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Institute of economics and management,
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Simferopol, Russian Federation.

,

MODERN TECHNOLOGIES SHAPING THE GLOBAL DIGITAL ECONOMY

The article is devoted to one of the key trends in modern development — the sphere of digital financial services in the context of the formation of the digital economy. It is proved that the successful development of the digital economy is largely due to progress in several disruptive digital technologies, among which the most important are software-oriented technologies such as blockchain, big data analytics, artificial intelligence and cloud computing, as well as Internet of Things devices.

The article identifies the advantages and disadvantages of using blockchain in various spheres of public life, presents: the forecast dynamics of the growth of the blockchain technology market, the volume of venture investments in blockchain startups, and also presents the dynamics of the growth in the number of users of crypto assets and blockchain wallets in the world. The study reveals the basis of the Internet of Things, characterized as an open and comprehensive network of intelligent objects. Big data represents a significant expansion of the availability of both mobile and fixed Internet, the growth of its average speed in the vast majority of countries has contributed to an exponential increase in the volume of digital and information data generation, the work provides a forecast of the volume of annual data generation in the countries of the world. The concept of artificial intelligence is used by many companies in various sectors of the economy, and a forecast of the global volume of investments of companies in artificial intelligence technologies is given.

The findings of the study emphasize that these technologies contribute to better analysis, processing and use of digital information to improve the efficiency of companies through the offer of more personalized goods and services. Thus, the article examines the technologies that form the contour of the digital economy of the countries of the world: blockchain, the Internet of things, artificial intelligence, big data, cloud technologies.

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on-line;

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:   (Blockchain),   (Big Data),
(Artificial Intelligence, AI),   (Cloud Computing),
(Internet of Things, IoT),

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- Statista [9],
980 . . 2017 .
162,8 . . 2027 . (. 2).

. 2.   -   2017   2027 .,   .
.   ([9]).

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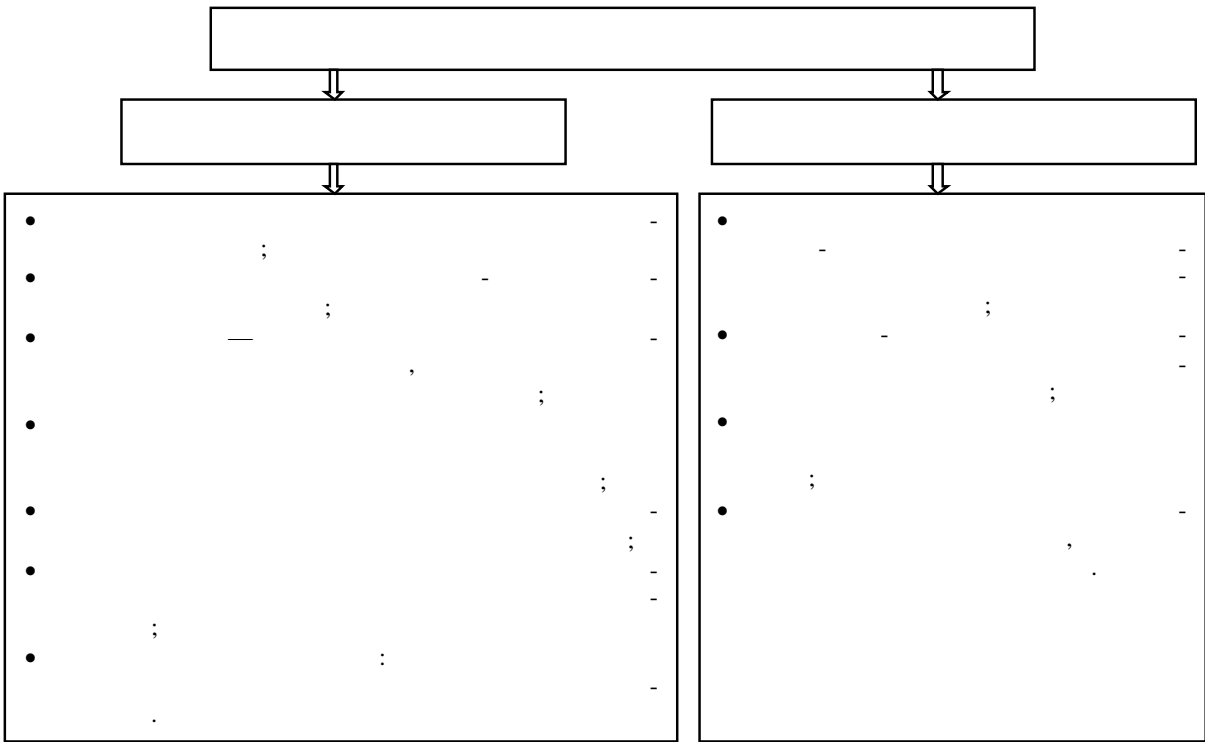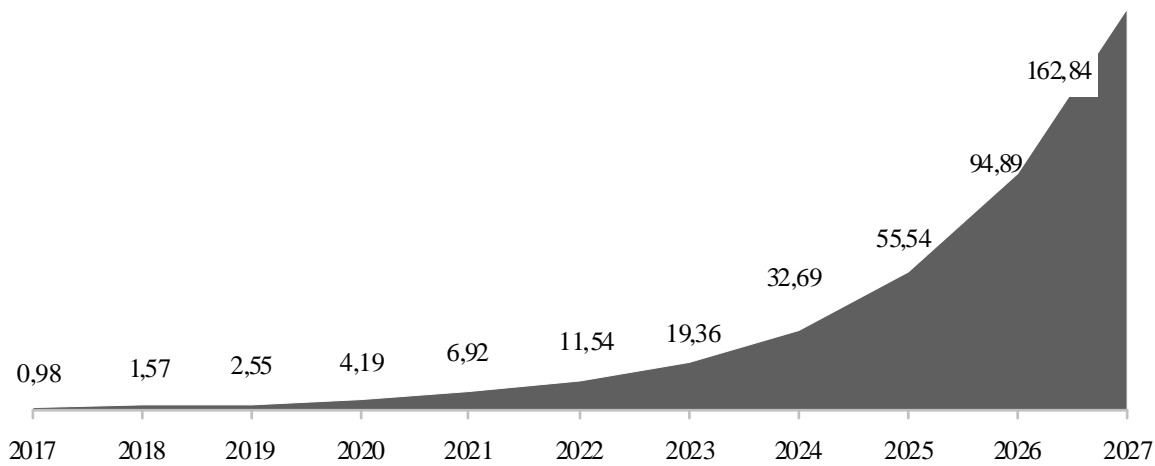,   ,   ,
-            ,   .
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,   8   10   -
[10].
,   2009   ,   -
,   6,6   .   .
(.3).
,   [11,14,15],   2017
:   3   —   7
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-   2009   2019   .   4,38   ,   .   33%

. 3.   -   2021 .,   .
([11-13]).

97

,   2,78   .   .
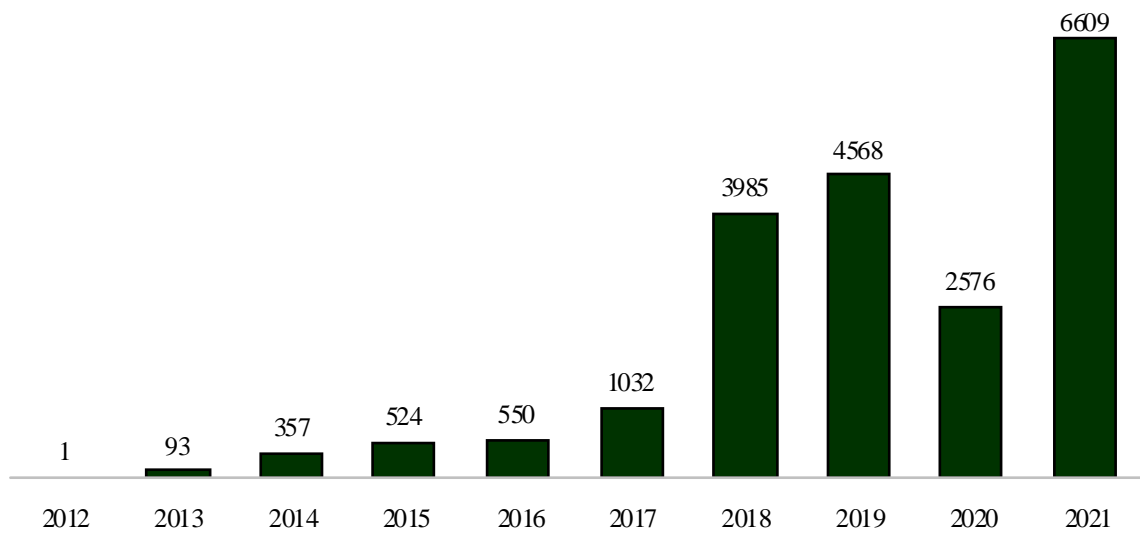
2,92   .   ,   70%   -

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,   [12,16]:   —

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(. Initial Coin Offering — ICO).

(   )   -

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.   ICO   4,7   .

-            ,   1,7   .   -   .   -

,   (1,4   .   ).

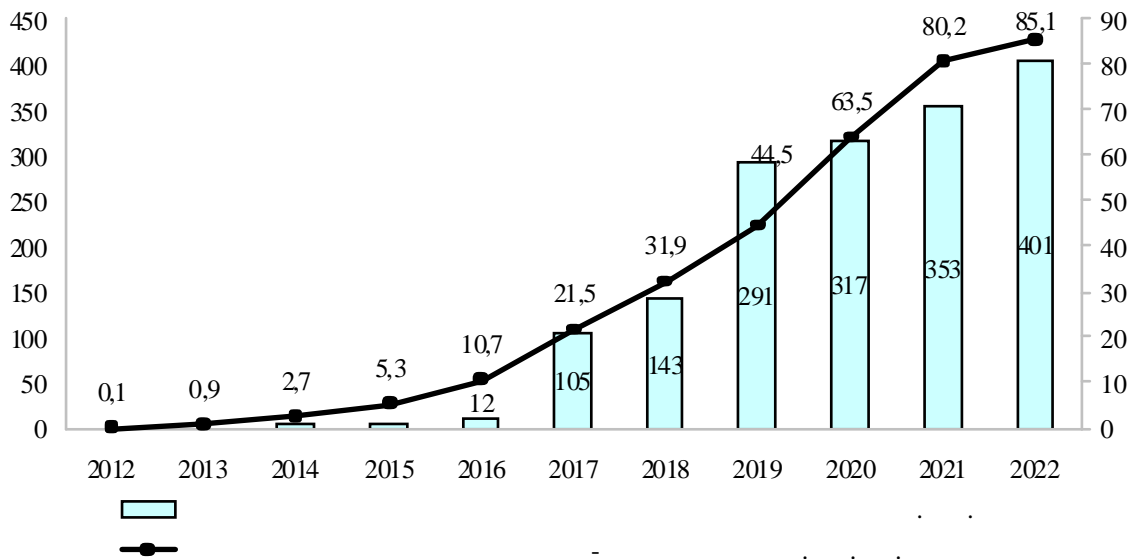,   -   (IPO).

-            .   ,   -

Circle Internet Financial (136   .   .   ), Coinbase

(117   .   .   ), 21 INC (116   .   .   ).

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,   -   .   ,   4   -

-   .

.4.   -   2012-2022   .,

.   . ([15-16]).

,   2012   2022   .   -

:   100   .   85   .   .   -

,   2022   .   400   .

(— 16 %).   2021   .   400   .   -

[10].

,   Zippia   2022   .   11,7

.   .   ,   2024   .   19   .   .   . 2030   .   -

85,9 %.

,   ,   -

98

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«   » (. Internet of Things, IoT).
1999 .

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(RFID)

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2004 .   .   ,   .   .   «   «   -0» (-
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	(,) (- , Wi-fi, Bluetooth, NFC);
	, - .
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. **5.**   ([20])

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(Smart city),   -
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99

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,   .
,   Statista [13],   2022 .   -
16,5   .   ,   20   ,   2010 .   2025 .
,   2   ,   30   .
.   2019 .   ,   -
(,   ,   .),
(10   .   )
(. 6).

8   8,7   9,1   9,5   9,7   9,7   9,8   9,9   9,9   10   9,9   10   10,1   10,2   10,2   10,3

6,1

4,6   8

3,6   10   11,7   13,8   16,4   19,8   24,4   30,9
2,8
1,6   2,1
0,8   1,1

2010   2011   2012   2013   2014   2015   2016   2017   2018   2019   2020   2021   2022   2023   2024* 2025*

☐ IoT   ━○━ Non-IoT
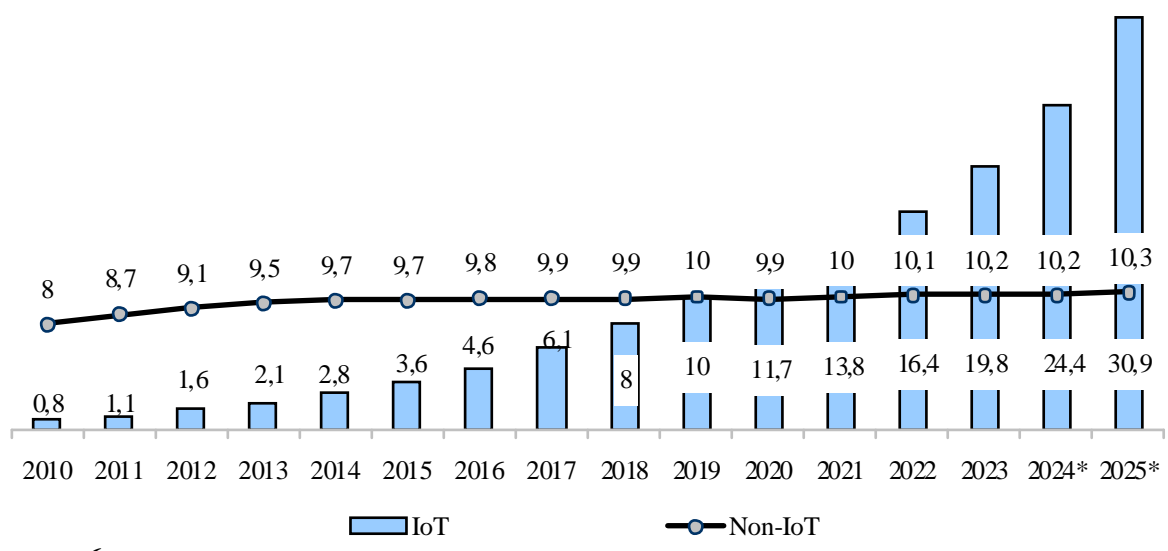
. 6.   -
2010-2025   .,   .   . ([13]).

,   127   IoT   -
,   15%   .
«   -
,   2020 .   63%   —
,   -
.   2025 .
IoT   4900   18   »[21].
, «   ,   2018 .
190   .   .   ,   6   2026 .   1,11   .   .
,   ,   ,
»[22].

(McKinsey Global Institute),   -
2025 .
3,9   .   11,1   .   .   (11%
) [23].

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100

.   «   » (.
— Big Data)   2008   .   ,   «
      »[24].

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((Networked European
Software and Services Initiative)» [27].
•   —   ,   -
                                                            «   -
                                            (International Data Corporation (IDC))»[28].
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                              ,   ,   .
                  ,   2021 .,   Domo [29],   -
                                        79   ,   -
            2019 . (1   63   .   4K   ).
      , 90%   2020-2021 .
                                    Statista,   2025
                  6   (. 7).
                                                                        (3V, 4V,
5V, 7V).   Meta

163

47

12

0,1   2

2005   2010   2015   2020   2025

. 7.   2005   2025   .,   -
([29-30])

101

Group . 2001 .. (3V) [31], — McKinsey
IDC (7V): (volume), (velocity), (variety), (value), -
(veracity), (variability), ( ).

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, »[32].

: IBM, Splunk, Dell, Oracle, Amazon Web Services, Accenture, Palantir, SAP, Hewlett Packard
Enterprise, Microsoft, Cloudera, Teradata, Pivotal. ,
, (Dell, Hewlett Packard Enterprise,
Amazon Web Services, IBM, Cisco Systems, Oracle, NetApp, Original Design Manufacturers).
, — 70% .
- — 40% .
8% - , — 6%, -5%.
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»[33]. -

. « » (Artificial Intelligence, AI) « -
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,   KPMG,   231,9   .   .   2025 .
(. 8).

231,9

148,8

96,4

62,8

41,3

27,4

18,3

12,4

| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |

. 8.
2018   2025   .,   .   .   ([36])

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2025 .,   600   .   .
.
(10,2   %).   (11,7 %)
(5,3%   280   .   .   )   (7,2%   200   .   .   ).
(1,3%),   (1,9%)   (3,2%).
,   ,   McKinsey&Company,
64%,   — 44%,
— 38%,   — 34 % .

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