Managing the Intelligence of Things

The Unicist Functionalist Technologies

The functionalist approach uses unicist functional design to develop solutions that include synchronized binary actions to ensure results and uses Unicist AI to install cobots and intelligent automation.

The Unicist Research Institute

Pioneers in Research since 1976

The Power of the Functionalist Approach

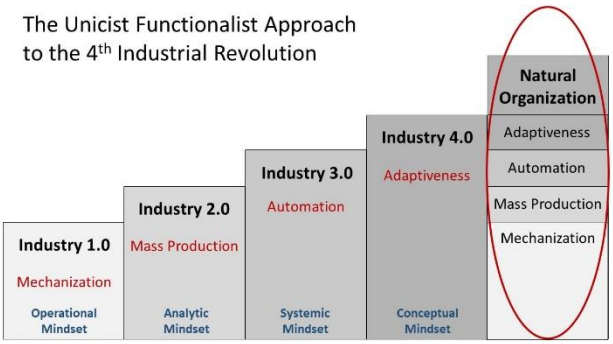
The unicist approach to functionality affirms that there is nothing in the universe, which is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function. Their interaction defines the intelligence of things.

The functionalist approach allows building structural solutions by managing the root causes of problems and using synchronized binary actions to generate value.

The functionality of business processes is managed using two synchronized actions that, on the one hand, open possibilities and, on the other hand, ensure results. These binary actions are defined by the functional structure of the business processes.

Unicist functional design allows designing business processes and the necessary binary actions to make things happen.

The Functionalist Approach in the 4th Industrial Revolution



The 4th Industrial Revolution introduced the functionalist approach to businesses based on managing the functionality of their processes to make them adaptive and customer centered.

It requires integrating the Internet of Things and the Intelligence of Things.

What For?

The functionalist approach allows solving complex problems, building adaptive solutions, and designing intelligent systems:

- To design and develop business strategies
- To define and manage marketing and sales processes
- To design organizational and business processes
- To foster talent development
- To develop intelligent systems and applications

How?

The use of functionalist technologies is based on managing the fundamentals of business processes. These technologies include:

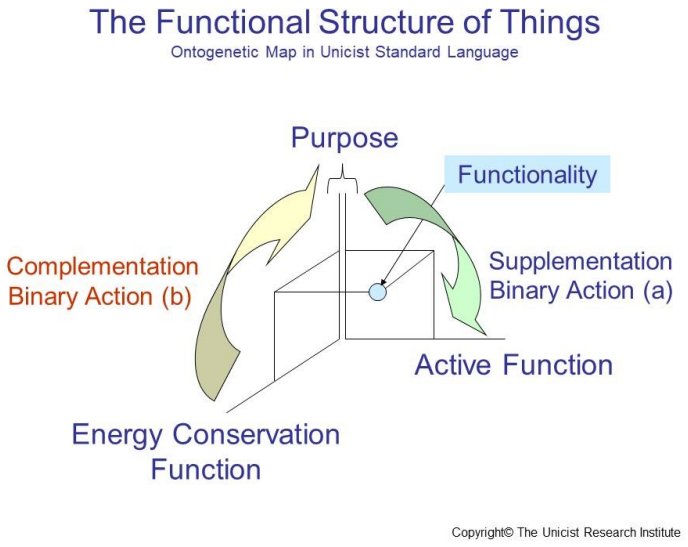
1. The use of unicist functional design to develop adaptive solutions
2. The knowledge of the functional structures of business processes to make them work
3. The unicist logic to build synchronized binary actions
4. Unicist AI to develop intelligent systems

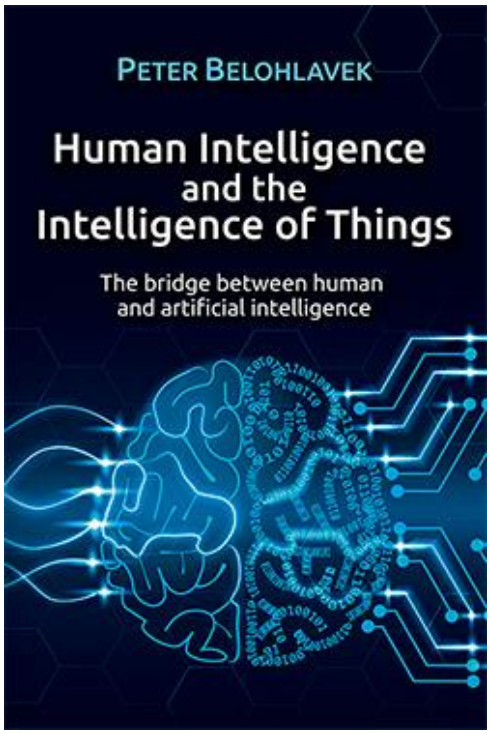
The Basics of the Functionalist Approach to Business

The unicist approach to functionality affirms that there is nothing in the universe, which is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function.

These elements are integrated by the complementation and supplementation laws established by the unicist logic.

This structure works through unicist binary actions (UBA) that produce the functionality of any entity or process, whatever its kind.





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The 4th Industrial Revolution introduced the functionalist approach to businesses based on managing the functionality of their processes to make them adaptive and customer centered.

This approach is based on the discovery of the intelligence that underlies nature that defines the principles of its functionality and led to the development of the unicist logic that allows managing the intelligence that deals with the functionality of "things".

It is based on the use of functional knowledge to manage the real world that integrates the know-how and the know-why of "things".

Unicist Functional Design
To Introduce the 4th Industrial Revolution

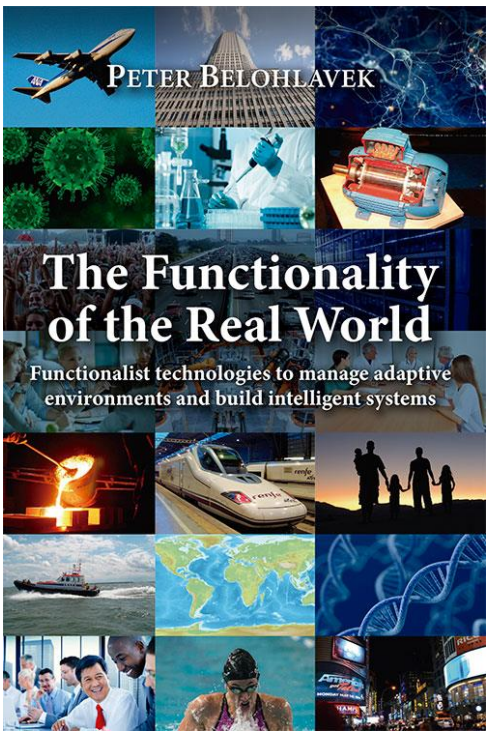
The unicist functionalist approach to the 4IR is based on integrating the Internet of Things with the Intelligence of Things that allows developing intelligent systems.

The development of the unicist logic allowed managing the intrinsic functionality and the use value of things and gave birth to the Unicist AI that emulates the intelligence of nature and human intelligence.

The unicist functional design was developed to enhance the functionality of business processes. This process is developed in participative solution-factories to design in adaptive environments.

This approach manages the functionality, dynamics and evolution of business functions and processes and is necessary to:

- Develop the functional design of adaptive business processes
- Design business strategies
- Design and implement binary actions to ensure results
- Design and develop intelligent business cobots
- Design and develop intelligent systems and applications
- Design and manage R&D processes of products, devices, and processes
- Develop business objects and catalysts to manage processes
- Design market expansion processes
- Manage process improvement, innovations, and changes
- Design software that includes intelligent functions



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The functional design process begins with the existence of a solution that needs to be built and ends with the installation of the solution.

Business Application Fields

Functional Design of Strategies & Business Intelligence

It includes the design of the binary actions that drive the maximal strategies to grow and the minimum strategies to ensure results. The designer always includes the development of competitive strategies.

Functional Design of Marketing & Sales

It includes the design of the binary actions that expand markets and accelerate buying processes. The designer uses a segmented approach to ensure a first-choice positioning.

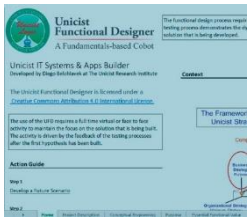
Functional Design of Organization & Management

It includes the design of the binary actions that manage adaptive work processes, increasing productivity and quality. The unicist organizational design is based on integrating processes and objects in organizations.

Functional Design of People Management

A functionalist approach requires working with systems to manage the accountability, reliability, and transparency of the roles of the managers involved. It integrates technologies with the efficacy of people.

Functional Design of Intelligent Information Technology



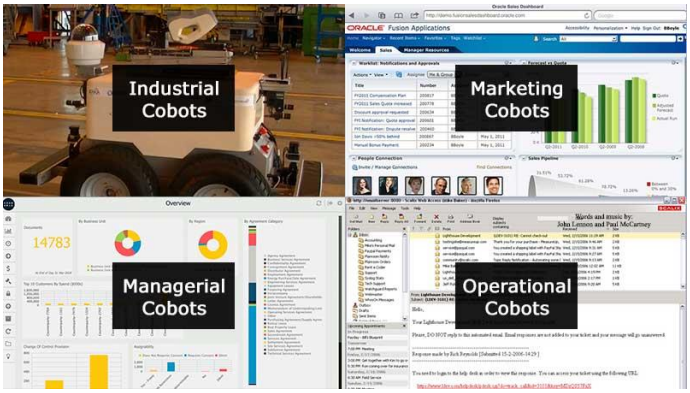
It includes the design of the binary actions that allow building intelligent systems, cobots and adaptive automation. The unicist functional design cobots provide the knowledge of the structure of business functions.

The Use of Functionalist Technologies

The use of design groups, intelligent systems, business cobots, unicist AI, binary actions, catalysts, and business objects is what makes the management of the functionality of adaptive business processes possible.

1) Use Intelligent Business Cobots to make processes adaptive and save costs

Unicist Cobots are collaborative robots that manage the functionality of business processes.

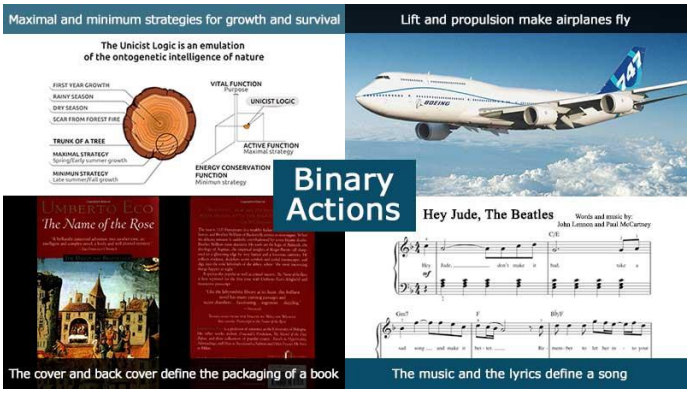


The use of the concepts and fundamentals of business processes allowed managing their functionality and enabled the development of collaborative robots.

The functionality of business cobots manages, on the one hand, the efficacy of processes using logical rules or artificial intelligence and, on the other hand, the efficiency of the operation to ensure the achievement of their purpose.

2) Use Binary Actions to generate results

The functionalist approach is based on the use of binary actions, that are driven by the use of unicist AI and business cobots.



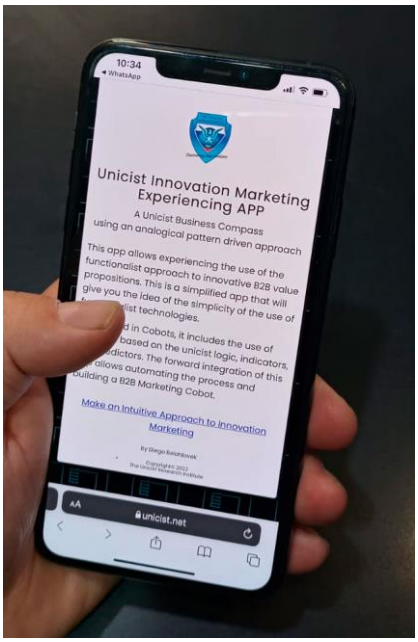
Binary actions are two synchronized actions that, on the one hand, open possibilities and, on the other hand, ensure the achievement of results.

For example:

1. The active function and the energy conservation function of the intelligence of a tree drive its growth and survival.

2. Propulsion and lift make airplanes take-off and fly. Propulsion drives the active action and lift drives the energy conservation action.
3. The cover and the back-cover define the functionality of the packaging of a book. The cover drives the active action, and the back-cover drives the energy conservation action.
4. The lyrics and the music of a song define its aesthetics. The lyrics drives the active action, and the music drives the energy conservation action.

3) Use Unicist AI to build Intelligent Systems



Unicist AI is based on the triadic functionality of the unicist logic that allows managing the functionality of things.

Fundamentals-based AI allows managing the functionality of processes and building intelligent systems and cobots.

The discovery that human actions are driven by the concepts people have in their minds, allowed developing the unicist logic that emulates human intelligence and the intelligence of nature to manage the functionality of things.

Fundamentals-based AI uses indicators and predictors both to monitor the functionality of processes and as an input to the inference engines.

It provides the meaning of data, its integration with data-based AI, allows managing processes using adaptive automation.

It uses the rules of the unicist logic and allows developing solutions and learning from the pilot tests of their implementation until their functionality has been confirmed.

Fundamentals-based AI allows automating the use of binary actions, catalysts, business objects, and marketing objects to develop processes of any kind.

4) Use Intelligent Business Catalysts to accelerate growth

The functionality of businesses requires the use of catalysts.

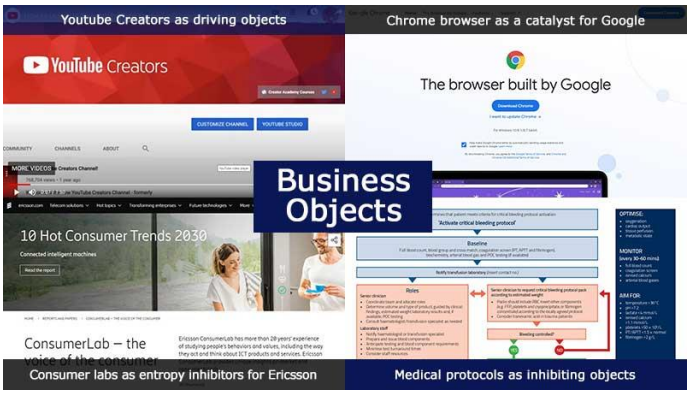
Catalysts are process accelerators that diminish the efforts needed to produce results. Catalysts have two functions: they expand possibilities by covering latent needs and accelerate business processes.

Some examples will help to grasp the idea:

1. The GE Open Innovation works as a catalyst for the GE Business.
2. Special offers are sales catalysts.
3. The direct publishing alternative is a catalyst that expands the business of Amazon.
4. The Deep Blue chess-playing supercomputer versus Garry Kasparov in the 90's was an equity catalyst for IBM.

5) Use Intelligent Business Objects to save costs & ensure quality

The functionality of adaptive systems is based on the use of business objects. Unicist business objects are encapsulated intelligent adaptive systems that produce predefined results that can be inserted in work processes to increase productivity and quality and to save energy.



Some examples will help to grasp the idea:

1. YouTube Creators work as Driving Objects.
2. Google Chrome works as a Catalyzing Object that expands and increases the functionality of the Google business.
3. Ericsson Consumer Lab works as an Entropy Inhibiting Object that inhibits the entropy of marketing processes ensuring that the value propositions are focused on real needs.
4. Medical Protocols work as Inhibiting Objects that inhibit dysfunctional events in medical praxis.

6) Install Roles in Design Groups

The installation of leading roles that assume specific complementary responsibilities empowers the synergy of groups:

1) **The "Coordinator"** is responsible for guiding the group towards the objectives that have been defined. The participants also have full responsibility for the results after they agreed that such results are possible.
2) **The "Fallacy-Shooter"** is responsible for the testing of the solutions and for assuring the quality of the decision-making processes.
3) **The "Ombudsperson"** is responsible for monitoring the value generation of the design processes. The ombudsperson represents the "user" and is responsible for generating value to the environment.

Main Markets

• Automobile • Food • Mass consumption • Financial • Insurance • Sports and social institutions • Information Technology (IT) • High-Tech • Knowledge Businesses • Communications • Perishable goods • Mass media • Direct sales • Industrial commodities • Agribusiness • Healthcare • Pharmaceutical • Oil and Gas • Chemical • Paints • Fashion • Education • Services • Commerce and distribution • Mining • Timber • Apparel • Passenger transportation –land, sea and air • Tourism • Cargo transportation • Professional services • e-market • Entertainment and show-business • Advertising • Gastronomic • Hospitality • Credit card • Real estate • Fishing • Publishing • Industrial Equipment • Construction and Engineering • Bike, motorbike, scooter and moped • Sporting goods

Country Archetypes Developed

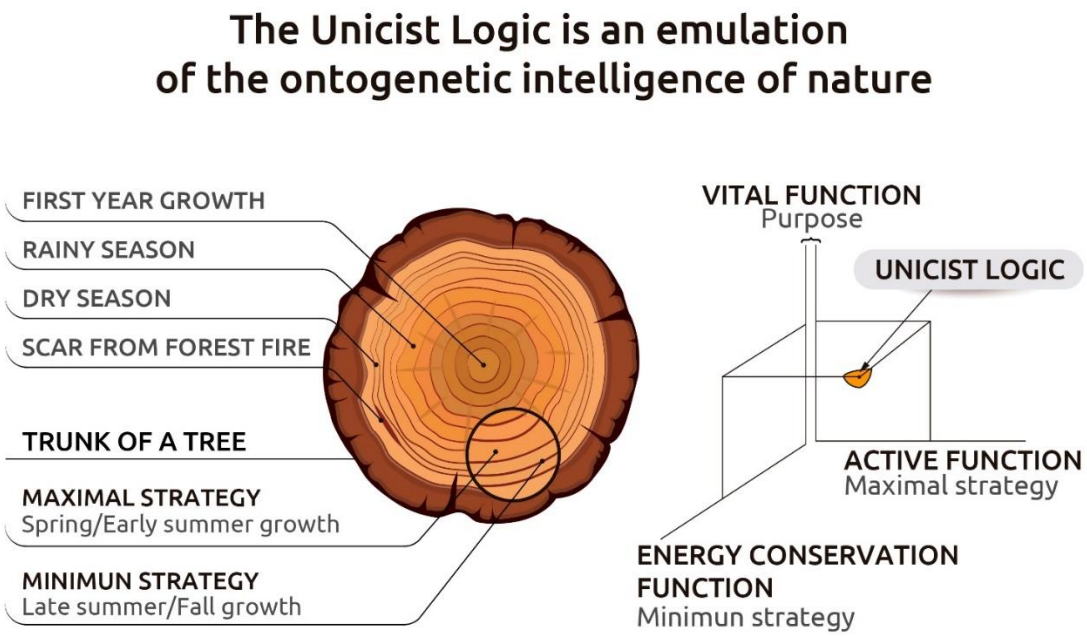
• Algeria • Argentina • Australia • Austria • Belarus • Belgium • Bolivia • Brazil • Cambodia • Canada • Chile • China • Colombia • Costa Rica • Croatia • Cuba • Czech Republic • Denmark • Ecuador • Egypt • Finland • France • Georgia • Germany • Honduras • Hungary • India • Iran • Iraq • Ireland • Israel • Italy • Japan • Jordan • Libya • Malaysia • Mexico • Morocco • Netherlands • New Zealand • Nicaragua • Norway • Pakistan • Panama • Paraguay • Peru • Philippines • Poland • Portugal • Romania • Russia • Saudi Arabia • Serbia • Singapore • Slovakia • South Africa • Spain • Sweden • Switzerland • Syria • Thailand • Tunisia • Turkey • Ukraine • United Arab Emirates • United Kingdom • United States • Uruguay • Venezuela • Vietnam.

Learn more about the Functionalist Technologies

Annex

The Unicist Functionalist Approach Emulates the Intelligence of Nature

The discovery of the ontogenetic intelligence of nature allowed defining that the functionality of any living being is driven by a purpose and has an active and entropic principle that drives its growth and an energy conservation principle that ensures its survival. This triadic structure gave birth to the unicist logic, that has also been proven in the functionality of human intelligence and drove to the development of unicist AI.



The research on the functionality of intelligence allowed finding that human actions are driven by the concept people have stored in the long-term memory, which are triggered by the CSTM (conceptual short-term memory) to generate instantaneous responses to any external stimuli.

The breakthrough in science and the researches that allowed developing the unicist functional technologies were led by Peter Belohlavek at The Unicist Research Institute.

Learn about The Unicist Research Institute

Websites

Research Center: https://www.unicist.org
Innovation Center: https://www.unicist.org/scientific-collaboration
Business Arm: https://www.unicist.net
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