



Unicist Business, Commercial & Organizational Strategies
by integrating maximal & minimum strategies



Equity Value Enhancement
by enhancing customer, shareholder & stakeholder values



Functional Design of Business Solutions
to design products, processes & business objects



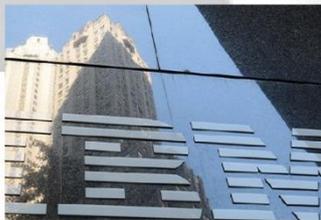
Adaptive Automation of Business Processes
taking advantage of the 4th Industrial Revolution



The Unicist Functionalist Approach to Business



Unicist Artificial Intelligence
to manage the operation of adaptive automation



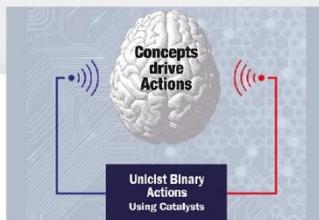
Business to Business Virtual Marketing
using binary actions, catalysts & marketing objects



B2B / B2C Customer Relationship Management
introducing the Unicist AI marketing module



B2B & B2C Bestseller Building
based on participative Unicist Functional Design



Commercial B2B / B2C Binary Actions
to increase market positioning & sales effectiveness



Business to Business Virtual Selling
using testing rooms, binary actions, objects & catalysts

Adopting the Unicist Functionalist Approach to Foster Growth & Ensure Results

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

Functional design is focused on the value of processes, while operational design is focused on the processes themselves. Functional design includes operational design but not vice versa.

Operational design is based on the know-how of processes, while functional design is based on the integration of the know-how and the know-why of processes.

The unicist functional design is based on the use of the ontogenetic maps that define the functionality of adaptive entities whatever their kind.

The output of any functional design is the definition of the operational design that includes the use of synchronized binary actions, the use of catalysts and the inclusion of business objects to increase productivity and quality.

Application Fields

The unicist functional design of adaptive business functions and processes is based on the use of the ontogenetic maps of the fundamentals that define the functionality of adaptive systems whatever their kind.

Paradigmatic applications of Unicist Functional Design and Unicist AI



The Breakthrough in Science

The evolution of nature is based on a triadic functional structure (see Annex I). Therefore, there is nothing in the universe, which is part of a system, that does not work with a purpose, an active function, and an energy conservation function, integrated by complementation and supplementation laws, that define its concept.

This was based on the discovery of the ontogenetic intelligence of nature that allowed developing the unicist logic and applied to all that happens in the universe. This is materialized in the ontogenetic maps of things that define and describe the functionality of the real world.

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

The unicist functionalist approach is based on managing this triadic structure of the concepts of things.

[Learn more](#)

The Triadic Functionality of the Real World

The ontogenetic intelligence of nature defines that any living being is driven by a purpose and has an active and entropic principle that drives its growth and an energy conservation function that ensures its survival. This structure drove to the development of the unicist ontology, and the name given to this intelligence was concept.

A unicist concept is defined by a purpose, an active and entropic principle, and an energy conservation principle. The concepts of things define the root causes of their functionality.

The ontogenetic intelligence of nature that was discovered defines that there are only two types of essential relationships in the world: a complementary relationship and a supplementary relationship, integrated in a triadic function.

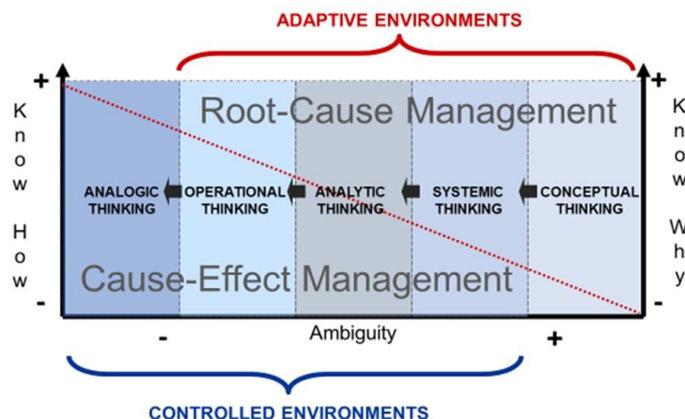
[Learn more](#)

The Unicist Intrinsic and Extrinsic Concepts

The unicist functional design was developed to manage the concepts that underlie the functions that are being managed, being they functions of living beings or artificial adaptive systems or environments.

Concepts describe the living creatures' essence and their evolution laws. Living creatures possess intrinsic concepts. This means that they exist in themselves. Inanimate entities, on the other hand, have intrinsic and extrinsic concepts. Intrinsic concepts describe their functionality and extrinsic concepts define the functionality of their use.

Functionality of Logical Thinking to deal with Causality



The Triadic Structure of Unicist Intrinsic Concepts

Intrinsic concepts are implicit in the functional structure of things. Such concepts have a functional structure that emulates the ontogenetic intelligence of nature and is integrated by three elements:

- 1) A purpose that is homologous to the "purpose" in nature.
- 2) An active function that is homologous to the active principle in nature.
- 3) An energy conservation function that is homologous to the energy conservation principle in nature.

These elements are integrated by the complementation and supplementation laws that are implicit within each conceptual structure.

[Learn more](#)

Examples of the Triadic Structure of Things:

Some examples of the functionality of non-adaptive systems allow grasping intuitively the functionality of their intrinsic concepts:

The Triadic Functional Structure of a Safety Match

A safety match is a short, thin stick made of wood or cardboard and covered with a special chemical at one end that burns in a controlled way when rubbed firmly against a rough surface.

The purpose of the triadic structure is the generation of a flame that is functional to its use. That is why there are different sizes of matches according to their use.

The active function is defined by the existence of a flammable substance on the head of the stick and the existence of an igniter.

The energy conservation function is given by a stick that works as the fuel to maintain the flame burning.

The first binary action consists of rubbing a section of the stick containing a mixture of an oxidizing substance and a flammable substance against a rough surface impregnated with red phosphor.

The second binary action is given by the burning of the stick that keeps the flame burning in order to be used.



The Triadic Functional Structure of a Hammer



A hammer is a tool with a metal head mounted at right angles at the end of a handle. The purpose of a hammer is to fulfill a task for which it is suitable. The active function is the handle, which generates the acceleration that produces the force to make the work possible. The energy conservation function is the mass of the head that ensures the results.

The binary actions that define the use of the hammer begin by the functionality of the handle and continue with the functionality of the head of the hammer.

The Triadic Functional Structure of an Electric Motor

The purpose of an electric motor is to convert electrical energy into the mechanical energy. DC motors and AC motors are based on the same essential principles that define their triadic structure.

Their active function is based on transforming electrical energy into magnetic energy.

The energy conservation function transforms the magnetic energy into mechanical energy.

The binary actions of the process are, on the one hand, the transformation of electrical energy into magnetic energy and, on the other hand, the transformation of the magnetic force into mechanical energy.

These processes happen within the rotor and the stator of an electric motor.



The Triadic Functional Structure of a Zipper



The purpose of the zipper in the textile industry is to join two parts or pieces of a garment.

The active function of the zipper is provided by the slider which, when moved, engages the hooks of one section with the holes of the other.

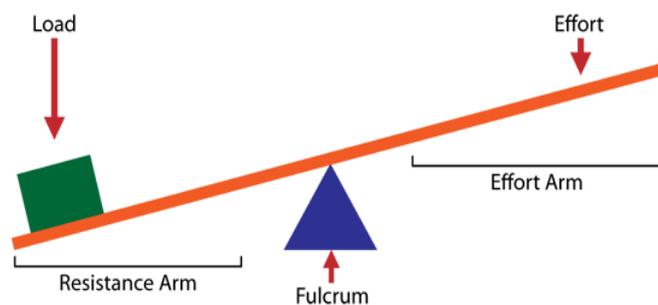
The energy conservation function is given by the hooks and holes located in the two pieces that are joined when pushed by the slider.

The binary actions that define the use of a zipper begin with the functionality of the slider and continue with the functionality of the hooks and the holes.

The Triadic Functional Structure of a Lever

The purpose of a lever is to move a load. The active function of a lever is given by the effort that is exerted on the lever arm while the energy conservation function is defined by the positioning of the pivot or fulcrum.

The binary actions that define the use of a lever begin by knowing the effort that can be exerted on the lever arm and continue by the positioning of the pivot.



Examples of the Triadic Structure of Adaptive Systems:

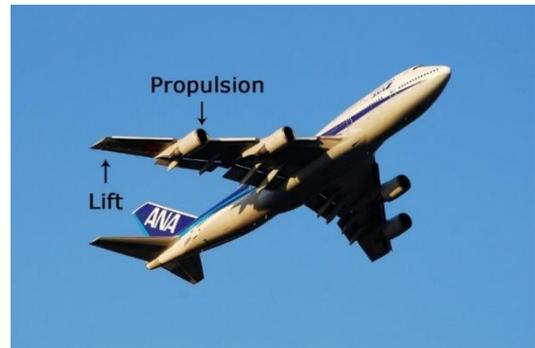
Some examples of the functionality of adaptive systems allow grasping intuitively the functionality of intrinsic concepts:

The Triadic Functional Structure of Airplanes

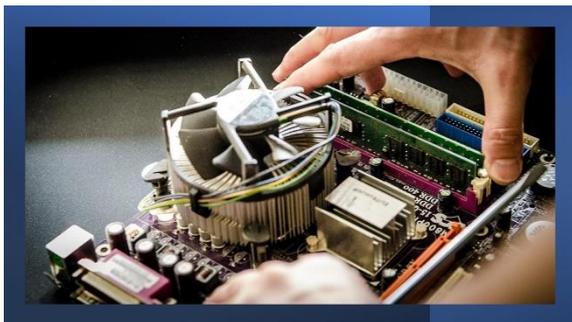
The purpose of flying an airplane can be considered to move from one airport to another.

The active function is given by their propulsion and the energy conservation function is given by the lift provided by the wings.

The binary actions to make an airplane fly begin by producing the propulsion that generates the necessary speed of the airflow on the wings of the airplane to generate the lift.



The Triadic Functional Structure of an IT Maintenance Service



IT maintenance is a process that must ensure the correct functioning of hardware and software structures in computer systems.

Its purpose is to restore the functionality of computer systems. Its active function is given by the dynamic diagnostics system for hardware and software problems in computer systems. The energy conservation function is the repairing action that was defined to restore the functionality of computer systems.

The first binary action that drives the solution is the use of the diagnosing system that provides a framework and tools to diagnose. On the other hand, the second binary action is the use of a repairing system that ensures the accuracy and reliability of the repairs. The purpose that drives both actions is restoring not only the operability but also the functionality of computer systems.

It has to be considered that IT maintenance is an adaptive system, which requires the existence of expertise of the people involved in the process and the development and updating of the methods and processes that are used.

The Triadic Functional Structure of Bicycles

The purpose of riding a bicycle is to travel from one place to another.

The active function of the riding of bicycles is given by the actions on the pedals while the body of the rider is the energy conservation function that sustains the balance to ensure their functionality.

The binary actions of riding a bicycle begin by producing the propulsion to be able to balance on it.



The Triadic Functional Structure of Object-Oriented Programming

Each program has its purpose. The methods included in the program, based on its purpose, define the behavior of an object, and constitute the active function of the program.



On the other hand, the energy conservation function is defined by the functionality of the object, which might or not be polymorphic.

The use of binary actions requires approaching objects beginning with the formulation and programming of the methods, based on the purpose, and continuing with the definition of the polymorphism of the objects.

This process needs to be recycled until the functionality of the system has been achieved.

The Triadic Functional Structure of a Written Sentence

Unicist semantics deals with the meaning of words and sentences by understanding and managing their functionality. It defines that a sentence is a system, that has a purpose, an active function, and an energy conservation function.

In semantics, the purpose is given by the substantive function of the sentence, which includes the noun.

The active function is defined by the verbal function, which includes verbs, and the energy conservation function is defined by the adverbial function, which includes adverbs and adjectives.

The first binary action integrates the verbal function with the substantive function, proposing an action. The second binary action closes the circle using the boundaries introduced by the adverbial function.

Unicist Semantics

A Functionalist Approach

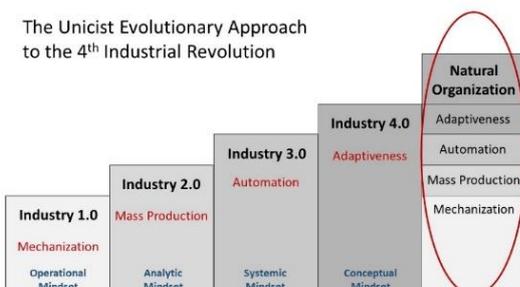
Technologies ensure results, but people make the difference.



Copyright© The Unicist Research Institute

The Triadic Functional Structure of Industry 4.0

The Unicist Evolutionary Approach to the 4th Industrial Revolution



The purpose of the Industry 4.0 is to expand businesses. On the one hand, the customer orientation, which is implicit in the purpose, defines the active function of the Industry 4.0 model.

On the other hand, the adaptability of industrial and business processes defines the energy conservation function of the model.

The use of binary actions to introduce this model requires beginning by ensuring the customer orientation and continuing with the increase of the adaptability of business processes.

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.

The unicist 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 Use of Unicist AI

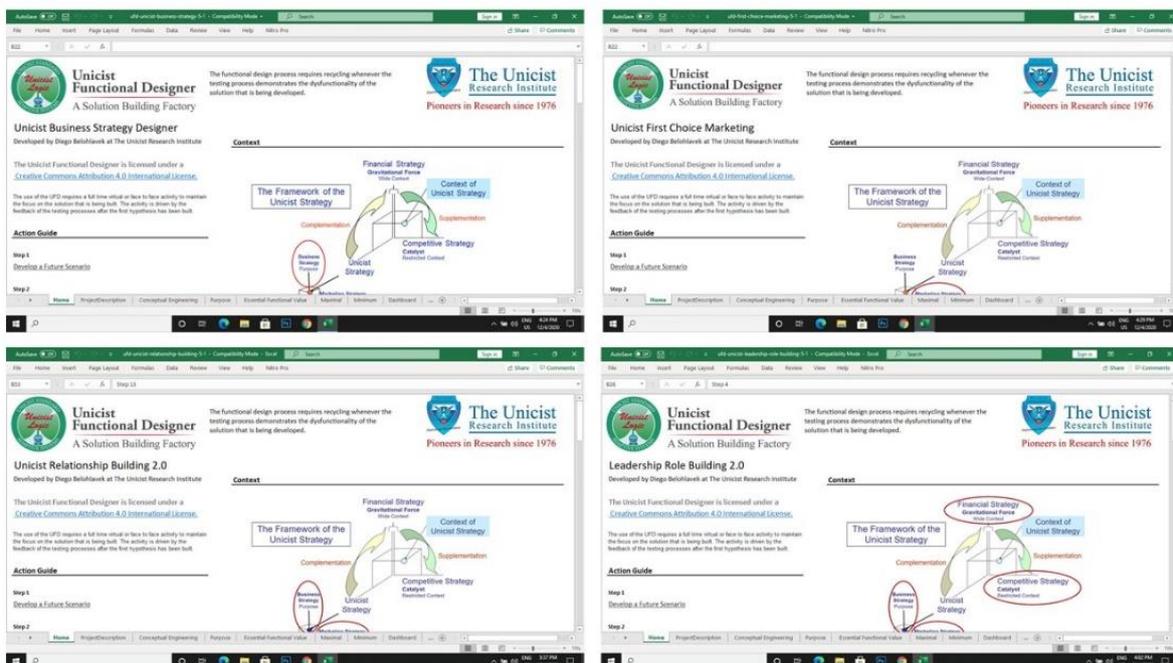
The unicist artificial Intelligence is integrated by data-based AI and fundamentals-based AI.

The data-based AI is supported by the fundamentals-based AI to avoid having subjective biases. When the quantity of data does not suffice, data-based AI is replaced by the use of fundamentals-based AI.

The fundamentals-based AI is based on the use of the ontogenetic maps of the concepts and fundamentals that drive the functionality of the process involved and the use of pilot tests to learn from the environment. [Learn more](#)

Unicist Functional Design: An Emulation of Nature

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 binary actions, catalysts and business objects is what makes the management of the functionality of adaptive business processes possible. [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:

The collage consists of four panels. The top-left panel shows a tree trunk cross-section with labels for 'FIRST YEAR GROWTH', 'RAINY SEASON', 'DRY SEASON', 'SCAR FROM FOREST FIRE', 'TRUNK OF A TREE', 'MAXIMAL STRATEGY (Spring/Early summer growth)', and 'MINIMUM STRATEGY (Late summer/fall growth)'. It also includes a diagram of 'UNICIST LOGIC' with 'VITAL FUNCTION Purpose' and 'ACTIVE FUNCTION Maximal strategy', and 'ENERGY CONSERVATION FUNCTION Minimum strategy'. The top-right panel shows a Boeing 747 airplane in flight with the caption 'Lift and propulsion make airplanes fly'. The bottom-left panel shows the cover and back cover of Umberto Eco's 'The Name of the Rose' with the caption 'The cover and back cover define the packaging of a book'. The bottom-right panel shows the sheet music and lyrics for 'Hey Jude' by The Beatles with the caption 'The music and the lyrics define a song'. A central blue box with white text reads 'Binary Actions'.

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:

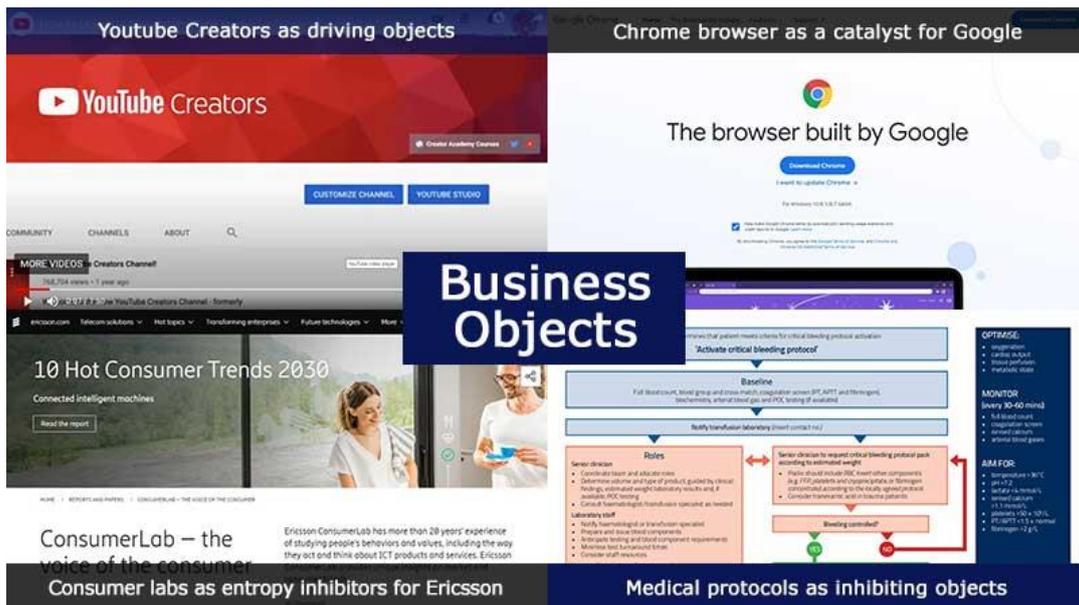


1. The GE Open Innovation works as a catalyst for the GE Business.
2. Special offers are sales catalysts.
3. The direct publishing alternative is a catalyst that expands the business of Amazon.
4. The Deep Blue chess-playing supercomputer versus Garry Kasparov in the 90's was an equity catalyst for IBM.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



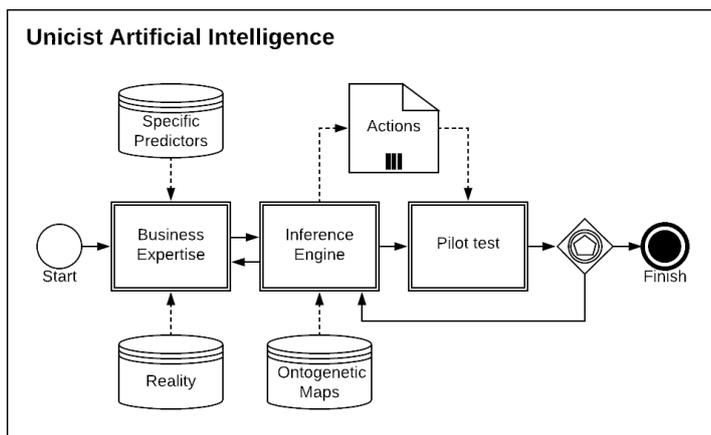
1. YouTube Creators work as Driving Objects.
2. Google Chrome works as a Catalyzing Object that expands and increases the functionality of the Google business.

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](#)

Conclusion: Managing the Functionality of Value Generation

The triadic structure of the 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. The lack of this information forces the substitution of the functionalist approach with an operational approach, which hinders the management of value generation. A metaphor might help to clarify this concept:

The cost of a glass is in its solid;
its value is in its hollow.
Its cost has no value.
Its value has no cost.
But both of them are within the glass.

The cost of a process is given by its operation;
its value is given by its functionality.
Operation has no value.
Functionality has no cost.
But both of them are within the process.

[Learn more accessing our Knowledge Bank](#)

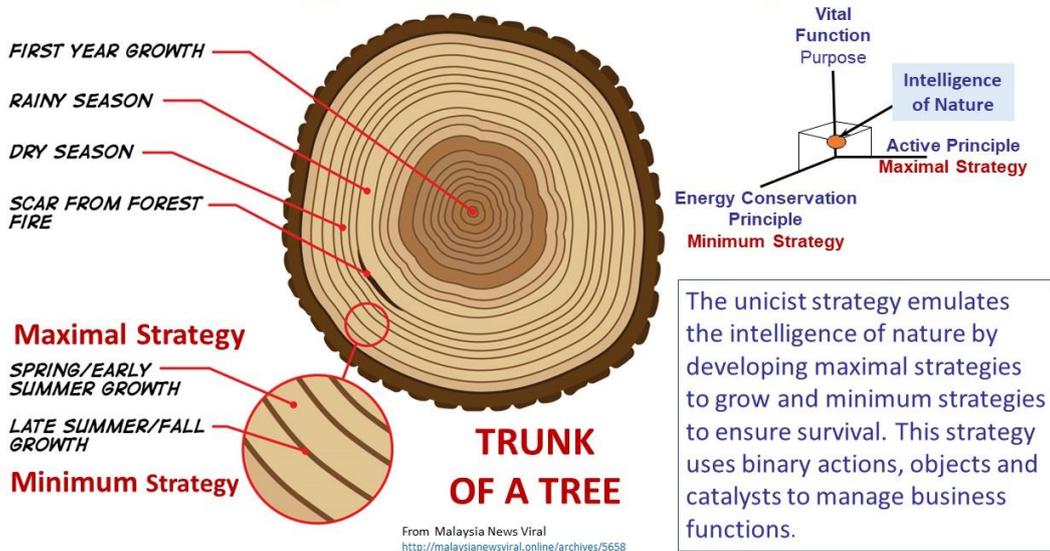
Annex I: The Discovery of the Ontogenetic Intelligence of Nature

The discovery of the ontogenetic intelligence of nature made the management of the functionality of living entities and adaptive systems and environments possible. This intelligence defines the triadic functional structure that drives the evolution of nature.

The ontogenetic intelligence provides the basic rules to adapt to an environment. It sustains the living being's unstable equilibrium. When, for any reasons, the ontogenetic intelligence is inhibited, the living being loses its equilibrium and its survival is endangered.

The ontogenetic intelligence of nature defines the nature of an entity. As such, its structure was named unicist ontology and the name given to this intelligence was concept.

The Unicist Strategy is an Emulation of the Intelligence of Nature



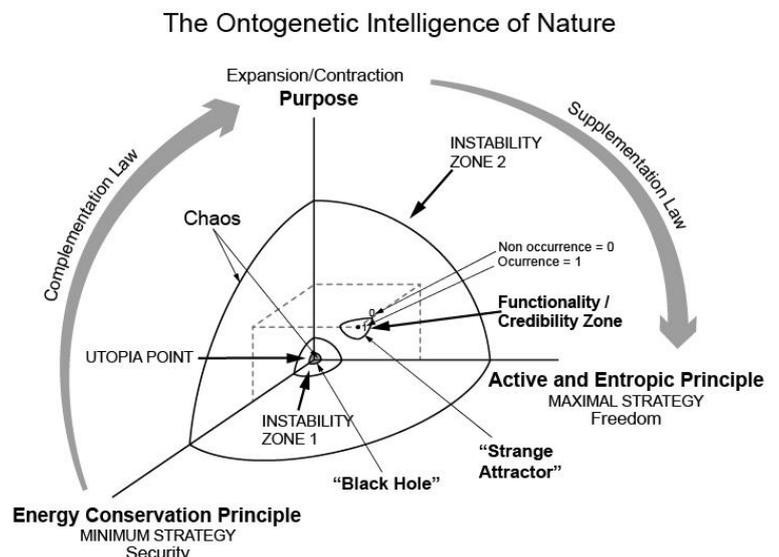
The ontogenetic intelligence of nature discovered defines that there are only two types of relationships in the world: a complementary relationship and a supplementary relationship, integrated in a triadic function.

The basic principles

The ontogenetic intelligence of nature defines the basic laws of evolution. It is a set of what can be called natural laws, which rule the evolution of living beings.

- **The action and entropic principle** that sustains growth and evolution. It is driven by freedom.
- **The energy conservation principle**, which sustains survival and avoids involution. It is driven by security.

These principles are active in individual beings and in the live environment they are part of.



This led to the development of the unicist double dialectical approach that allows dealing with complex problems using a logical approach.

The unicist double dialectical approach is a rational emulation of the ontogenetic intelligence of nature that allows apprehending the dynamics of evolution. This made the development of the Unicist Logic possible.

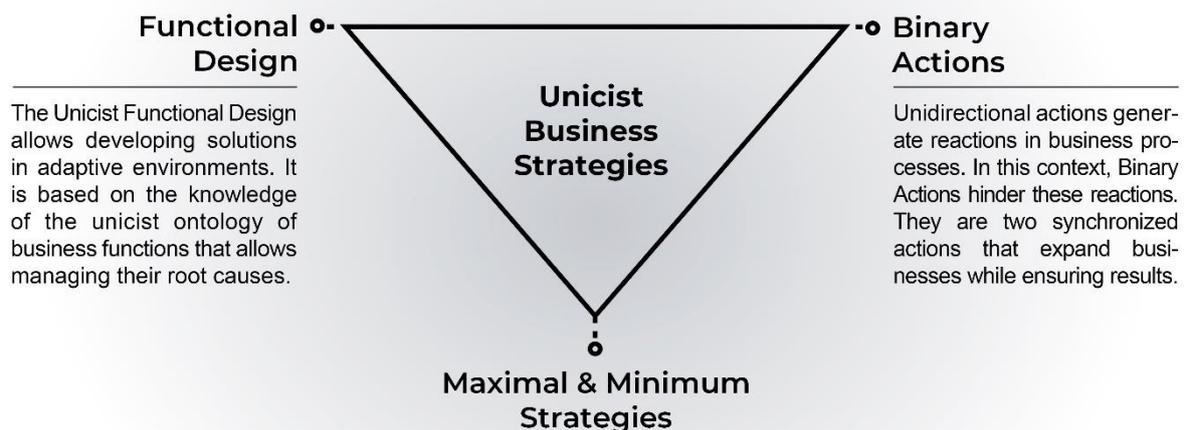
The objective of this research was to develop a technology that allowed predicting the evolution of specific aspects of complex adaptive systems and developing solutions to exert influence on such evolution.

[Learn more](#)

Annex II: Unicist Strategy: An Emulation of the Intelligence of Nature

The discovery of the ontogenetic intelligence of nature opened the possibility of understanding and influencing nature and adaptive systems.

The Unicist Strategy uses binary actions, to develop maximal and minimum strategies, catalysts, and objects to ensure results.



The Unicist Strategy is an emulation of the intelligence that underlies nature, which includes a maximal strategy to grow and a minimum strategy to ensure survival. It allows developing any kind of strategy.

The emulation of nature was the basis for the development of the Unicist Strategy and its applications to all the fields of human activities that require a strategic approach. Thus, the maximal strategies to expand the boundaries and the minimum strategies to survive were established.

The double dialectical logic allowed transforming supplementation and complementation laws into strategic functions that drive the maximal and minimum strategies making evolution reasonable, understandable, and predictable.

Therefore, the simplicity of the unicist strategy is based on the emulation of the intelligence that underlies nature.

Binary Actions based Strategies

The Unicist Strategy introduced a paradigm shift in the strategic approach to economic, social, institutional, and individual evolution based on the emulation of the intelligence of nature and the development of synchronized maximal strategies to grow and minimum strategies to ensure survival.

Strategy has been until now, an adaption of the concepts of military strategy. The discovery of the triadic intelligence of nature allowed understanding the genetic intelligence driven strategies used by living beings to grow and to survive.

This led to the development of a triadic approach to strategies, developing maximal strategies to grow and minimum strategies to ensure survival, emulating the intelligence of nature.

This approach included the development of binary actions based on maximal strategy actions and synchronized minimum strategy actions that ensure the achievement of results in adaptive environments.

[Learn more](#)

[Learn more accessing our Knowledge Bank](#)

The basic functional technologies, systems and tools are provided under a Creative Commons Attribution 4.0 International License.

Websites

Business Arm: <https://www.unicist.net>

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