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18], [5], [1, c. 148])

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[8, .27],

[1, .30 - 31], [8, .30]

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[8, . 30],

[9, .6]

PMBOK [10, . 8],

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*BPMN* (), *EPC* (с

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. SADT (Structured Analysis and Design Technique) IDEF (Integration Definition for Functional Modeling).

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[8, . 17] c -

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- . -

UML (Unified Modeling Language).

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[8, . 18]

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BPMN (Business Process Model and Notation), ARIS (Architecture of Integrated Information Systems), EPC ( ).

### 1.3.2.

. [14] -

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, [14, . 15]  $C = (P, T, I, O)$ ,

4- :

1.  $P$ ;

2.  $T$ ;

3.  $I;$
4.  $O.$

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. [14, . 18]

$G = V, A,$  -

$$v_i \in V$$

$$a_i \in A.$$

$V$   $P$  (

)  $T$  ( ).

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1.3.3. -

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**BPMN.** BPMN - , -

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. **OMG**

**BPMN.** BPMN

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*BPMN*,

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:[15, . 30]

1. (flow objects);
2. (data);
3. (connecting objects);
4. (swimlane);
5. (artifacts).

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BPMN

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**YAWL***YAWL (Yet Another Workflow Language)*

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(Aalst)

(Hofstede) 2003

[\[16\]](#),

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YAWL

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[\[16, c. 3\]](#)

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YAWL,

[\[16, . 10\]](#),

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[1.3.2](#)

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[13](#)).**1.4.****1.4.1.**

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WfMC [\[17, . 9\]](#)

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(Workflow)

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(workflow engine).

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[18, .31 -- 35], workflow-

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Workflow, [19,

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Cunningham LLP Zagiel S.A., , [20],

[21]. Canningham LLP

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Zagiel S.A.

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## 1.4.2.

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• BPM- [22] -  
 - ( , BPMS), << ,  
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1.4.3.

PMBOK Guide [10, . 33]

[24, . 46]

[12, c. 91 - 93]),

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—eTOM [45]

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APQC [47].

## 2.2.

### 2.2.1.

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 Gartner Inc. ( . [48]) Forrester Research [49]) 2009 – 2013 .  
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 [48], [49],  
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 The Forrester Wave [50], [51], [52], [53],  
 Gartner Magic Quadrant [54], [55], [56], [57].  
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 : PegaSystems, IBM, Appian, Progress Software, Metastorm  
 : Fujitsu, EMC, Global360, Bosh Software Innovations

### 2.2.2.

([2.2.1](#) [28](#)),

: Appian BPM Suite[\[58\]](#), OpenText MBPM

[59], Cordys BPMS [60], Pegasystems BPM [61], Fujitsu Interstage BPM [62], Tibco Active Matrix BPM [63];

: jBPM [64], BonitaBPM [65], Taverna Workflow [66], Activiti BPM [67], Pegasus [68], Intalio BPMS [69].

### 2.2.3.

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- OpenText (Cordys BPMS, MBPM0), Appian. -
- , , OpenText Appian -
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- (Taverna Workflow, Pegasus),
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- (JBPM, Activiti)
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· jBPM Activiti  
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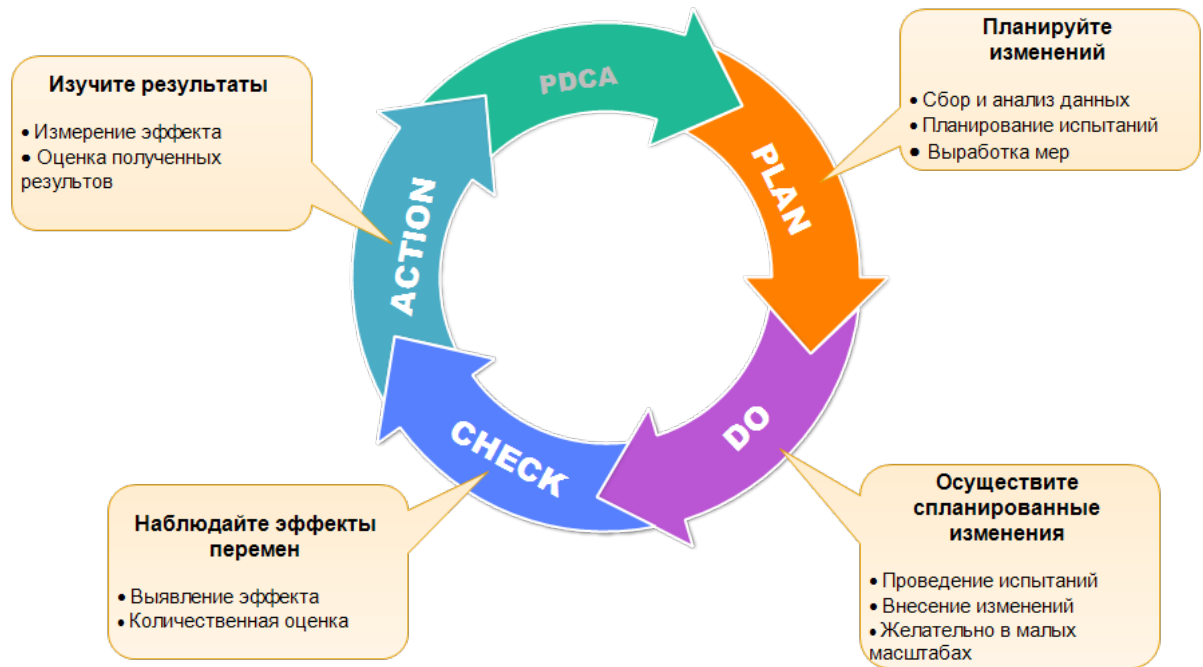
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[42, . 97]

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Appian BPM Suite	9	8	9	7
OpenText MBPM	8	7	8	10
Cordys BPMS	10	8	6	9
Pegasystems BPM	10	9	10	9
Fujitsu Interstage BPM	7	7	6	5
Tibco Active Matrix BPM	6	10	9	9
jBPM	8	7	8	7
BonitaBPM	8	8	10	7
Taverna Workflow	5	10	6	7
Activiti BPM	7	6	7	5
Pegasus	5	10	8	8
Intalio BPMS	9	6	8	5

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Appian BPM Suite	8	5	8	6
OpenText MBPM	7	8	6	7
Cordys BPMS	3	10	3	1
Pegasystems BPM	4	10	5	9
Fujitsu Interstage BPM	8	5	8	8
Tibco Active Matrix BPM	0	1	2	0
jBPM	2	6	2	0
BonitaBPM	7	5	3	3
Taverna Workflow	3	2	4	0
Activiti BPM	0	2	0	2
Pegasus	1	0	1	0
Intalio BPMS	1	1	3	1

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