**How to provide better estimates for RPA automation?**

The key of providing better estimates is the amount of information available regarding the process. There are many factors which are involved in deriving the effort estimation such as No. of Applications involved, business rules etc. Make sure that you have the following details available regarding the process before you start estimation process:

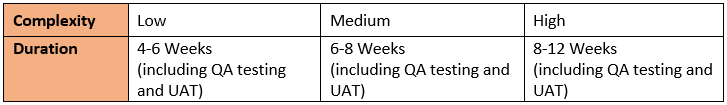
* **Applications**– How many applications Bot will have to interact during the process?
* **Steps**– Total number of keystroke level steps involved in the process
* **Input**– How many input sources are involved? What type of input data will be used?
* **OCR**– Is there any PDF involved? If yes, then is it a standard PDF or handwritten?
* **Compatibility**– Are the systems involved compatible with the RPA tool?
* **Teams Involved**– How many teams from the Business will be involved in the process?
* **Business Rules**– What is the complexity of the Business Rule(s) involved in the process?
* **Process**- Is the process documented properly? Is the process already standardized?
* **Variations**– How many variations are involved in the process?

Let’s see how the above factors drive the estimation process**. First, we need to determine the complexity of the process as Low, Medium, High based on the analysis of the above-mentioned points as follows:**

* **Applications**– More the number of applications/systems involved, higher is the complexity. Process involving 1-2 applications are considered as Low and anything above 4, will be considered as High
* **Steps**– More the number of steps involved, higher is the complexity. Process involving steps under 100 is considered as Low and anything above 500 will fall under High category.
* **Input**– More the number of input sources, higher will be the complexity. Also, if the input data involved is structured then the complexity will be Low and if the data is unstructured then it falls under High category.
* **OCR**– In case PDF is involved in the process, then if it’s a standard PDF it falls under medium category but if it’s non-standard then it falls under high category. **Note** – Also handwritten PDF’s are very difficult to read and the output may not always be reliable. So, its suggested to avoid processes involving hand-written PDF’s or add a human intervention in the automation to complete that step.
* **Compatibility**– If you are not sure that the application will be compatible with the RPA tool, it’s always recommended to build a Pilot before you begin the actual process just to be sure that the process can be automated. In case if you are not sure about the compatibility then it does increases the automation time as you will need to test compatibility separately.
* **Teams Involved**– If there is only 1 team involved from the Business then the complexity will be Low. If the number of teams involved is more than 2 then it will have high complexity as you will need to interact with multiple teams to figure out the process designs, get input data, create test data and get approvals, which in turn increases the time consumed in every activity.
* **Business Rules**– If the Business Rules involved are complex then it increases the effort required in implementation. Hence, more complex Business rules means high complexity.
* **Process**– If the process is already standardized and documented then it will be a Low complexity process. If the process is not documented/standardized at all then it will fall under High complexity category as you will need to spend additional time to standardize the process and create documentation for the same before you can start automation.
* **Variations**– More number of variations or different scenarios means high complexity as the process involved will have multiple decision stages with more branches in the process flow which will increase the development time. Any process with 2 variations will be considered as Low and anything above 4 will be considered as High. **Example**– If you are going to automate a process to interact with some online form. The different types/categories of forms you will need to interact with will be considered as variations as they will have different set of fields and business rules for the same process.

Once you have gathered all the information, comes the most important question “How do you decide which category this process falls?”. So, it’s not a hard rule that if your process has High in any one category then it falls under High category. You need to determine that by analyzing all points. I will give you an example for reference, but remember it’s not a hard rule – If your process has 6 Low and 3 Medium then it should be considered as Medium.

After you have determined the category of the process, you can provide the estimates for automation based on the category as follows:



Finally, there are 3 important things which you should consider while providing the estimates: -

* Always keeps 1-2 week additional for Requirement gathering, documentation and approvals
* Always keep in mind to have some buffer time in your estimates as things don’t always work as expected. You can hit an unexpected issue during development **like delay in getting access, unexpected behavior, small misses in requirements** etc.
* Always keep some additional time (Hypercare) of 2-3 weeks after Go-live in order to monitor the production runs to make sure there are no unexpected behaviors or if small adjustment is required in process.