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31], [29, . 148],   ,   -

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1.1.2. -

- (. [29, c. 148],
[27, . 17], [30]) :

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[37, . 27],   -

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[29, . 30 - 31], [37, . 30]

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[29, . 31]   «

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[37, . 15], - —

BPMN ( ), *EPC* (c

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• , [37, . 15],

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. SADT (Structured Analysis and

Design Technique) IDEF (Integration Definition for Functional Modeling).

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[37, . 17] c -

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- . -

UML (Unified Modeling Language).

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[37, . 18]

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BPMN (Business Process Model and Notation), ARIS (Architecture of

Integrated Information Systems), EPC ( ).

1.3.2.

• [33] -

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, [33, . 15] $C = (P, T, I, O)$,

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1. P;

2. T;

3.   *I*;

4.   *O*.

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.   [33, . 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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BPMN.   BPMN

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BPMN,   ,

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:[55,   . 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

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            [77],   ,

                                    YAWL

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                  [77, c. 3]   :

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                  YAWL,   [77, . 10],   -

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                  YAWL

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1.4.

1.4.1.

                        .   WfMC [47, . 9]   -

            (Workflow)   ,

                                                                                          ,   -

                                                            (workflow engine).

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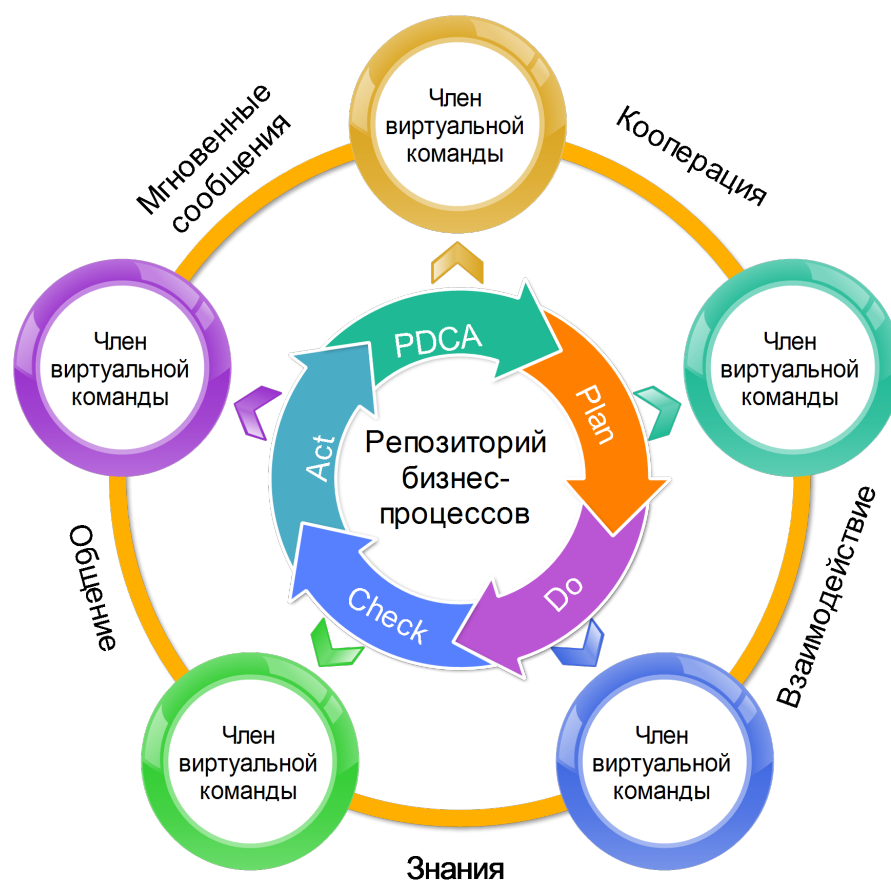
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Workflow-   .   -

Workflow,   [24,

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Workflow, [24], -
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Workflow- .

workflow - ,

Cunningham LLP Zagiel S.A., [43],

[40]. Canningham LLP

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Zagiel S.A.

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1.4.2. -

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

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—   [51],   [74], [49],

[41].

2.1.3.

(agility)   -   .

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[51] . -

workflow, .

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c (. [69], [70])

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eTOM [9] — SCOR [18] —

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APQC [15].

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Gartner Inc. (. [4]) Forrester Research [3]) 2009 – 2013 .

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[4], [3], -

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The Forrester Wave [75], [73], [45], [44],

Gartner Magic Quadrant [61], [62], [63], [64].

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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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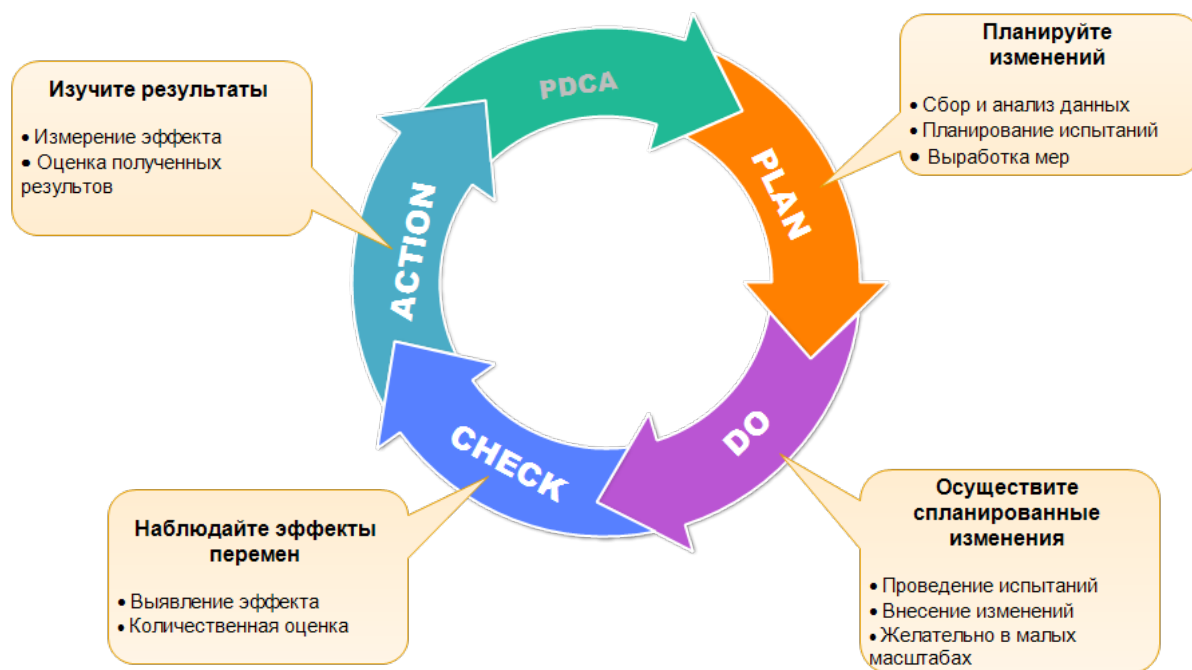
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: Appian BPM Suite[6], OpenText MBPM

[14], Cordys BPMS [13], Pegasystems BPM [17], Fujitsu Interstage BPM [10], Tibco Active Matrix BPM [20];

: jBPM [12], BonitaBPM [7], Taverna Workflow [19], Activiti BPM [5], Pegasus [16], Intalio BPMS [11].

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Appian.   ,   ,   OpenText   Appian

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                                                                (Taverna Workflow, Pegasus),

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                                                            (jBPM, Activiti)

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                 31   .   jBPM   Activiti
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TOGAF.   TOGAF 9 [56]

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TOGAF   ,   -

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Appian   OpenText MBPM,   -

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Подсистема кооперации

Проектировать бизнес-деятельности

Решать конфликты выполнения процесса

Улучшать качество процессов

Член виртуальной команды

Член виртуальной команды

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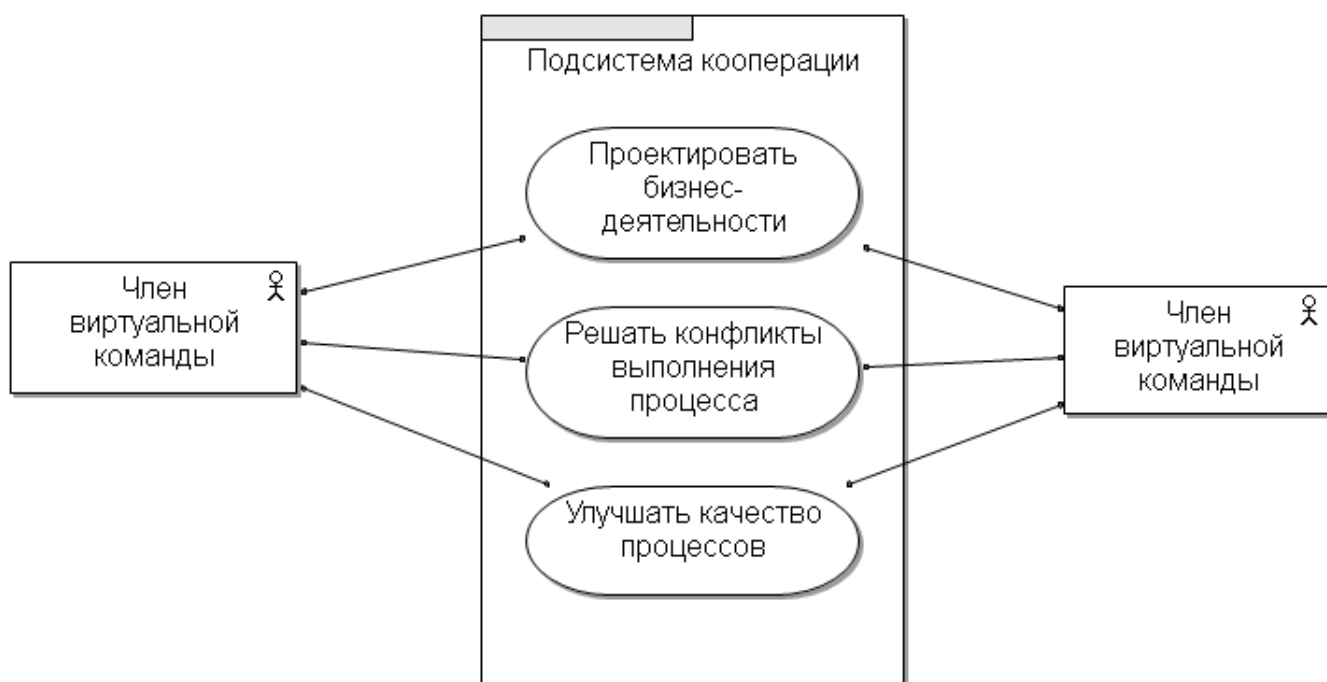
3.2.2.

jBPM   Activiti.

                         (.   2.2.2   . 28)

      jBPM   Activiti.

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                Activiti.   Activiti
            (BPMN 2.0 XML),

                    ,   .

jBPM

- , - jBoss

Drools, XML jPDL. Activiti, -

[5],

Alfresco [2],

- .

Activiti Apache, -

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Activiti. Activiti -

- (Activiti

Modeler, Activiti Designer) - -

(Activiti Engine). . 3.3

Activiti.
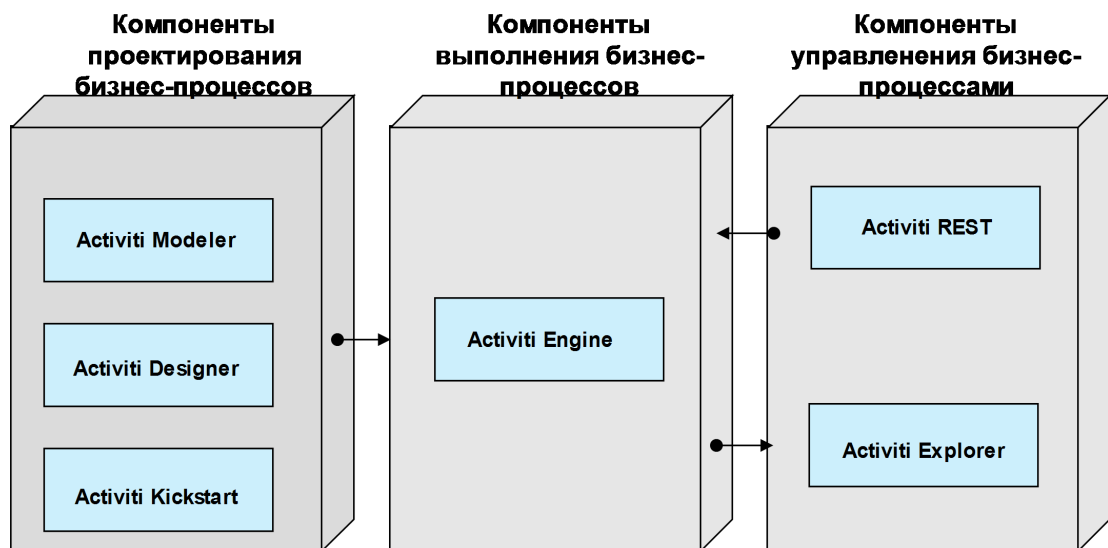
. 3.3. " Activiti [5]

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Eclipse IDE. -

BPMN 2.0 XML.

BPMN XML,

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git.   git,   [8], [71],

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XMPP.

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Openfire.   XMPP   -

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OpenFire [72].

OpenFire   -

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LDAP,

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Openfire   Open Source Apache,   -

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1. BPM. BPMS (-   ,   ).
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2.   Alfresco. ????

3.   Forrester Research. ????

4.   Gartner Inc. ????

5. Activiti BPM Platform. ????

6. Appian BPM Suite. ????

7. Bonitasoft BPM. ????

8. Distributed Git - Distributed Workflows. ????

9. eTOM Business Process Framework. ????

10. Fujitsu Interstage BPM Suite. ????

11. Intalio BPM Suite. ????

12. JBoss Community jBPM Suite. ????

13. Opentext Cordys BPM Suite. ????

14. OpenText MBPM. ????

15. PCF - Process Classification Framework. ????

16. Pegasus Workflow Management System. ????.

17. PegaSystems BPM Suite. ????.

18. SCOR - Supply Chain Council. ????

19. Taverna Workflow Management System. ????

20. Tibco ActiveMatrix BPM Suite. ????

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    (   ).   :   -   , 2005. 260.

22. . .   . .   . .

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27.   . .   ,   ,   -
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1984. 264.   .   .

34.   .   .   :   "   2005.
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       :   - , 2013. 118.

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Изучите результаты

• Измерение эффекта
• Оценка полученных результов

Планируйте изменений

• Сбор и анализ данных
• Планирование испытаний
• Выработка мер

PDCA

ACTION

PLAN

CHECK

DO

Наблюдайте эффекты перемен

• Выявление эффекта
• Количественная оценка

Осуществите спланированные изменения

• Проведение испытаний
• Внесение изменений
• Желательно в малых масштабах

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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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	Des	**Org**	**Ctrl**	**Res**
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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