

Hey, and welcome to Lesson 1. This is the term section of Module 2 for Automation: Set It & Forget It.

So what we're going to do here is just going over some terms about what you need to know. What I call things so, that way, we talk about the same exact thing during this module. You can take these terms and translate them to whatever you need in your ecosystem for people to be able to keep the same language.

If you don't know what these terms are, great. Let's define them. If you do again, suspend your definition, go with the definition in this lesson.

So, in terms of system engineering, what do we need to know about specific terms? The first couple are pretty important.

So, the first thing that we're going to go over is the word **TASK**. What is that? It is just a set of instructions to follow. So it is a very specific one seat, one session, human or robot that have instructions.

Now you have **INPUT, OUTPUT, TRANSFORMATION**. Those are the three different levers that you're going to have within processes and tasks. So they're going to be those are the things that you're doing. You're either inputting into the system. You're transforming an input that's already there. Or you're producing an output. Those are the three different things that you're going to actually be doing with a task.

A **PROCESS** is a set of tasks with a start and an end. So task is a very specific set of instructions to do a specific thing. The process is a set of tasks with a start and an end.

Then, you have the word **WORKFLOW**. The workflow is going to be a set of processes with a start and an end with decision points and a success and a failure state. So it's going to be a bunch of processes that are chained together with yes-no statements that determine if you're going to move on to the next process with a success and a fail state.

So the easiest thing that I could kind of put together for a workflow would be like turning a light bulb on. So you walk into the room. You'd hit the switch and you would say, "Oh, the light is out."

So the workflow begins of determining what is going on with that light bulb. You want to walk forward and you say, "Is the thing plugged in?" Yes. Check the bulb. Is it a good bulb? No. Change the bulb. Once it changed the bulb, turn it on. It works. So you just walk through an entire workflow of a process with tasks for changing the light bulb. And the impetus of that was the light didn't turn on.

So you have a start state and end state. You have decision points. And then you have the success or fail state. So, the fail state would be the lamp is broken or the power is off. And the success state is the lamp works.

So then you have a **BOTTLENECK** which is a part of the process: the input, output, or transformation that stops the next part of the process in the workflow.

So there's three different types of bottlenecks, and they just coincide with the three different levers of task process and association. So you have an input bottleneck. Okay, so imagine that you are creating a bunch of blog posts. Or maybe you're creating a bunch of videos and you cannot create enough content for your editors and your posters and your video editors and creative team. You don't have the enough ability to record or to create for them.

So you have an input bottleneck because there's maybe just one person and that person is the one sending it into the system and maybe you have four or five video editors, but you have to create the video. So that would be an input bottleneck.

But then you have a transformation bottleneck, which is like, let's say, in the same exact situation. You have a backlog – 50, 60, 70 videos that you've already recorded. And then you go and hire one video editor. And that person only has a certain amount of time and a certain amount of skill set and just whatever to be able to actually edit those videos, to transform those videos. So his process is a transformative. He takes your output as an input and he's transforming it because he's editing your video.

So, if you don't have an input or output issue, you already have everything, it's a backlog and you give all of your output of your videos into the input of the system for him. He doesn't have an input problem, he can accept as many videos as you give him. You can upload him 50 or 60 videos. That's not the input problem. It's fine. He just can't edit those. He can't transform those things. The transformative process, it sinks down.

So that's what you imagine probably when somebody says bottleneck or like an hourglass is unlimited inputs or you know, a known quantity of inputs. And then the transformation process slows it. And then it slowly can, as it transforms, gets to the output which is unlimited again.

So, how does that work as an output bottleneck? Well, let's say you have 50 videos but you also have a bank of 50 editors. So it's 1:1. But the social media platform that you're going to post on limits the amount of videos that you can post for the per day. Or because you don't have a certain amount of watch hours, you can't actually post on that for a week.

So now your input in your transformation is fine. You have a one to one input and transformation, but you can't do anything with those outputs. Those outputs are just sitting there and they're stacking up. And they're stacking and stacking and stacking. And these things compound.

So output actually is the most dangerous and most costly of all bottlenecks that people don't really even realize they're in. Because they're so focused on the transformation process that they don't even look at the distribution output process. So those are the 3 bottlenecks.

So input, output, transformation, type of tasks within the process – those all can have bottlenecks as well.

The next term we want to talk about is **INFLECTION POINT**. That's just going to be a point in time where you make a choice within the system that you can't go back. So there's going to be pathing within the system. And it's going to be a yes or no choice or an A or B choice.

And if you say yes, you say no, it's going to proceed. Or it's going to go back in time. So as soon as you say yes, it can no longer enter that loop. It's out of that loop and you're into the next process. So an inflection point is going to be like, let's say you are building some kind of A/B test or experiment and it says, "Is this ready to launch?" Once you say yes, you can't unlaunch it. You can launch another one, but you can't unlaunch it, right?

Inflection point is you put the pizza in the oven. You can't unbake it.

And then you have a **PROCESS MAP** which is just a basic flowchart with known shapes. So like you have a pill shape, that's a start. A square, that's a task. Diamond, that's an inflection. There's all kinds of shapes that you have. These are built into Google Suite and Microsoft as well. So you don't actually have to buy any software for this. You can just build process maps directly in Microsoft. We'll show you how to do that in a later lesson.

And then **PROCESS OPTIMIZATION** which is identifying bottlenecks and process workflow.

So you look at the three levers of the types of tasks. You look at the bottleneck and all the systems holistically and you say, "hey, there's an output bottleneck or an input bottleneck or transformation bottleneck, transformation bottleneck. Remove those bottlenecks and you'll optimize the process."

Then you're able to look at and see which ones you can automate.

So task, input, output, transformation, types of tasks. Process – set of tasks. Workflow – set of processes. Bottleneck – part of the process that slows the rest of the process. Inflection point is a choice where you can't go back from. Process map is literally just a map or a flowchart of the process. And then process optimization is using that process map to get rid of redundancies and bottleneck.

Okay, but what do you need to know conceptually and theoretically about automation for this to win? What do you need to walk away from? What are the concepts that you need?

The first one is process optimization which we just defined. But what does that mean? Okay? So this is a flow chart of a process. You see you have the pills. You have the squares. You have the decision point, inflection point. And then you have another pill for stop.

So process optimization. You can, on an average save 50% of operational cost through optimization and automation. So you go through and you say, "What are the processes that I have that I can optimize? What are the inputs, outputs and transformations that I'm having? Do I really need to transform this input for this output?"

You get rid of all the redundancies within the systems and say, "Hey, this process goes through Microsoft Word six times. Why don't we just do it once and end with Microsoft Word instead of processing." And there's going to be steps within your process that only you can determine because you process map them out. And you start going and looking at inflection points and when it starts going back and then recursive loops and you say, "How do I get out of these recursive loops and keep it moving forward? What do I do here to make sure that this is a yes for more than going back into this? What do I do so I can make sure that I don't have an end point because the system failed."

So process optimization is the first thing that you do out of all of this. You go through and you say, "These are the processes I have. Here is everything that they are. Here's all the tasks within those." Identify redundant tasks. Get rid of those like reporting tasks and extra reporting tasks or like email tasks. Things like that that don't need to be there for the process to actually work, trim those. Get it down to the very least of what it actually is that the process does. Map that out and see how you can get rid of steps and then you can automate that even even further.

The next thing is workflow automation. It's taking a business workflow that you've gotten to the point where you no longer can optimize it with a human. Everything that is there a human can do the most effectively.

So you start replacing the human from manual rote tasks. Anything that is done the same way every single time that is data manipulation or data transposition can be done without problem with the automation.

So, you identify all these processes. You optimize them. You get to a point where the human is working the absolute most efficiency. And then you replace the human as much as you can.

You don't replace the human at all, like always, because you want to make sure that there's checks and balances. And that the workflow automation isn't just going willy nilly, but you can 9x that person with workflow automation. Or you can free that person to be 9x available or whatever they need to do that's not in the busy work of in process.

So you get rid of all of the processes that are causing bottlenecks, and then you automate the rest of them. You can get your process beat up and 90% and drop your operational cost by 50%. We'll go over what that means, specifically, in the later lesson but keep those two numbers in mind.

So this is the quote that I want you to think about as you're good going forward, learning about automation, learning about AI, learning about having to actually pave the path in front of you. From Jack Welch, Six Sigma, from GE Fame says, "Good business leaders create a vision, articulate the vision, passionately own the vision, and relentlessly drive it to completion."

That last part is the most critical of all of this. You not only have to own all of this, but you have to actually push it forward and make it happen. This is going to be something that people are not really interested in losing their job to.

So change management is the most important thing that you do. If people are not going to get on board with this, you might as well not do it. So understand that it's not enough to have the vision. It's not enough to tell people about the vision. It's not enough to own it. You have to drive it home. As it were to tell, as Shaq back in the day, "You got to take it to the home".

So let's do for lesson one and the next lesson, we're going to go over what workflow automation is, how it works within AI. And we're going to really start getting into the nitty gritty of what it means to optimize processes and to get workflow automation going.

Thanks and we'll see you in the next one.