



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



---

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 3**

**Issue: II**

**Month of publication: February 2015**

**DOI:**

[www.ijraset.com](http://www.ijraset.com)

Call:  08813907089

E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)

# Define Rules for New Rapid Business Process Model

Amit Laxmidas Vadera<sup>#1</sup>, Yogesh R. Ghodasara<sup>\*2</sup>

<sup>#1</sup>Assistant Professor- Research Scholar – Faculty of Science (Computer Science), RK University – Rajkot (India)

<sup>\*2</sup>Associate Professor-College of Agricultural Information Technology, Agricultural University – Anand (India)

**Abstract** — Since last decade, business process model are widely used all over the world to satisfy business needs. Interest to develop this paper is that any organisation or industry wants to achieve their business goal very quickly and easily, in this concern business process model will help them to achieve it .For that they must have to select any business process model available in the market like UML-AD – Unified Modelling Language Activity Diagram, BPMN – Business Process Model Notation, EPC – Event-driven Process Chain, Petri nets, RBPM - Rapid Business Process Model etc. To use any business process, certain rules are there. In this research paper we address to define some rules for Rapid Business Process Model.

**Keywords** — Business Process, Rules, Model, Rapid BPM, Notation

## I. INTRODUCTION







To represent any Business Processes, some graphical notations or specific symbols of any business process model are used, but question is that how to use these notations or symbols? Main approach towards this paper is to define rules for one of the process model names Rapid Business Process Model

## II. WHAT IS RULES?


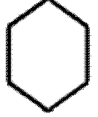


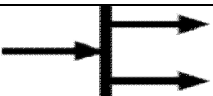
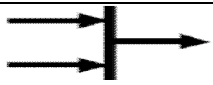

In any business action or method, the start, progress and end result are usually determined by reference to a set of rules. These rules can be very simple, such as the person must present evidence document of being 18 years old, or Complex one, such as determine what a personalized insurance policy will and will not cover. Like wise any business model has their own rules to describe any process. In this paper we are going to discuss rules to use Rapid Business Process Model.

## III.SYMBOLS OR NOTATIONS OF RAPID BUSINESS PROCESS MODEL

TABLE I SYMBOLS / NOTATION USED FOR NEW RAPID BPM

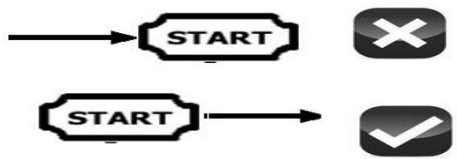

Elements / Symbols	Description of Rapid BPM Symbols
	<b>Start / Stop</b> <ul style="list-style-type: none"> <li>A Start symbol represents opening of any chapter means from where any trigger will be fire.</li> <li>A Stop symbol represents closing of any chapter.</li> <li>A Carry symbol represents closing of current chapter and carry on to new chapter.</li> </ul>
	
	
	<b>Chapter / Task</b> <ul style="list-style-type: none"> <li>A Chapter or Task is a unit of work. It is a job to be performed or an activity within a process flow.</li> </ul>
	<b>Method</b> <ul style="list-style-type: none"> <li>A Method is a collapsed sub process. It is used for decomposable chapter means it is also linked with another process diagram.</li> </ul>
	<b>Person / Unit</b> <ul style="list-style-type: none"> <li>It represents responsibilities for activities in a process. It can be any organization, any system or any role.</li> </ul>

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

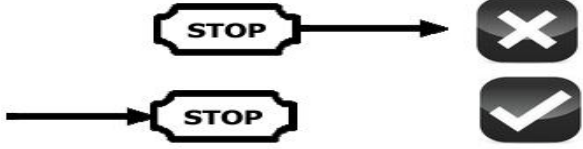




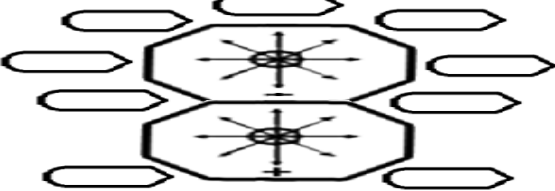
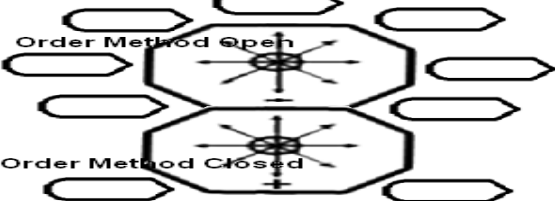
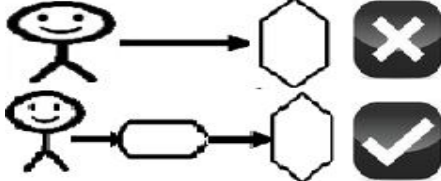
	<p><b>Data Storage</b></p> <ul style="list-style-type: none"> <li>Data Storage represents information flow come through the process, may be business documents, any letters or emails. Data storage is also a place, where we can write or read data which is store lifetime for the process.</li> </ul>
	<p><b>Choice</b></p> <ul style="list-style-type: none"> <li>A Choice represents splitting. It moves the flow more than one side based on alternates or conditions.</li> </ul>
 <b>Sequential Flow</b>	<p><b>Flows</b></p> <ul style="list-style-type: none"> <li>A Sequential Flow represents sequence to be executing chapter or method. It also represents flow of any process.</li> <li>A Timer Flow represents sequence to execute chapter or method with certain amount of time. It is also used for certain processes, which is ongoing or working.</li> <li>A Split Flow represent all outgoing branches are activated simultaneously.</li> <li>A Merge flow represents parallel branches, which hang around for all incoming flows to complete before generating the outgoing flow.</li> </ul>
 <b>Timer Flow</b>	
 <b>Split Flow</b>	
 <b>Merge Flow</b>	
	

### IV. DEFINE RULES USED FOR RAPID BUSINESS PROCESS MODEL

TABLE II RULES FOR RAPID BPM

No	Rules Description	Notation Representation
<b>1</b>	<b>Start/Stop Notation</b>	
1.1	A start notation cannot have an incoming sequence flow	
1.2	Model must start with incoming message trigger fired by any Person/Unit.	
1.3	A start notation in a top-level task should be labelled. If a top-level task contains more than one start notation, all should be labelled to identify the alternative start conditions.	

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

1.4	Stop notation cannot have outgoing sequence flow	
1.5	Stop notation with outgoing message must have satisfied result.	
1.6	Two stop notations in a process level should not have the same name. If they mean the same stop state, combine them; otherwise give them different names	
<b>2 Chapter/Task Notation</b>		
2.1	All the Task/Chapter notation should be labelled	
2.2	We can't use same labelled for any 2 Task / Chapter notations	
2.3	Every Task / Chapter notation must connect with flow notation	
2.4	Task/Chapter notation can be used to open or close any trigger or process.	
<b>3 Method Notation</b>		
3.1	Method can be divided if more than Seven chapters/tasks are open	
3.2	The label of a child-level page should match the name of the sub-method notation.	
<b>4 Person/Unit Notation</b>		
4.1	Person/Unit notation can't talk directly with choice notation	



## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

4.2	Person/Unit can be any individual person or any team or any system or any organization.	
<b>5 Choice Notation</b>		
5.1	A Choice notation cannot be used if there is only one sequence flow goes out.	
<b>6 Data Notation</b>		
6.1	Data notation can't Stop any process.	
6.2	Data notation can't talk directly with any Person / Unit notation	
6.3	Data notation can be talk with chapter, method or choice notation	
<b>7 Flow Notation</b>		
7.1	Two timer notation can't use simultaneously.	
7.2	Timer notation can be used to connect with any other notation (sequence flow need not required)	
7.3	Timer notation must be used between 2 chapter / chapter and choice / chapter and method notation.	
7.4	A Timer notation should be annotated to indicate the process schedule	
7.5	Sequence flow can be use for incoming or for outgoing	
7.6	Flow of lines in a diagram set only horizontal or vertical, doesn't use diagonal line	
7.7	All notations other than Start, Carry and Person/Unit must have an incoming sequence flow	
7.8	All notations other than End must have an outgoing sequence flow	
<b>8 Annotation Notation</b>		

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

8.1	Use annotation notation to describe each task/process in detail
<b>9</b>	<b>Common Rules</b>
9.1	Large diagrams containing masses of notations, in fact convey small information
9.2	No Crossings are allow (Try to avoid any two lines in your diagram to cross each other)
9.3	Make notations the same size if possible
9.4	Make Align all notations, either by one of their sides. The latter and notation works best when aligning vertically

### V. CONCLUSIONS

Always certain rules are defined to understand any business processes speedily and easily. In this research we have define some rules for Rapid Business Process Model, which helps any stakeholder to know the process of the organization or industries smoothly. This research will save the time with using concept of reusability of any process.

### REFERENCES

- [1] BPMN tutorial Process modelling using BPMN visited on website <http://www.bpmn-tool.com/en/tutorial/> dated Jan-14
- [2] An Introduction to BPMN for Business People visited on [http://www.slideshare.net/Michael\\_Moyal/bpmn-for-business-people](http://www.slideshare.net/Michael_Moyal/bpmn-for-business-people) dated Jan-14



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)