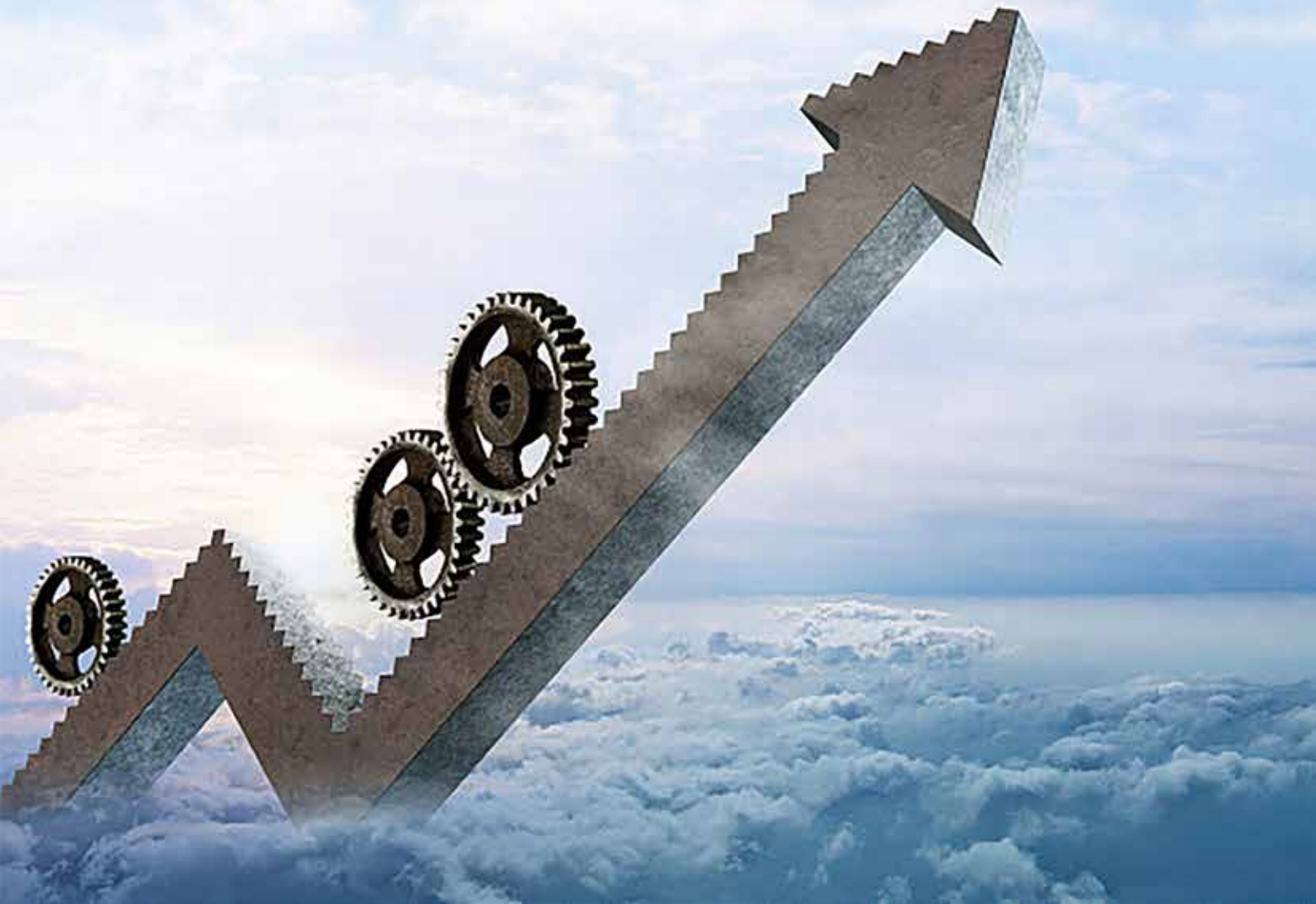
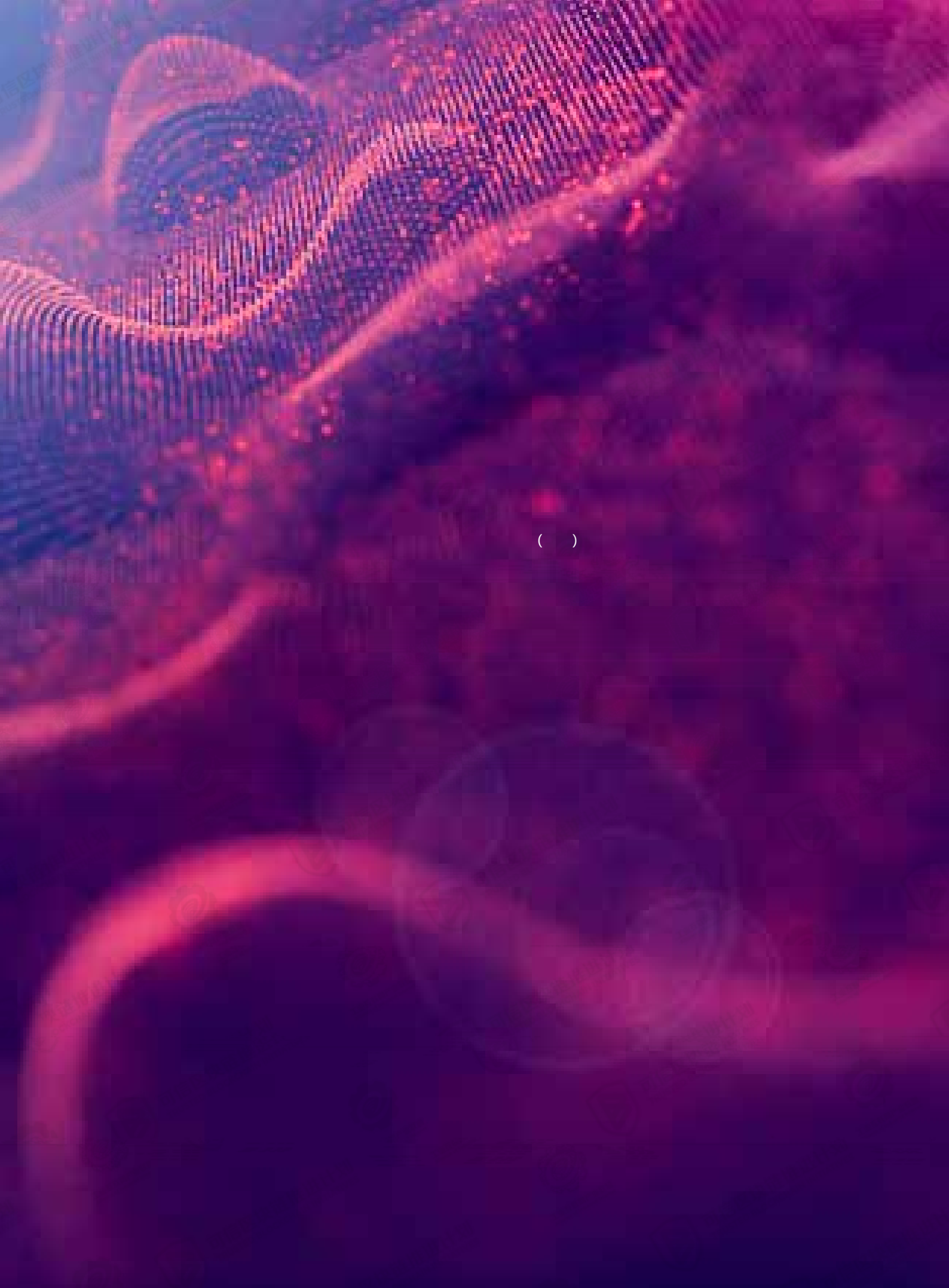
1.0



ؠ ؠ ؠ



ę ̆ ̆ ̆

4
( ) 4
( ) 5

8
( ) 8
( ) 9

12
( ) 13
( ) 14
( ) 15

17
( ) 18
( ) 19
( ) 20
( ) 23

24
( ) 25
( ) 27
( ) 28
( ) 29

32
( ) 32
( ) 33

34

1.0

¨ ˵ ˶ ˶ ˶

: 1.6 ¨ ß ¨ ˩ 5000

ʒ Ă î 9.9% 1.6% GDP · ¨ ¨ ˩

= ˽ ‘ ¨ Î Î ˽ Ƨ ª̈

î 2019ת ˩ ¨ ˽ ✱ ؟ ˽ ¨ 206 : 2020ת

˩ ¨ خ ؤ ¨ Ã ˽ ˩ ¨ î : 255

î = ß Ơ Î ˽ - Ã

Î ڈ ڭ ר ’ ˩ ¨ ` ˽ ˽ Ơ ` ¨ ڭ

’ Ґ ē ² ¨ ˩ ʒ

¨ ß ˽ ˽ ر Î

ERP Î MES Î CRM ¨ ƒ

ڈ ڭ ¨ ƒ ¨ ƒ ˽ ˽ ƒ ¨ ƒ ؤ

ڈ ڭ ¨ ƒ ˽ ˽ ƒ ‘ ؤ ر Î

ʒ ¨ ˩ ڈ ڭ ¨ ˽ Ţ Î ˽ ˽ Ţ Î

, ˩ ê ’ ˽ Ă ¦

Ľ - ¨ ˽ ƒ ˽ Î

ß c Î ˽ ¨ ˩ ר

ڈ ڭ ˽ Ă ڈ ڭ Î Î ˩ Î Ш ʒ ˽ ē

ר ڈ ڭ ˽ Ă ˽ Î Ґ

Î ˩ ¨ Ă ˩ ڈ ڭ ¨ ˩ ب Î ר

’ ˩ ר Î ¨ ˩ ˩ Ă ˽ ˩ ˩ Ă ˽ ˩ ˩

ڈ ڭ ¨ ˩ ˽ Î ˽ ث ڈ ڭ ˩

˽ Ă ’ Î

NIST 2019 2 2019 9 [5] 2020 2 [6] National Blockchain Roadmap 2018 IVI IVRA-Next' GSMA 2018

2019

2019 11

Ш Opportunities and Use Cases for Distributed Ledger Technologies in IoT ř ę

1 Î ≠ Î ≈ б ˩ W

IEEE Ă2019т ˩ ICEET ˽ ą Ř ę

˩ 4.0 ð Implications of Blockchain in Industry 4.0 ř

ę Ă˩ ' Î Î Ť

ť ≠ Ш б 。 î 2020т1 ˩ , IIC

Industrial Internet Consortium ą I Trusted

IoT Alliance TIoTA ± Ж ę Ă˩ ' î

2020т4 27ؤ ¯ î WEF ą / ę

Ă ƨ ą̃ Ш Ė î

ę ę ˝ ≠ , Ґ б '

Ť ť ˝ ˹ c Î Î o – ˛ ą

[8] î Ơ ę ę- ˹ c Ť ť î ˛ ˝ Ă ˽ I

' I ˛Ơ б ę H I

Ă ¨ Ė б ę Ť˹

Î ˛Ơ I ˽ , ˝ Î

Î Î

˛

' Î

2018

2018 9

Ì ‘ ي З

¨ ← Ì ˝ d̈ Î Ƨ ˶ ˵ ,

У A

[illegible] IEEE 2019 [illegible] ICEET [illegible] 4.0 [illegible] Implications of Blockchain in Industry 4.0 [illegible] GE [illegible] 3D [illegible] 3D [illegible]

[illegible]

[illegible] FIDO [illegible] U PKI/CA [illegible] Fast Identity Online [10] [illegible] IFAA Internet Finance Authentication Alliance [11] [illegible]

[illegible]

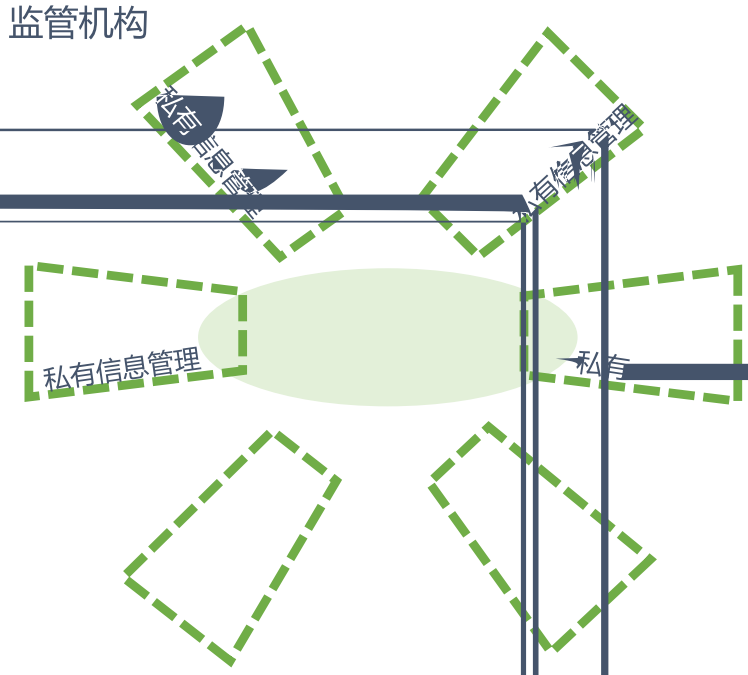
FIDO https://fidoalliance.org/.
IFAA http://ifaa.org.cn/

[12]

[13]

1.0

专栏 1

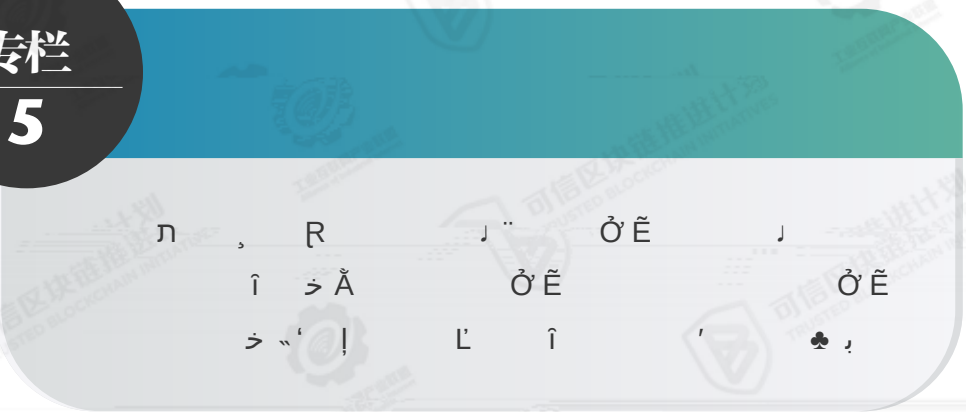

监管机构
私有信息管理
私有修改管理
私有信息管理
私有

专栏
2

专栏
3

专栏
4

专栏
5



(2015)

专栏
6

专栏
7

Ƶ Ė[22] ĵ

[illegible]

[illegible]

[illegible]

专栏
8

专栏
9

2016

5 3

: 2017 4 .

2015

(2015)

2018-2024