



# UNIT-5

## The Execution Phase

### Learning Outcomes

**By the end of this unit the learner will be able to:**

- ✓ Identify ways of implementing process changes

## Unit 5

### The Execution Phase

#### Implementing Processes

Once you have defined or modified an existing process, you need to figure out how to launch the change. Use the following tips to help your process get a solid foothold within your organization.

##### Tips for Implementing Process Changes

###### Get Management Buy-In

When implementing a process (or any organizational change, for that matter) it is vital that you have the support of management. To do this, you need to show them what is in it for them. Make sure you get their thoughts and feedback on the proposed changes, and make sure you include different levels of management. Remember, their opinions and willingness to support the change can make or break your efforts.

###### Establish a Policy for Your Process

It is important to establish a policy for the process. This will help outline the purpose of the process and set behavioral expectations. Furthermore, a policy attached to your new process helps give the initiative a greater sense of legitimacy.

###### Establish Measurements

Over time, with the collection and analysis of process data, you can establish the acceptable performance of the process (also known as a baseline). When establishing your baseline, it is important to consider the types of work being done and when that work is being done. Knowing how much effort needs to be inputted to get the output of your process is a crucial part of the equation.

###### Train Staff

Everyone using the new process must understand it. When training staff to implement your process, focus on the following questions:

- What information needs to be communicated to staff?
- Do managers need to know more than employees?
- What does successful completion of training look like?
- What skill sets will your trainees have acquired?
- Who will deliver the training? Who will receive training?
- Where will it take place?
- Who will write the material?
- What sort of funding do we need for the training to happen?

- How long will the training take?
- What will be the ramp-up period (after training, but before employees get to 100%)?

### Manage the Change

Implementing a process can mean a big organizational change. You can support individuals through the change by providing adequate training. However, some people are adverse to change no matter what support you give them, and you will probably get resistance from some individuals within the organization. You can alleviate this by getting buy-in from management and by having a policy in place for the process. If this does not produce the expected behavior, you may have to establish consequences for noncompliance.

### Test Your Knowledge

#### Exploring Automation

**Can you automate a process too much? That is, can you automate a process and compromise the quality or service the process was intended to offer? In other words, do some processes work better with a high level of human involvement?**

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**Give an example of an automated process you work with. Do you find this process is enhanced by automation?**

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### Automating Processes

#### What Does it Mean to Automate a Process?

When you automate a process, the goal is to use technology to help make your process more efficient. You can automate certain steps of the process or the entire process.

When you automate only steps of a process, you allow for the blend of human interaction and automation. If you choose this method, you need to ensure that the people working with the automation understand how to use the technology and tools.

When you automate the entire process, you cut down on the level of human involvement in the process. If you choose this method, you need to ensure that the process lends itself well to low human involvement.

## **Benefits of Automation**

### **Increased Profitability**

Automation can help increase profitability by shortening your process' cycle time.

### **Increased Productivity**

Automation increases productivity by giving employees extra time and increased flexibility. By having process tasks complete themselves, employees are free to work on other tasks.

### **Increased Efficiency**

Automation increases efficiency by eliminating time-consuming steps in a process.

### **Increased Quality**

Some processes can be extremely intricate or require a lot of repetition to be completed. Automation can increase quality by minimizing the instances of human error.

### **More Convenient**

Automation can make a process more convenient for customers. Think of online banking. Paying your bills used to be laborious; it used to require you to be physically present at a bank during their business hours. This was inconvenient (if not impossible) for most working people. Now, we can simply go online whenever we like and pay our bills.

### **Potential Pitfalls of Automation** **Compromised Customer Service**

When we over-automate a process, the result can be consumer frustrations. Think of when you have to call a service provider because you have a question about your bill. You call the 1-800 number and you get a computer-automated voice telling you to press numbers for a selection or to say a word for a selection. You say the word and press the number, and then you get disconnected. You call back and repeat the process over again.

Over-automating your processes can alienate your customers. A large part of customer service is the interaction between two people; it's a relationship for however brief a time. What's more, it impacts the way the consumer views your company. Over-automating customer interactions can be viewed as sterile and can be counterproductive.

### **Not Foolproof**

When you automate a process, remember that technology is not foolproof. If you have a system go down, you will not be able to offer some of your services. You have the potential to lose a lot of business depending how long your system is down. At the very least, you will have inconvenienced a number of your customers.

## Steps to Automate a Process

### Identify Steps in Your Process that Lend Themselves to Automation

Not every step in your process will lend itself to automation. For example, imagine you needed a prescription. Instead of getting a pharmacist to fill the doctor's prescription, imagine that you could go online and submit a form to get your prescription filled. Does this process lend itself to automation? Absolutely not, since a mistake could be potentially fatal for a customer. This process needs human interaction. Consult with your process design team and get feedback from people that use the process to pinpoint areas that would benefit from automation.

### Look for Increased Quality and Efficiency Through Automation

When automating processes, look at areas which would increase quality and efficiency when automated. In addition, focus on steps that would be easy to automate and provide more value for your customer.

Think of when you are pumping gas. You used to have to go into the store to pay, but now you can pay at the pump. Gas companies changed the way their customers purchased by automating part of the process. This gives the consumer a choice and adds value by saving the customer time.

### Consult with an Expert

When you have decided what parts of a process you would like to automate, you then need to consult with a technology expert to figure out how you can accomplish this. Depending on the solution that you need, this may be in-house, externally, or a combination of solutions.

### Summary

When automating aspects of processes or whole processes, there can be benefits and potential drawbacks. Here are some questions that you should consider when deciding whether or not to automate a process:

- Does this automation optimize my process?
- Does this automation simplify my process?
- Does this automation create value for customers, thereby improving our bottom line?

Answering these questions will help you determine whether or not automating a process is the right solution for your organization.

## Understanding Business Rules

### What are Business Rules?

Business rules are designed to control, define, standardize, and structure how procedures are carried out within an organization. These rules influence and guide how a business performs. They are created by analyzing the needs of the company and should evolve as the company grows.

Earlier, we talked about an insurance company's quest to update their services by envisioning their future state, analyzing their current state, and setting out steps to bridge the gap between the two. Let's say the insurance company achieves their goal and manages to have their adjusters respond to a customer the same day of the accident. A business rule that might follow from this could be: "Adjusters will respond to customers the same day of an accident."

### **Benefits of Business Rules**

#### **Direction and Clarity**

Business rules benefit an organization because they help to build a clear picture of what is expected. The example we just used ("Adjusters will respond to customers the same day of an accident") is written in simple language and makes it very clear what needs to be achieved.

#### **Easier to Measure**

Typically, rules that are easy to understand are also easy to measure. In the example above, the adjuster either met with the client on the day of the accident or they did not. Therefore, the company either succeeds in achieving the rule or not. The success rate of this particular rule would be extremely easy to measure.

#### **More Accountability**

The structure and language of our sample rule is extremely hard to misinterpret. The expectations are clearly laid out, so failure to meet the rule must have justification.

#### **Figure Out the How**

Since the business rules sort out the what, it allows you to focus on sorting out the how. How will you achieve this? What strategies will you use?

#### **Things to Watch Out For**

Business rules must be written in a clear, concise manner. Use language that is both easy to understand and that communicates the expectations of the rule. People who find the rule confusing may avoid it altogether.

Before finalizing the rule, test it! Have multiple people within the organization read the rule. Then, ask them what they think it means. Make adjustments as necessary to ensure clarity and comprehension.

As well, your rules should be written down and documented. This makes it much easier for others within the organization to access this information. Furthermore, updating or changing your rules becomes simpler when you have them compiled. One common documentation method is to use a database that is accessible to the appropriate people in your company.

## The Role of Business Rules in Workflow Engines

While business rules can be used to give your organization structure, they also have a large part to play in business process technology. Business rules can interact with workflow engines and set up the parameters under which a workflow engine operates. (A workflow engine is a tool that helps businesses automate parts of processes or entire processes.) That is, the behavior of the workflow engine will be prescribed by business rules.

When creating business rules in a workflow engine, first establish what you want the system to do. How will it be operating within the process? What will be its function? Based on these answers, you can begin to construct a set of business rules that will govern the operation of your engine.

Let's look at an example. Say you are a Financial Services Representative at a bank. A customer comes in to apply for a line of credit. You take their financial information and input it into the bank's financial screening system to see if they qualify for the service. This screening system is an example of a customized workflow engine: it automates certain tasks like prompting you to fill out required information.

When you are filling out the forms within the screening system, you ask the customer if they have documents to prove their income. Unfortunately, they have left these documents at home. Without these documents, the process cannot continue. Your screening system prompts you that these documents are needed in order to go on. This prompt comes from the predefined business rules that govern the screening system.

Without business rules, your workflow engine is directionless. Typically, most organizations use logic-based software to create business rules. For the example above, the business rule might be, "If the customer provides the correct income documentation, then the process can continue." This sample rule is conditional; it is based on an if, then format. (If the requirement specified is met, then the process may continue. If the requirement is not met, the process cannot continue.)

When choosing business rule software, do your research. Make sure the software enables you to maximize the potential of your workflow engine.

In addition, consider the application's ease of use. Ask:

- How easy is it for you to create a rule?
- How easy is it for you to change the rule?
- How easy is it for you to link the rules with your workflow engine?

Finally, compare the cost to features. These steps will help you decide which application is the right solution for your purposes.

## Test Your Knowledge

Create a paragraph that summarizes the role of business rules within technology and the organization as a whole.

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## The Role of Workflow Engines

### What is Workflow?

**Workflow** is a term used to describe how various components of an organization interact and collaborate to complete the overall strategic goals of the company. In other words, a workflow is the sequence of steps needed to be completed for a process to take place. Moreover, workflow is the conscious effort to eliminate barriers between process steps and to encourage a seamless transition. Thus, when we look at workflow in an organization, our aim is to increase the efficiency or flow between these steps to increase productivity and decrease costs.

Two questions determine what a workflow looks like:

- What type of input needs to happen in order to receive the desired output?
- How well does the input move through the process in order to achieve the proper output?

In a digital world, workflow can be increased with technology. Solutions that enable workflow in processes are called **workflow engines**.

### The Workflow Model

Here is a diagram that illustrates how the various components come together:



### What is a Workflow Engine?

A **workflow engine** is a tool that automates parts of processes or entire processes. Workflow engines normally work in conjunction with human interaction. Let's say you are visiting a local library to renew your library card. You are greeted by an employee and they begin the process of issuing you a card. They open a computer program that prompts them to input your basic information. The worker follows the prompts and the workflow engine then provides the employee with the necessary documentation to be completed by you. You fill out the forms, the employee finishes inputting the data, and when all the information has been gathered, the workflow engine prompts the employee to print a library card.

However, workflow engines can complete processes without any human interaction. For example, let's say that now that you have your card, you have checked out materials from the library. Unfortunately, you have forgotten the date that the materials are due back. However, when you signed up for the card, they asked you for your e-mail address. The e-mail address is used by the computer program to send you a notification when your materials are due. This process has no human interaction; it is completed within the workflow engine.

### Test Your Knowledge

What are the benefits of this workflow solution?

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**What could be some of the potential pitfalls with this solution?**

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**Does your workplace currently use any workflow engines to streamline processes? If so, describe the system your business uses.**

**Workflows and Business Rules**

One additional point to note is that the parameters for the workflow engine are established by business rules that define what the system will allow. These rules are designed to structure the activities your workflow engine will perform. Additionally, they are designed to guide the user to input the proper information to successfully complete the process.

**Case Studies**

**Choose one of the following examples:**

- Automated airport travel (ticket purchasing, getting your boarding pass, seat selection, and baggage check-in)
- The self-serve checkouts at grocery and department stores
- Another relevant example from your industry

**Explain how workflow engines have impacted this industry.**

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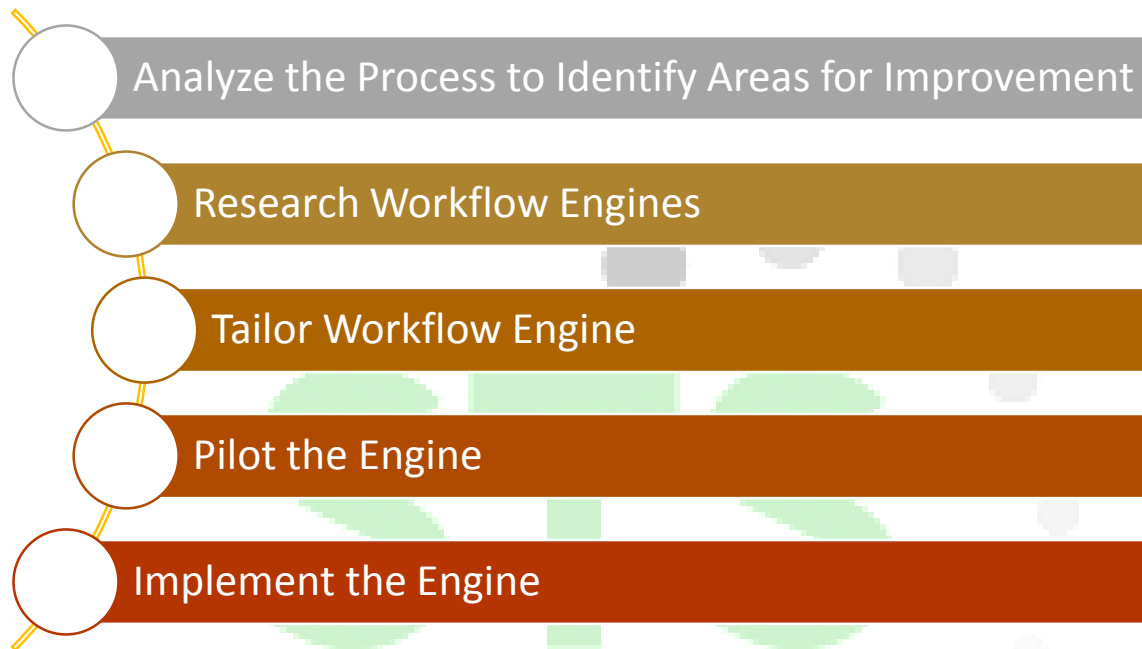
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## Steps to Implement a Workflow Engine

### Implementing a Workflow Engine

While workflow engines can drastically improve the efficiency of your processes, they require a significant amount of time and resources to get underway. Here are the steps for implementing a workflow engine.



### Breaking Down the Model

Let's look at each step of this model.

#### Analyze the Process to Identify Areas of Improvement

When you are trying to implement a workflow engine in your process, you need to identify how your engine will enhance the process. To do this, identify areas that are in need of improvement and the areas that lend themselves to being automated. Then, you can pinpoint what tasks you want the engine to perform.

#### Research the Available Workflow Engines

When you are looking to implement a workflow engine, do your research. See what solutions are available and compare workflow engines to ensure they meet your needs. Furthermore, when researching available engines, make sure you have the proper infrastructure to support it.

Ask:

- What upgrades will need to be made to your existing IT infrastructure?
- What training will people need?
- Who in your organization will be in charge of monitoring the engine?
- What funds do you have available to support the purchase and related expenses?

### **Tailor the Workflow Engine to Suit your Process**

Once you have chosen a workflow engine, you will need to tailor the engine to your process. Consider:

- What functions does it need to perform?
- What parameters need to be met in order to complete a process?
- What other systems need to be integrated?

### **Pilot the Workflow Engine**

After you have tailored the workflow engine, pilot the engine to ensure it is working correctly. Identify improvements to be made and implement them.

### **Implement the Workflow Engine**

Once your engine has been piloted, make a plan for implementation. Ensure that training is provided and that people within your organization know how to use the engine to increase process efficiency.

### **Further Reading:**

