Tunnel similar modeling notation and spherical viewpoint
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Annotation
The article proposes a spherical model of perception, groups and levels of complexity, notation for modeling abstractness, complexity.

Keywords: notation of tunnel similar modeling, complexity, cycle.

Introduction
Currently, there is an active process of creating notations for computer modeling. Most notations offer flat images for models. There are several cyclical approaches in the world: the theory of functional systems [https://en.wikipedia.org/wiki/Theory_of_functional_systems], the Deming cycle [https://en.wikipedia.org/wiki/PDCA], the OODA loop [https://en.wikipedia.org/wiki/OODA_loop]. Also known about the division of the domain into levels of complexity and types of abstraction.

To construct a notation, it is proposed to combine the approach of Descartes' dualism, the classification of complexity, cycles. Classification of types of resources by levels of complexity is proposed. Types of resources correspond to the columns of the ontology of the enterprise Zachman [https://en.wikipedia.org/wiki/Zachman_Framework].

Legend for difficulty levels
It is assumed that the complication goes in the form of a sigmoid chain. Each sigmoid consists of three main periods: preparation, development, stabilization, followed by a conservation phase. In the period of preparation, chaotic stimulation occurs. In the period of development, the complication acquires a positive feedback. In the period of stabilization negative feedback starts to act.

Each sigmoid forms a group of complexity. Analogues of groups can be considered types of complexity in the diffusion of innovation. We can assume the presence of the following groups:
- chaotic
- fractal
- energy
- information
- systems
- processes
- synergetics
- bureaucracy
- ecology
- cosmic
For middle groups, we designate pairs of triangles or segments of a circle on the left side of the rectangle. To indicate periods, we suggest painting the figures in pairs in accordance with the two-bit notation: 00, 01, 10 [http://itue.ru/?p=1603].

**Symbols for phases**

Each activity can be divided into 4 phases. For the phases, the PDCA cycle designations are used. For each phase, you can use the symbols on the right side of the rectangle [https://habrahabr.ru/post/259291/].

![Pic. 1 Legend of the phases of the Deming cycle.](image)

**Spherical Model**

In accordance with the theorem proved by Perelman, any connections can be represented on a sphere. For the sphere, we introduce the abstractness, increasing from below upwards. The complexity increases from the poles to the equator. Phases are placed along the equator. Thus, we will get a sphere on which to place the modeling elements. You can get a map of the sphere using the Mercator projection. For our purposes we use two pseudospheres formed by rotation of hyperbolas [https://en.wikipedia.org/wiki/Pseudosphere]. The upper branch corresponds to the abstract, the lower branch corresponds to the material. Dualism is revealed in the book L.E. Balashov, How We Think [http://philosophystorm.org/files/Balashov.Kak-mi-dumaem-2.pdf].
Levels of thinking

Below is the content for the levels.
Types of algorithms for artificial intelligence

For each complexity group, you can align the algorithm from the book [Domingos, Pedro (2015). The Master Algorithm: How machine learning is reshaping how we live]:
- probabilistic conclusion (Bayes) - chaotic
- genetic search (evolution) - fractal
- optimization with constraints (analogies) - energy
- reverse deduction (symbolists) - information
- gradient descent (connectionists) - static
- probabilistic conclusion (Bayes) - dynamic (processes)
- genetic search (evolution) - synergistic (market)
- optimization with limitations (analogies) - bureaucratic (regulations)
- reverse deduction (symbolists) - ecological
- gradient descent (connectivity) - cosmic.

The proposed series is an illustration. To verify compliance, research is required.
Conclusion

The notation for modeling of the enterprise is offered. The notation for different elements is proposed. The concepts of groups and periods of complexity, phases of activity are introduced. Spherical coordinates are introduced to classify the terms of the domain.