of time. Another term for this is throughput. This is important to know for each step as it is the first step in understanding flow. It also follows that the throughput of the entire organization will be constrained by the smallest capacity of the all the steps.

    For Example: Marketing produces a large number of leads that Sales converts to orders. If Operations can only handle half the number of orders, we will soon see work accumulating

between Sales and Operations, resulting in dissatisfied customers.

4. ***Processes:*** *Processes* are the repeatable guidelines followed by individuals in order to produce work. The best processes consistently produce high-quality work while using resources efficiently. Process design is a trade-off that depends on what you want to emphasize. A process that emphasizes quality over cost will look a lot different than one that emphasizes cost over quality.

   For Example: The process of boarding passengers for a flight could actually be very simple. However, the need to maximize security requires that we need to carry the proper identification and become quick-change artists when it comes to footwear and other clothing accessories. This makes the process a bit more cumbersome for passengers. Whether it's beneficial and actually improves security is left as an exercise for the reader to determine.

5. ***Tools and Resources****: Tools and Resources* are used by processes to accomplish work. These are a combination of infrastructure and support.

   For Example: Tools might be manufacturing equipment and software, whereas resources might include capital and internal and external services.

6. ***Functions:*** *Functions* are the specific roles played by team members who carry out processes using tools and resources. As we will see later, all the different functions that we identify in the team make up the functional framework.

   For Example: In a kitchen there may be a head, or executive, chef who is responsible for creating the menu and managing all activities in the kitchen. In icube™, we call this a function. Under this function we often have secondary function called the *sous* chef (*sous* meaning "under" in French), who is the second in command and the leader of the kitchen in

the absence of the head chef.

7. ***Time in System:*** *Time in System* identifies how much time is taken for work to be completed from input to output. The longer time in system a job requires, the greater the capital and resource requirements, and all else equal, the greater the cost of the final product. This is why cheese that is aged longer is usually more expensive than younger cheeses.

8. ***Variability:*** *Variability* deals with increasing the consistency of the process. Variability can pertain to time, quality, or even quantity of the work. Effective systems need to minimize variability since it can cause bottlenecks and disruption. High variability can also reduce overall throughput even if average throughput is high. The intuitive way to understand variability is to imagine what happens when traffic doesn't flow smoothly on the expressway. If any one car slows down, that causes the driver of the car behind it to hit the brakes, causing the one behind it to also slow down, causing a chain reaction. Then if the car that braked speeds up, there is a gap between it and the car behind it, causing that driver to want to speed up, making it look like the traffic is moving in fits and starts. However, when you have low variability, everyone is driving at the same speed and the traffic flow is much more even and uniform and the overall throughput, number of cars moving on the expressway, is high. Usually variability occurs when the type of work that is being done isn't consistent.

   For Example: Variability would be the experience of a stylist at a hair-salon. The amount of time it takes to give haircuts could vary substantially from client to client depending on needs and results desired. Similarly if there isn't a defined process, different people will take different amounts of time to do the same work.

9. ***Internal Constraints:*** *Internal Constraints* are the factors that affect throughput or process flow that are within the control of the team. These can usually be addressed by deploying capital or reworking configurations.

    For Example: An internal constraint could be the capacity of the manufacturing equipment that is used to produce a widget. It might be easy to increase capacity by purchasing additional equipment or reconfiguring the existing equipment.

10. ***External Constraints:*** On the other hand, *External Constraints* are factors are out of the control of the team and are usually not addressable by deploying additional capital.

    For Example: An external constraint might be imposed because of licensing restrictions. Another type of external constraint might the limitations of what is scientifically possible. As one scientist mentioned to me, "It's not a good idea to argue with physics!"

Guide Your Team with the System of Work Audit

With all of these factors in mind, the facilitator guides the team through the System of Work Audit. It's important to note that this is the time to focus on the status of the current work system, not to solve any actual issues. That task comes later. To accomplish this, the facilitator uses the System of Work Audit table. (*See Figure 2*).

	Marketing	Sales	Operations	Finance
Input				
Output				
Capacity				
Processes				
Tools and Resources				
Functions				
Time				
Variability				
Internal Constraints				
External Constraints				

Figure 2: System of Work Audit

The facilitator now guides the team through the exercise starting with Marketing, following the steps in succession. Since this is the first group exercise, the facilitator needs to be extra-vigilant to ensure that the ground rules and other norms be set right from the start, such as:

- Bad habits or unproductive dynamics must be rectified immediately.
- The facilitator must also pay close attention to be sure the conversation doesn't get derailed.
- The facilitator should use an "Issues List" to record areas of disagreement or topics that require further analysis. This allows the exercise to stay on track and all questions are clearly recorded.

Examples of issues that arise during this activity include the following:

a) What is the desired output?

b) How should we compute capacity?

c) Do we have three processes or four?

d) Is the variability in a step high or low?

The facilitator uses his or her judgment to determine how much time to allocate for discussion of such questions. If the team comes to a quick conclusion, then it is recorded on the board; otherwise, the question is added to the issues list and the conversation moves on to the next topic.

Prioritize Your Systems of Work

The last item in the exercise is to rank the systems of work that need the most attention from the most urgent/important → least urgent/important. Sometimes a particular functional area such as Marketing or Sales may stand out as a bottleneck. The team needs to decide whether this is something it can accomplish in ninety days or if it requires a longer timeframe. If it is the former, fixing the bottleneck is listed as a quarterly Wildly Important Goal (WIG).