Impact of change technologies on corporate governance and control practices

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26.10.2018

Theses and structure of consideration

- Impact of change technologies factors on GRC (Governance, Risk, Compliance/Control)
- Understanding the impact "chain" (predicting the sequence of changes)
- Examples of disruptive technologies impact in risk identification, control development
- Changes in corporate governance
- Preparation for implementation of technologies in a GRC division

Disruptive technologies



Transform business models

(supplant existing business models)

Create new markets

(while disrupting existing markets)

Other value sets

(that ultimately and usually unexpectedly outperform existing markets and models)

Impact factors



Мс	Sf	Dt	Se l
Medical tricorders	Smart flooring & carpets	Diagnostic toilets	Smart energy grids A
41 DE	42 DE	43 DE	44 SP 4
DI	Pa	Δν	ld l
Distributed ledgers	Precision	Autonomous	Intention decoding
31 DE	agriculture 32 SP	vehicles 33 EA	algorithms d 34 MI 3
Da	C a	Cm	Do
Rc	Sc	Cm	Ro /
Robotic care companions	Smart controls and appliances	Cultured meat	Delivery robots & A passenger drones &
21 MI	22 DE	23 SP	24 EA 2
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Cryptocurrencies	Concentrated solar power	Predictive policing	Micro-scale ambient A energy harvesting to
11 DE	12 SP	13 DE	14 SP 1
Sn	Dw	Va	We
Smart nappies	Deep ocean	Vertical agriculture	Wireless energy E
	wind farms		transfer in
1 DE	2 SP	3 SP	4 SP 5

Nearest time horizons of action: distributed ledgers, cryptocurrencies, predictive infringement prevention, intent recognition algorithms

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Technology impact on GRC tasks

Objects of comparison, development areas

* GRC - Governance, Risk, Compliance/Control



Personnel



Processes



Equipment



Knowledge

Understanding impact chain

of technology development to corporate governance and control processes

Industry impact study

(expert analysis, information search, forecasts, trends, subject matter conferences)

Future insight (future scenarios, vision, near-term technology)

Actualization of present and 3 leading practices

(assembly of examples, analysis of applicability, time correction)

Current state analysis (as is, in the context of "people", "processes", "technology", "knowledge")

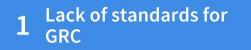
Development of a time causal chain

(building a chain of technology development in the industry and profession, "visualization" of the impact chain)

1-2 weeks, methodology expert

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Standards



2 Finding information and understanding application - creative approach

3 Studying technology standards, communicating with subject experts

Disruptive technologies and impact on GRC



Information

Artificial intelligence Big data Predictive analytics, mood (intention) monitoring

Robotization

Information search technologies Process robotization, "human substitution" Ethics matters Sorting hotline signals

Distributed interaction

Blockchain as a means of control Distributed ledgers (registers) Internet of things, fog computing

Risk identification disruptive approach example

- Connection to company systems and bases
- Initial development of search algorithms and context
- ³ Search bot
- Assembly of documentation (files)
- Initial machine based or dependent analysis

- ⁶ Algorithm and search context adjustment
- 7 Deep search
- 8 Machine dependent sorting
- Viewing and primary identification of risk events and factors
- ¹⁰ Classification, expert discussion, final risk identification

Mood monitoring, an example of predictive anti-fraud

- ¹ Definition of criteria for atypical reactions
- Assembly of activity information from nodes (work stations) of company systems
- ³ Interpretations based on data base analysis
- 4 Identification of atypical reaction locations
- 5 Understanding fraud factors
- 6 Response development

Use of conversational AI in search and development of controls

(effective in compliance)

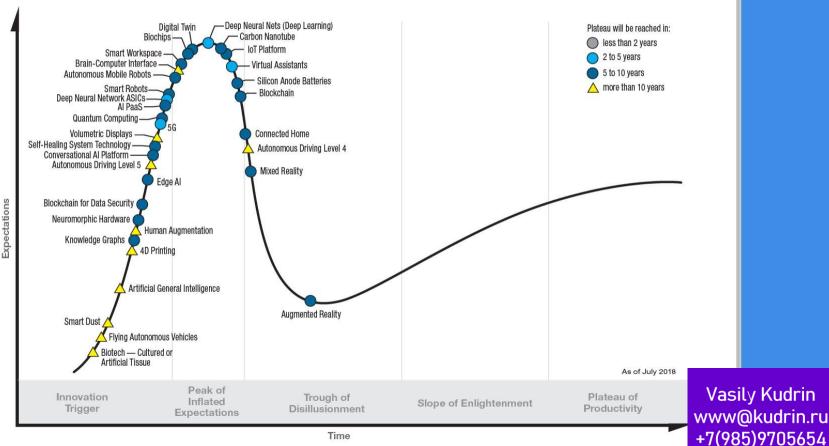
- ¹ Connecting a intellectual machine to databases, constantly replenishing databases with new materials
- ² Elaboration of questions and keywords
- ³ Asking questions based on the results of a risk assessment
- 4 **Response processing**
- 5 Machine learning

Corporate governance, influence areas of modern disruptive technologies

- Implementation of traditional corporate governance methods in disruptive technology companies
- Expertise in supervisory boards' work
- Financial markets
- Using blockchain in corporate actions

- Enhancing corporate governance and financial reporting
- Ethics matters, company reputation
- Major threats associated with disruptive technologies and discoveries

Hype Cycle for Emerging Technologies, 2018



Time

Role of insight (insightful expertise)



- Perception of disruptive technologies in their true purpose
- Providing the organization with hints (understanding) how to constructively use their "destructive" power
- Protection of company value by providing risk-based objective assurance, recommendations, insightful expertise

Contact information



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