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## 1.1. -

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### 1.1.1. -

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31], [\[1, . 148\]](#),  
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[2] - , << -

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>>.[\[3, .](#)

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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]

[1, . 31]

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[9, .6]

PMBOK [10, . 8],

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### 1.2.2.

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[12, . 34]

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#### 1.3.1.

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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]

$$G = V, A,$$

-

$$v_i \in V$$

$$a_i \in A.$$

$V$

$P ($

) T( ).

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1.3.3. -

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**BPMN**

**BPMN**

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OMG BPMN.

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*BPMN*,

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:[15, . 30]

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

( ,

· .). BPMN , /

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**YAWL**

*YAWL (Yet Another Workflow Language)*

(Aalst)

(Hofstede) 2003

[16],

YAWL

[16, c. 3]

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YAWL,

[16, . 10]

( . 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**

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Workflow,

[19, . 127],

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**Workflow-**

workflow

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Cunningham LLP

Zagiel S.A., ,

[20], [21].

Cunningham LLP

### 1.4.2.

Systems) [23]

Zagiel S.A.

BPM-

[22]

( ), <<

. BPMS

>> (Handbook on Business Information

1.4.3.

PMBOK Guide [10, . 33]

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[24, . 46]

[12, c. 91 - 93]),

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2.1.1.

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• , [30], [31],  
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— [32], [33],[34],  
[35].

2.1.3.

(agility) - •  
, [36], [37], -  
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- . ADEPT2, [38], [? ], -

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ADEPT2 -

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[32]

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].

- [itemsep=0pt, parskip=0pt]

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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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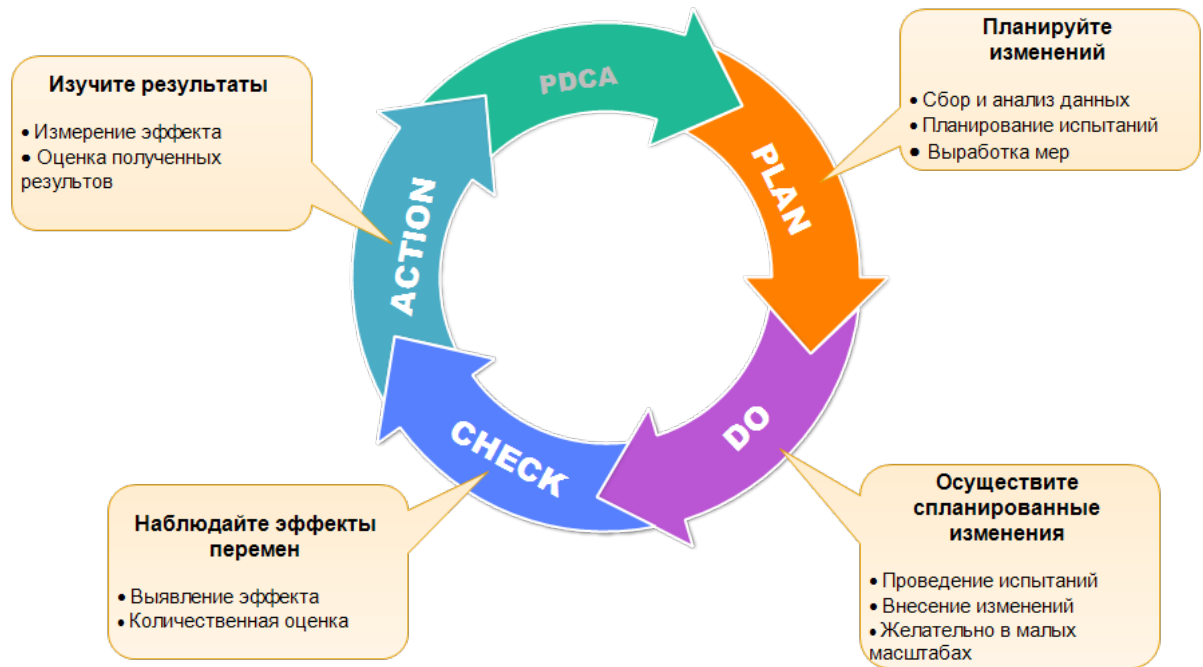
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[43, . 97]

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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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