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## 1.1. -

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### 1.1.1. -

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## 1.1.2.

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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],

, PMBOK 5 [11], -  
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### 1.2.2.

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[12, . 34]

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[13], [12].

### 1.3. -

[8, .14] , --

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#### 1.3.1.

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 , [4, . 27].

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[8, . 15], - —

*BPMN* ( ), *EPC* (c

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, [8, . 15]

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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]

$G = V, A,$  -  
 $a_i \in A.$

$v_i \in V$   
 $V$   $P ($   
 $) \ T($  ).

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1.3.3. -

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**BPMN** **BPMN** - , -  
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OMG BPMN. BPMN -  
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[15, . 26]

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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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**YAWL** *YAWL (Yet Another Workflow Language)* -  
 (Aalst) (Hofstede) 2003

[16], ,

## YAWL

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 [16, c. 3] :

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YAWL, [16, . 10] -

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( . 1.3.2 . 14).

## 1.4.

### 1.4.1.

WfMC

(Workflow), WfMC [17, . 9], ,

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(workflow engine). ,

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

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Workflow

Workflow, [19, . 127],

Workflow

Workflow,

[19],

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Workflow-

workflow

Cunningham LLP

Zagiel S.A., ,

[20], [21].

Cunningham LLP

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. Zagiel S.A. -

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#### 1.4.2.

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BPM- [22] -

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>> (Handbook on Business Information

Systems) [23] , -

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1.4.3.

PMBOK Guide [10, . 33]

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[12, c. 91 - 93]), :

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— [32], [33],[34],  
[35].

2.1.3.

(agility) - •  
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- . ADEPT2, [38], [? ], -

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ADEPT2 -

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workflow,

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c ( . [41], [42])

workflow

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[43, . 95]

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—eTOM [46]

SCOR [47]

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APQC [48].

2.2.

2.2.1.



Gartner Inc. ( [49]) Forrester Research [50]) 2009 –2013 .

[49], [50],

The Forrester Wave [51], [52], [53], [54],

Gartner Magic Quadrant for Intelligent Business Process Management Suites [55], [56], [57], [58].

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, : PegaSystems, IBM, Appian, Progress Software, Metastorm

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, : Fujitsu, EMC, Global360, Bosh Software Innovations

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, : Tibco Software, Software AG, SAP —

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: Appian BPM Suite[59], OpenText MBPM [60], Cordys BPMS [61], Pegasystems BPM [62], Fujitsu Interstage BPM [63], Tibco Active Matrix BPM [64];

: jBPM [65], BonitaBPM [66], Taverna Workflow [67], Activiti BPM [68], Pegasus [69], Intalio BPMS [70].

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**2.2.3.****2.3.**







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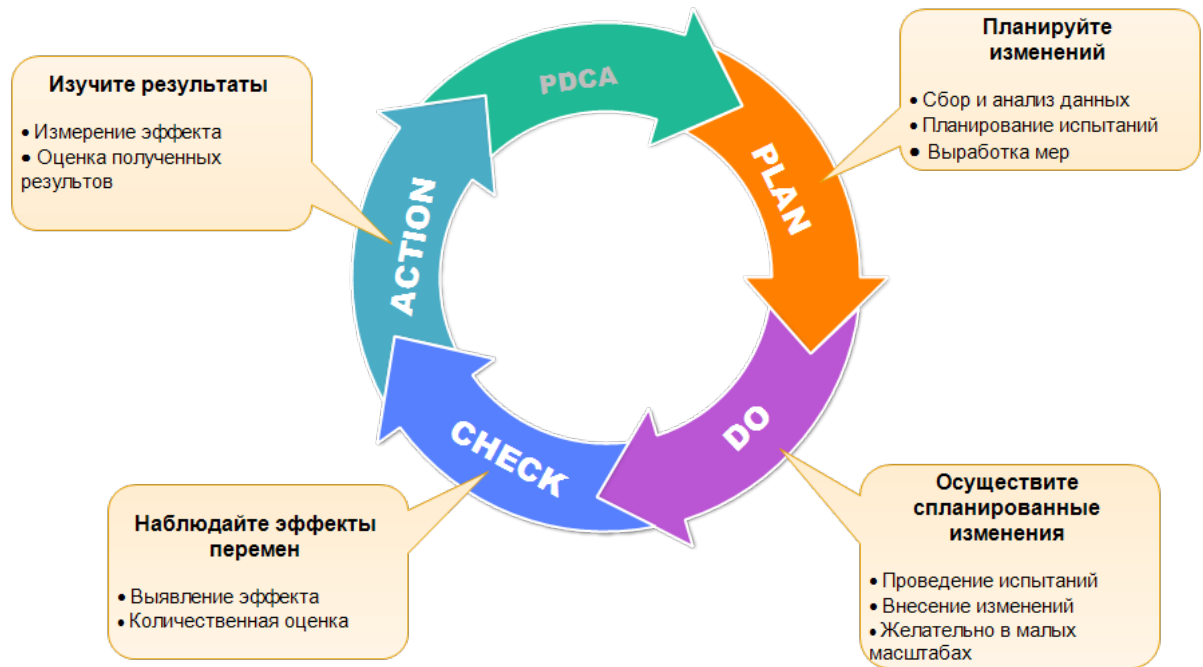
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Appian BPM Suite	3	8	7	5
OpenText MBPM	3	8	7	5
Cordys BPMS	3	8	7	5
Pegasystems BPM	3	8	7	5
Fujitsu Interstage BPM	3	8	7	5
Tibco Active Matrix BPM	3	8	7	5
jBPM	3	8	7	5
BonitaBPM	3	8	7	5
Taverna Workflow	3	8	7	5
Activiti BPM	3	8	7	5
Pegasus	3	8	7	5
Intalio BPMS	3	8	7	5

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