Enhancing Collective Intelligence in Business

A Binary Actions driven
Functionalist Approach to Business

The Unicist Research Institute
Pioneers in Complexity Science Research since 1976

Unicist Binary Actions applied to Business (*)

There is nothing in the universe, that is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function. This structure works through binary actions (UBA) that produce the functionality of any entity or process, whatever their kind.

Binary actions are two synchronized actions that aim at the same purpose. This implies that the real-world functions are based on binary actions. Therefore, their use is not optional, it is mandatory to ensure the generation of results.

The use of univocal actions only works if the environment provides the second action that sustains it. This applies to all fields of human actions. The function-alist approach is the pathway to this new stage in the world.

Binary Actions are a Natural Human Approach

The use of manipulation, threat and chantage are negative ways of using binary actions to obtain benefits. Here you can find a series of binary actions to gener-ate value that are evident, which are benchmarks you might use to adopt this way of thinking and working:

1) Learning (UBAa) + Teaching (UBAb) = Knowledge acquisition
2) Productivity (UBAa) + Quality (UBAb) = Value generation
3) Marketing (UBAa) + Selling (UBAb) = Generating revenue
4) Punishment (UBAa) + Rewards (UBAb) = People management
5) Root Causes (UBAa) + Triggering Causes (UBAb) = Solutions
6) Efficacy (UBAa) + Efficiency (UBAb) = Effectiveness
7) Empathy (UBAa) + Sympathy (UBAb) = Influence Building
8) Participation (UBAa) + Power (UBAb) = Leadership
9) Processes (UBAa) + Objects (UBAb) = Organization
10) Desirability (UBAa) + Harmony (UBAb) = Aesthetics

To generate results, the synchronicity of binary actions requires beginning with UBAa, which are active function actions, and then developing UBAb that are energy conservation actions.

(*) This paradigm shift in science was developed by Peter Belohlavek at The Unicist Research Institute.

Unicist Functional Design & Binary Actions
Managing Business Adaptability in the 4th Industrial Revolution

The Unicist Functional Design allows developing solutions in adaptive environments. It uses the knowledge of the unicist ontology of business functions that allows managing their root causes. It is based on a unicist ontological approach that allows managing the functionality and operation of adaptive systems.

Functional design manages the concepts and fundamentals of processes and emulates the intelligence, organization, and evolution of nature to develop maximal strategies to grow and minimum strategies to ensure results.

The unicist functional design includes:

- **Binary Actions** to ensure the results of processes
- **Catalysts** to expand and accelerate processes
- **Business Objects** to ensure productivity and quality
- **Unicist Artificial Intelligence** to empower adaptability
- **Business Cobots** are collaborative robots to complement marketing actions

Learn more

1) The Use of Binary Actions

Binary actions are two synchronized actions that expand businesses while they ensure their results. They were developed to manage the evolution of adaptive environments by managing actions to install maximal strategies to grow and minimum strategies to ensure results.

Any adaptive system and environment (living being or artificial construction) is driven by binary actions. Some examples will help to grasp the idea:

1. The active function and the energy conservation function of the intelligence of a tree drive its growth and survival.
2. Lift and propulsion make airplanes take-off and fly.
3. The cover and the back-cover define the functionality of the packaging of a book.
4. The music and the lyrics of a song define its aesthetics.

The use of binary actions to manage adaptive environments is a must. Learn more

2) The Use of Business Catalysts

Catalysts are process accelerators that diminish the efforts needed to produce results. The discovery of the structure of the functionality of biological and behavioral catalysts allowed developing business catalysts, which are necessary to accelerate processes and drive the evolution of businesses. 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. Learn more


3) The Use of Business Objects

Unicist business objects are encapsulated adaptive systems that produce predefined results that can be inserted in work processes to increase productivity and quality and to save energy. To imagine an object please consider an automatic pilot in an airplane. It can be considered a "paradigmatic" object. 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.

Learn more

4) The Use of Unicist AI

The use of Unicist AI integrating data-based AI with fundamentals-based AI allows managing processes using adaptive automation. Fundamentals-based AI uses indicators and predictors both to monitor the functionality of processes and as an input to the inference engine.
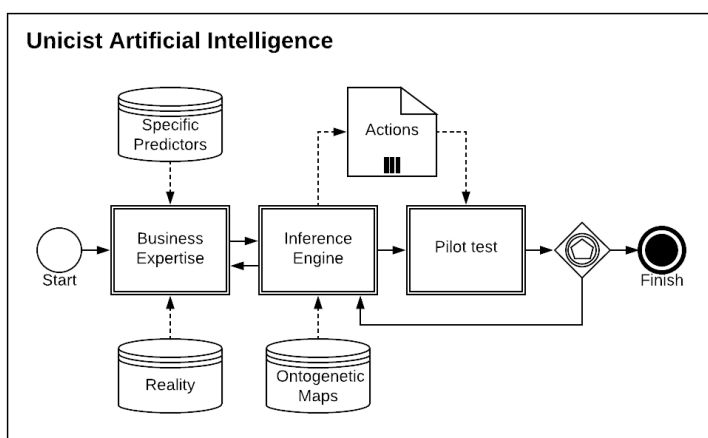
The Unicist AI is based on the integration of fundamentals-based AI to manage the basics of processes and data-based AI to manage the operational aspects. Data-based AI works within the clusters established by fundamentals-based AI.

The fundamentals provide the framework of the meaning of data.

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

Data-based AI refines the structural information provided by fundamentals-based AI and - when sufficient customer's data are available - allows establishing databases of potential buyers.

Learn more

5) Unicist Cobot Building

Cobots are collaborative robots that are based on human-robot interaction. They have been used for decades in the industrial field and the unicist functionalist approach enabled introducing them in the rest of the business processes. They are extremely valuable to introduce adaptability and customer orientation in business processes.

The business application of Cobots became possible due to the development of the fundamentals-based AI and of the binary actions that ensure the generation of results.

Business Cobots enhance efficacy. According to their use, they include different levels of adaptability. Based on their functionality, there are different types of Cobots:

1. Research Cobots
2. Diagnosing Cobots
3. Design Cobots
4. Solution Building Cobots
5. Business Objects Building Cobots
6. Operational Cobots

All types of Cobots include the delivery of the necessary functional knowledge. There are four application fields of Cobots: Industrial, Marketing, Management and Operation.
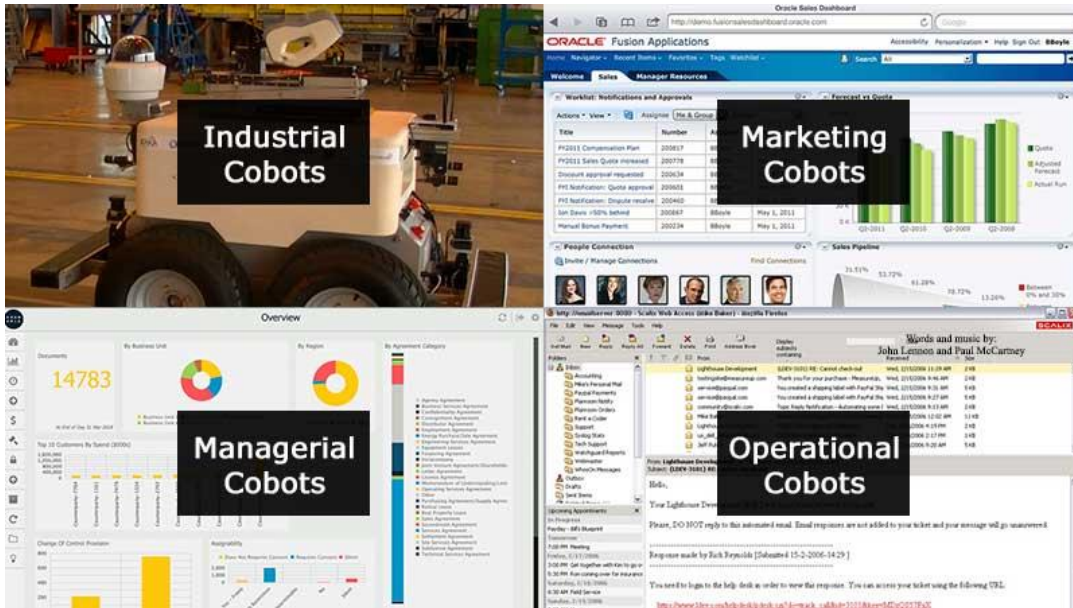
The use of concepts and fundamentals allowed managing the functionality of business processes and enabled the development of collaborative robots to provide the resources - including functional knowledge- that are needed to manage business processes. They interact with people to ensure the functionality of processes and the generation of results. [Learn more]

Unicist Functional Design

The unicist functional design is based on the use of the ontogenetic maps that define the functionality of adaptive entities whatever their kind. The input to any functional design is the conceptual structure of the functionality of the entity that is being designed and the output is the definition of the operational design that includes the definition of the necessary binary actions.
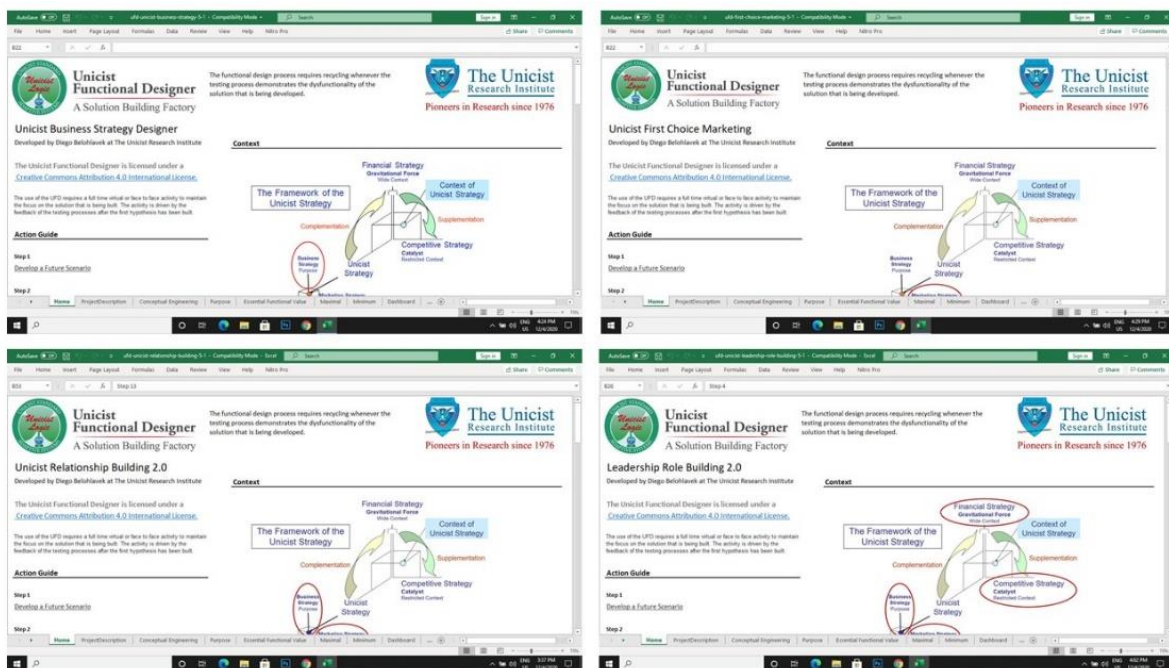
The unicist functional design is sustained by the knowledge of the triadic structure of the concepts of business functions using binary actions, business objects and catalysts to ensure results. Unicist functional design is the unicist ontological approach to design solutions in adaptive environments.

The unicist ontological approach is based on the emulation of the intelligence of nature. It allows designing maximal strategies to generate growth and minimum strategies to ensure results in adaptive environments.

Functional design introduced an upgrade in the design of adaptive business processes. While empirical design is based on the knowledge of the know-how of businesses, functional design is based on the integration of the know-why with the know-how.

The use of business cobots, binary actions, catalysts and business objects is what makes the management of the functionality of adaptive business processes possible. Learn more

Roles in Functional Design:

Unicist Groups Enhance Collective Intelligence

All the unicist groups that deal with the development of solutions in adaptive environment have the same structure to enhance their collective intelligence. They have a coordinator, a fallacy-shooter, and an ombudsperson.

The complementation and supplementation of these roles enhances the collective intelligence of groups. It expands the efficacy of the participants by introducing the core aspects of the functionality of a group.

The Members of the Groups

The members of the design group that participate in the development of solutions as well as the members of the testing group that test the solutions also assume a differentiated responsibility within the group, taking one of the following roles:

1) **The "Coordinator"** is responsible for guiding the group towards the objectives that have been defined. The coordinator has the full responsibility for the diagnoses and for achieving the results that have been defined as being possible to be achieved. The participants also have full responsibility for the results after they agreed that such results are possible.

2) **The "Fallacy-Shooter"** is responsible for assuring the quality of the foundations and justifications in the decision-making processes. The "Fallacy-Shooter" is the person responsible for guiding the action-reflection-action process in order to improve the accuracy of the diagnoses and of the work processes.

3) **The "Ombudsperson"** is responsible for monitoring the value generation of the design processes. The "Ombudsperson" is responsible for monitoring that the proposals respond to the functional needs of the solutions that are required; s/he guarantees results. The ombudsperson represents the "user" and is responsible for generating value to the environment.

Using Binary Actions to manage Functionality

The triadic structure of unicist concepts defines the functionality of any kind of entity. All that is part of a system has a concept, which makes it part of that system. It requires developing binary actions to ensure results.

The lack of this information forces the substitution of the functionalist approach with an operational approach, which hinders the management of value generation.
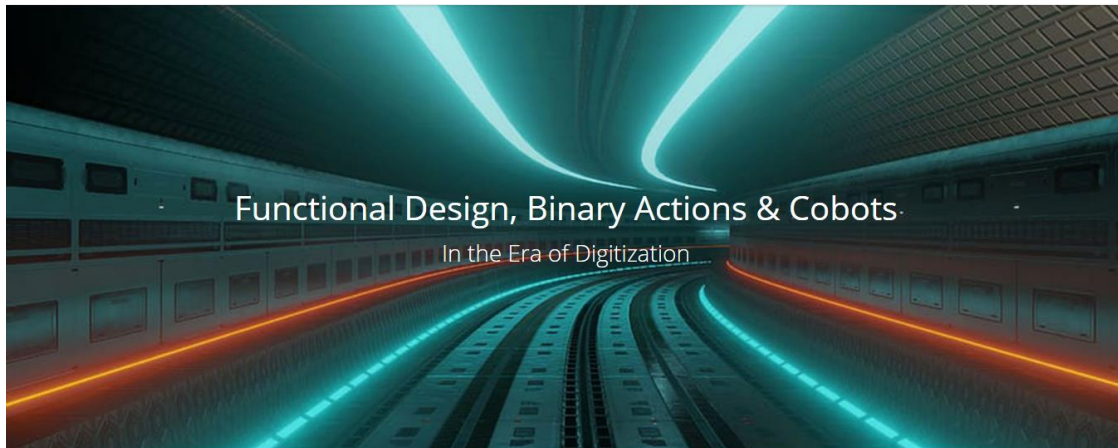
[Learn more about the Functionalist Technologies](#)

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

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Websites
Business Arm: https://www.unicist.net
Intelligent Systems: https://www.unicist-systems.com
Academic Arm: https://www.unicist.org/academic
Research Center: https://www.unicist.org

Phone: +1 315-506-6720
Contact us:
n.i.brown@unicist.org