Unicist Future Research Lab

The 4th Industrial Revolution

The functionalist approach made adaptive processes possible





The Scenario of the 4th Industrial Revolution

The difference between the 3rd and the 4th industrial revolution is that the 3rd is based on managing processes and tasks, while the 4th is based on the use of business objects to ensure adaptability and results.

The 4IR, as a concept, is already here, and can be synthetically defined as the "revolution of adaptive business processes". It changes the paradigm of automation introduced by the 3rd industrial revolution.

This scenario was developed at The Unicist Research Institute to define how the trend will behave in developed and developing environments. The purpose of the 4IR is to enhance the energy efficiency, customer orientation, and adaptability of business processes.

Adaptability requires managing the functionality of the business functions to be able to integrate different people, technologies, processes, systems, objects, and tools.

Adaptability requires managing the functionality of things, which is based on the concepts and fundamentals of the business functions.

This allows managing the root causes of market behavior, the root causes of business processes, and the root causes of industrial processes to ensure customer satisfaction, productivity, and quality.

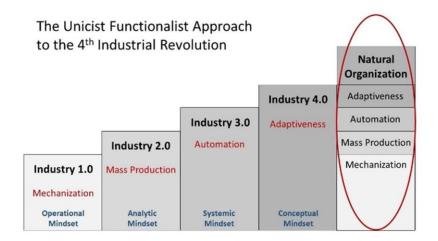
Beyond Digitization & Automation: The Paradigm Shift of the 4th Industrial Revolution

The paradigm shift is based on organizing based on managing the functionality of businesses using business objects instead of managing the operationality based on processes and tasks, which was the case until the 3rd industrial revolution. It increases energy efficiency by up to 30% depending on the market and industry.

It has to be considered that all adaptive environments are organized by objects to ensure the adaptability of the systems. The organs of the human body are an example of the organization by objects in nature.

The 4IR enhanced value generation. Digitization and automation without the use of business objects are part of the 3rd industrial revolution. The object-driven organization is the catalyst that is being introduced by the 4IR to open the possibilities for business adaptability and to enhance energy efficiency and customer orientation.

The 4IR opened a new stage in a business organization based on the use of social, industrial, and business objects as autonomous interdependent entities to generate value in business.



Object-driven organization emulates the organization of nature. The first object-oriented programming language, Simula, was also driven by the emulation of nature.

In the next 20 years, this will introduce a structural change in all those countries and industries where the concept of Industry 4.0 is applicable. It will be driven by the change in the educational models.

Content

The Paradigm Shift of the 4IR: Objects Driven Organization	6
1) Function driven	7
2) Objective driven	8
3) Consensus driven	8
4) Market driven	9
About Objects	9
The Functionality of Objects	
Driving Business Objects	
Inhibiting Business Objects	
Entropy Inhibiting Business Objects	12
Catalyzing Business Objects	
Gravitational Business Objects	
The Basics of the 4 th Industrial Revolution	
Dealing with the Functionality of Businesses	14
1) Industry 4.0 and the 4IR	15
Intelligent Systems to deal with Adaptive Environments	16
The Concept of the 4th Industrial Revolution	
A Revolution for Growth	
Industry 4.0 – The 4 th Industrial Revolution	19
Industrial Revolutions and Mindsets	20
The Unicist Logic to Deal with Adaptive Environments	
The Unicist Paradigm Shift: The DNA of Businesses	
2) The Functionalist Approach to the 4IR	24
Functionalist Approach to Business	
Unicist Functionalist Approach to Business Processes	
Managing Business Adaptability in the 4IR	
Unicist Functionalist Design: An Emulation of Nature	
3) The Use of Unicist AI	27
4) Conceptualization in the 4IR	

The Unicist Approach to the 4th Industrial Revolution

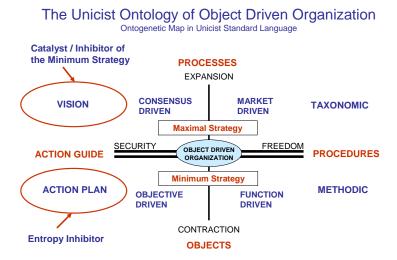
Introduction	28	
The Loss of Freedom		
The Birth of the Era of Conceptualization	30	
Synthesis	31	
5) The Next Stage	33	

The Paradigm Shift of the 4IR: Roles & Objects Driven Organization

The roles & objects driven organization can be defined as the organization of processes and the use of objects to achieve the objectives that have been established in a strategy.

An object-driven organization implies the development of a maximal strategy that includes the design of processes based on binary actions action and having a shared vision that makes these processes consistent with the business.

The vision of the organization is the catalyst of the minimum strategy. If it does not achieve its threshold, it works as an inhibitor of the minimum strategy and degrades the energy efficiency of the organization.



The minimum strategy is based on the use and reuse of objects within the context of methodic procedures that ensure their use and functionality. The procedures depend on the type of objects that are being managed.

The methodic action plan implies that there is a system that can deal with extreme situations.

Extreme situations are cases in which objects cannot solve problems "automatically" and need to be taken care of. Human intervention is necessary when the boundaries of the functionality of objects are exceeded. See the case of the autopilot of an airplane.

The entropy inhibitor of the whole process is the action plan. As such, the entropy inhibitor needs to be structured to ensure its fulfillment.

Considering the nature of object-driven organizations, it can be said that there are four different segments of object-driven organizations:

- 1) Function driven
- 2) Objective driven
- 3) Consensus driven
- 4) Market driven

1) Function driven

This is an organization in which the functionality of the different processes prevails over results.

This function driven segment needs to use objects based on a methodic approach. In this context, it is necessary to make sure that functionality doesn't become an end in itself. Function driven segments need to have a strict control system to ensure the fulfillment of the action plans.

This segment is put into action by a market driven approach to provide meaning to the use of objects and is sustained by a consensusdriven approach to ensure the fulfillment of the action plans.

2) Objective driven

This segment seeks "bottom-up action plans" to define the objectives to be achieved. The objects are used to fulfill the different goals established in the action plans. This segment is efficacy dependent on the use and reuse of objects.

The structure of the solutions is always driven by the action plans that have been established. Therefore, there is a tendency to modify objects to make them fit into action plans. Only a strictly methodic approach avoids the misuse of objects.

This segment is put into action by consensus, which is necessary to define the action plans and is sustained by a market orientation to envision the external goals to be achieved.

3) Consensus driven

This segment is driven by the objective of achieving the maximal strategy in an object-driven organization.

It fosters consensus to ensure the validity of the processes to achieve the goals established in the strategy. It builds consensus based on the vision of the organization to achieve its goals.

The use of objects, as it is part of the vision of the business, is natural for this segment. It uses the object-driven organization model to build the spirit de corps of the business.

This segment is put into action by bottom-up established objectives to build consensus and is sustained by functional-driven rules to ensure the responsibility of the members.

4) Market driven

This segment is driven by its adaptation to markets. It is the segment that integrates the vision of the "end client" within the organization.

It follows strict taxonomic rules in the design of processes to ensure the production of results. Being driven by client needs, this segment avoids operational shortcuts to produce results.

The vision of the business is a limit for this segment's business approach. It uses objects to ensure added value to the market.

This segment is put into action by the function-driven responsibilities and sustained by the bottom-up objective-building process.

About Objects

Objects are encapsulated adaptive systems that have a concept, an added value, the necessary quality assurance, and a methodology to ensure the minimum strategy. To imagine an object please consider an automatic pilot in an airplane. It can be considered a "paradigmatic" object.

At this stage, it would be useful to clarify the difference between objects and things. Objects only exist within a process. When they are not part of a process, they are things.

Objects produce an added value for someone in the process. When they do not produce added value, they are things. Things can be such in some conditions and objects in others. The definition of an "object" is functional to a value that needs to be achieved.

For example, a commercial car is an object if there is a driver, if not it is a thing. But if it is a collection car it is an object for the owner and for those who appreciate its value. For those who do not, it is just a thing.

In the world of abstract objects, a rumor is an object if it achieves the expected value. News is an object if it has a use for the one who receives it.

That is why it has to be clarified that objects depend on a given functionality within a process. A stone might be an object if it has a use, if not, it is just a thing.

Only people who have sound knowledge of a process can design the objects that are part of the process.

To reuse objects in other homologous processes it becomes necessary to have expert knowledge. Without it, no homologies can be understood.

The Unicist Ontology of Objects' Functionality

Ontogenetic Map in Unicist Standard Language Catalyst / Inhibitor of the Minimum Strategy **PROCESSING EXPANSION DRIVERS** CATALYSTS TO PRODUCE **GENERATION Maximal Strategy** SECURITY FREEDOM **QUALITY** GRAVITATIONAL **VALUE ASSURANCE OBJECTS** Minimum Strategy TO CONTROL **SUSTAINING ENTROPY** ACTION INHIBITORS INHIBITORS CONTRACTION **Entropy Inhibitor** INFLUENCING

There are different types of objects:

• Driving Objects

To drive processes

• Inhibiting Objects

To inhibit dysfunctional events in a business

• Entropy Inhibiting Objects

To inhibit the entropy of business processes

• Catalyzing Objects

To open possibilities and accelerate processes

• Gravitational Objects

To influence the results of processes

The Functionality of Objects

An object is such because it produces an added value for someone in the process. When it does not produce added value, it is a thing. Things can be such in some conditions and objects in others. The definition of an "object" is functional to a value that needs to be achieved.

For example, a car is an object if there is a driver, if not, it is a thing. But if it is a collection car, it is an object for the owner and for those who appreciate its value. For those who do not, it is just a thing.

The different functionalities of the objects correspond to the roles the objects exert in nature. The building of human adaptive systems requires the use of objects to ensure the production of the required results.

Paradoxical results are produced in human adaptive systems if the objects do not have the required energy or fail in their objective and are not substituted or replaced by human action.

Objects are elements that have independent functionalities but are installed in processes to work in an interdependent way.

Driving Business Objects

The driving function of an object is defined by the final purpose of such object that is driven by its concept.

The function of driving objects is to achieve the concept that underlies their creation.

To do so they need to generate added value and have a quality assurance system that ensures the value they add.

Inhibiting Business Objects

The inhibiting function is defined by the focus on the necessary actions of an object.

The purpose of inhibiting business objects is to sustain the focus of the concept that underlies the driving objects.

By establishing the focus, they need to inhibit any activity that is beyond this focus.

Entropy Inhibiting Business Objects

The entropy inhibiting function is defined by the energy conservation function of the minimum strategy of an object.

Entropy inhibiting business objects seek to ensure that the need of a process is satisfied.

Their active function is to ensure that the focus on the needs is maintained.

Catalyzing Business Objects

The catalyzing function of an object is defined by the energy conservation function of the restricted context of an object.

Catalyzing business objects are elements of the restricted context of a system that can be used to influence other objects to open possibilities and accelerate their work, by managing the latent needs of a business function. They are not part of the system they accelerate.

Catalyzing objects are energy conservation functions of a superior level that influence the use of the energy of a system.

Gravitational Business Objects

The gravitational function is defined by the wide context that contains the object within a superior and wider unified field.

Gravitational objects impose an authoritative context to foster the freedom of choice of individuals and provide a framework of security to influence individuals' actions.

They need to be based on subliminal design and an adequate level of participation to ensure that leadership can be accepted. They represent the wide context that influences the restricted context and thus the system.

The Basics of the 4th Industrial Revolution Dealing with the Functionality of Businesses

Industry 4.0 and the 4IR

Industry 4.0, as a concept of the 4IR, implies introducing adaptiveness in organizations. Business functions are adaptive when their functionality is feedback-dependent. The Unicist Research Institute was one of the precursors of Industry 4.0 through the development of complexity sciences to deal with adaptive systems and environments.

This concept applied to business requires managing the root causes of processes to ensure their reliability.

This requires managing the concepts of the business functions involved. The level of industrialization depends on the outputs that need to be produced by the business functions. Therefore, different levels of industrialization coexist in most organizations.

Industry 4.0 became possible due to the evolution of IT technologies, conceptual management, and artificial intelligence. Its goal is to develop businesses as adaptive systems, which implies customer orientation and improving productivity and quality that naturally foster market growth and profit improvement.

The implementation of the 4IR in business processes might include:

- The use of a strategic approach and business intelligence to plan and manage growth.
- The use of tools with artificial intelligence to manage adaptive environments.
- The use of conceptual management to define business functions.
- The use of conceptual design to develop business processes.
- The use of business objects to ensure the productivity and quality of business processes.

- The use of client-centered management to ensure customer orientation.
- The use of market labs to monitor markets.
- The use of root cause management to ensure the reliability of results.
- The use of adaptive IT solutions.

The introduction of adaptiveness in organizations is a step-by-step process, that needs to generate economic benefits from the beginning. It needs to follow two basic rules:

- It has to be introduced from "the outside to the inside", from the external needs to the internal needs, which implies starting with the functions that influence the environment.
- It needs to be managed from "top to bottom", which implies the commitment management's commitment toe.

Intelligent Systems to deal with Adaptive Environments

The concept of Industry 4.0, applied to a business as a whole, is necessary to produce sustainable growth. It is based on the use of intelligent systems to simplify the approach to adaptive environments.

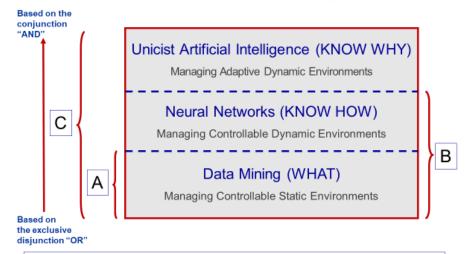
The 4th Industrial Revolution introduced adaptiveness in the industrial and business world. The Industry 4.0 concept proposes to manage businesses as adaptive systems increasing customer orientation, energy efficiency, and adaptability.

It has to be considered that the unicist functionalist approach was a precursor of the 4IR concept.

This theory was developed to understand the evolution of adaptive entities and to manage adaptive systems and environments.

The Unicist Approach became mature in the market when the hard technologies allowed for developing adaptive industrial processes and gave birth to 4IR.

The Evolution of Intelligent Knowledge Systems



- A) The knowledge of WHAT allowed transforming data into information
- B) The KNOW HOW, allowed predicting in controllable dynamic environments
- C) The KNOW WHY allowed predicting in adaptive dynamic environments

Industry 4.0, as a concept, can be synthetically defined as the "revolution of adaptive business processes".

Adaptability requires managing the concepts of the business functions to be able to integrate different people, technologies, processes, systems, objects, and tools.

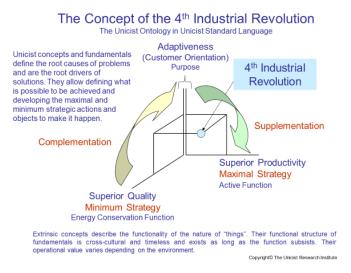
As with the previous industrial revolutions, Industry 4.0 coexists with the previous stages, providing a significant competitive advantage for those who enter this stage.

The Concept of the 4th Industrial Revolution

The birth of an industrial revolution is triggered by new technologies, which produce a new industrial stage when they can satisfy the latent needs of society.

The history of industrial revolutions shows that they expand as such in environments where they satisfy the needs of an "establishment" of a culture.

As soon as they begin to have a viral expansion, the industrial revolutions demonstrate their true value, and the underlying concepts can be perceived. In the case of the 4th Industrial Revolution, it becomes evident that its purpose is to introduce adaptiveness into industrial and business processes.



It has to be considered that adaptiveness, the concept that underlies flexibility, was always a goal in the industry but could not be solved without increasing costs and affecting the quality of the products. Industry 4.0, due to the now available technologies, introduced adaptiveness but also increased the productivity and quality of the products.

This opened a new stage that was based on industrial processes, although it deals with businesses as a whole.

It introduces adaptiveness by managing the concepts and fundamentals of business functions.

This allows managing the root causes of the functionality of processes to increase their productivity and quality and to ensure their reliability.

A Revolution for Growth

The evolution of IT, the Internet, and Artificial Intelligence finally allowed transforming adaptiveness into the 4th Industrial Revolution.

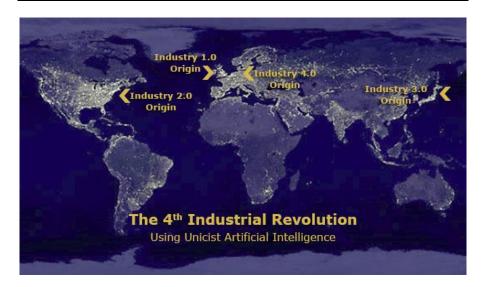
Growth and business expansion is the effect produced by the introduction of this revolution.

Growth is the consequence of adaptiveness, which allows for empowering customer centricity while increasing productivity and quality.

Industry 4.0 – The 4th Industrial Revolution

Adaptive solutions can only be managed by structured flexible processes with a high level of productivity and quality.

Adaptability requires managing the concepts and fundamentals of the business functions, which allows for managing the root causes of market behavior, the root causes of business processes, and the root causes of industrial processes to ensure customer satisfaction, productivity, and quality.



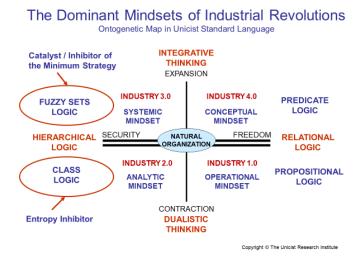
The following technologies are part of Industry 4.0:

- 1) **Business Strategy:** to develop maximal strategies to grow and minimum strategies to ensure profits.
- 2) **Functionalist Management:** to manage businesses as adaptive systems and organize using business objects.
- Root Cause Management: to manage the root causes of business problems based on the knowledge of the fundamentals of the business functions.
- 4) **Functionalist Marketing:** to expand markets based on the management of the concepts that drive buying processes.

Industrial Revolutions and Mindsets

Industrial Revolutions foster and establish dominant mindsets to fulfill their purposes. These mindsets include the preceding mindset as complementary approaches.

Operational thinking is the dominant mindset in the 1st Industrial Revolution. Mechanization requires operational thinking and the solutions provided by this stage deal with the operation of things.



Analytical thinking is the dominant mindset in the 2nd Industrial Revolution. The analytical approach allows for managing mass production in a meaningful way by dividing these masses into manageable entities.

Systemic thinking is the dominant mindset in the 3rd Industrial Revolution. Automation requires envisioning the unified field of the operation and its components to build automated processes.

Conceptual thinking is the dominant mindset in the 4th Industrial Revolution.

The Industry 4.0 stage is based on improving the adaptiveness of processes by being fully consumer/user/buyer oriented, increasing productivity, which implies improving the cost-value relation and increasing the quality to become fully reliable.

The Unicist Logic to Deal with Adaptive Environments

The unicist logic is an emulation of the logic that underlies nature that allows understanding and managing adaptive systems and environments. It has to be considered that systems are adaptive when their products are feedback-dependent.

This logic allowed defining the structure of the concepts and fundamentals that define the root causes of the functionality of adaptive systems making them reasonable, understandable, and predictable.

The resulting artificial intelligence allows for ensuring the results of adaptive systems and provides the conceptual structure of business functions, business scenarios, and big data analysis.

Thus, the unicist logic provided the structure to define, design, and manage adaptive processes and the necessary knowledge of the concepts and fundamentals that underlie business functions. This ensures the adaptive behavior in markets which naturally generates growth.

The Unicist Paradigm Shift: The DNA of Businesses

The Unicist Paradigm Shift in Business establishes the framework of the unicist approach to the 4th Industrial Revolution. It defines the different technologies and methodologies to be used to manage businesses as adaptive systems.

The discovery of the intelligence that underlies nature allowed the emulation of nature, understanding its organization and its evolution.

This drove the discovery of the structure and functionality of concepts and fundamentals that drive human behavior and underlie things that define the root causes of adaptive environments.

This structure of concepts defines the DNA of organizations and adaptive systems that allowed managing the root causes of their functionality.

This upgraded business management, introducing a new stage in business diagnostics, future research, business strategy, and business architecture, and applying it to business process design. This approach established the conceptual structure of Industry 4.0.

2) The Functionalist Approach to the 4IR

The 4IR introduced the need for managing the functionality of processes to ensure the results that are produced using digitized processes. The functionality of processes is defined by their functionalist principles defined by the concept they have

The functional approach allows managing the concepts that underlie the functions that are being managed, being these functions of living beings or artificial adaptive systems or environments.

It will begin by being adopted by challengers to compete with the dominant organizations until it is adopted as a natural path by all those who need to be adaptive.

Functionalist Approach to Business

The functionalist approach made businesses reasonable, understandable, and predictable. It empowers their customer orientation, adaptability, and growth, increasing their shareholder value, customer value, and stakeholder value. The unicist functionalist approach is based on managing this triadic structure of the concepts of things.

Functionalist design is focused on the value of processes, while the operational design is focused on the processes themselves. The functionalist design includes operational design but not vice versa. The unicist functionalist design is based on the use of ontogenetic maps that define the functionality of adaptive entities whatever their kind.

The output of any functionalist 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.

Unicist Functionalist Approach to Business Processes

The 4th Industrial Revolution introduced adaptability in the industrial and business world.

The Industry 4.0 concept proposes to manage businesses as adaptive systems increasing customer orientation, productivity, and quality.

Adaptability requires managing the concepts of the business functions to integrate different people, technologies, processes, systems, objects, and tools.

Requirements that are being installed by the 4IR:

- 1. Functionalist Design to build adaptive processes.
- 2. Binary Actions to ensure the results of processes.
- 3. Artificial Intelligence to empower adaptability.
- 4. Functional Segmentation to increase market share.
- 5. Conceptual Analysis to manage functionality.
- 6. Catalysts to expand and accelerate processes.
- 7. Business Objects to ensure productivity and quality.
- 8. Object Driven Organization to increase profitability.

Managing Business Adaptability in the 4IR

The Unicist Functionalist Design allows for developing solutions in adaptive environments. It is based on 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 functionalist 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.

Unicist Functionalist Design: An Emulation of Nature

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

The functionalist design introduced an upgrade in the design of adaptive business processes. While the empirical design is based on the knowledge of the know-how of businesses, functionalist 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.

3) The Use of Unicist AI

Unicist AI is a fundamentals-based AI that allows complementing with data-based AI to deal with business processes.

Data-based AI is supported by 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 Unicist 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.

Fundamentals-based Artificial Intelligence

Fundamentals-based AI allows for managing adaptive systems and environments. It is a core tool when dealing with the concept of "Industry 4.0" applied to businesses.

It allows monitoring adaptive solutions by using the unicist logic that emulates the intelligence that underlies nature. It provides a tool for root cause management, unicist business strategy building, and conceptual management.

When dealing with big data it is complemented with neural networks to develop reliable big data analytics.

The fundamentals-based AI allows developing monitors to manage business intelligence, business strategy, marketing, and designing business functions and business objects. It allows emulating and supporting the development of solutions in the mind of deciders.

It allows building monitors to emulate and develop adaptive systems in social, economic, and business environments.

4) Conceptualization in the 4IR

Introduction

Conceptualization is required to manage the functionalist approach to develop adaptive solutions. This approach is still far away from the schooling systems which are driven by operational and analytical approaches.

The Era of Knowledge ruled the evolution of the central world for decades, almost a century, and expanded marginally to the peripheral world, except for the "emerging" countries, where it became installed. It implied the prevalence of science and technology over ancestral cultural values.

The expansion of political democracy in the world triggered the introduction of the Era of Participation that finally exploded driven by communication technologies. Cell phones, the Internet, and Social Networking were the milestones of this new stage.

This explosion occurred generating immediate paradoxical side effects. "To be liked" began to prevail over "being functional"; apparent consensus became more important than true consensus.



Generation "Y", the Millennials, is the one who pays the price of this transition which is accelerated by the introduction of artificial intelligence that gives access to infinite data and operational knowledge but

requires a conceptual mind to filter this information and transform it into value-generating actions.

This paradox was a parallel phenomenon to the expansion of information technologies based on the use of artificial intelligence, which triggered the development of computer games. The use of these games drove people towards a comfort zone in a parallel world, where individuals found the conditions that validated the use of addictions to find a place in the world.

All types of games became functional to have a comfortable place. Thus, participation was displaced by pseudo-participation, which required no responsibility, which degraded the functionality of the Era of Participation.

The Loss of Freedom

People became computer/technology-dependent, both in social life and in business life. This drove another paradox, where people began to lose the freedom they had earned through democracy, beginning to be fully dependent on two masters:

- 1) The master "like", that demonstrates acceptance and recognition.
- 2) The master "technology", that does not require thinking before doing.

This loss of freedom expanded the segment of "over-adaptive" people who try to avoid managing the influence their culture exerts on them, to avoid assuming an adaptive role.

These people feel satisfied because of the "likes" they obtain, which work as the "Snow White's stepmother's mirror" that confirms their role.

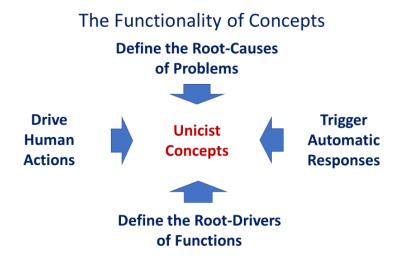
It became necessary to find a way to avoid the destruction of the values of freedom due to the dysfunctionality of the prevalence of "likes" over "functional actions".

Fortunately, a parallel phenomenon occurred that generated the birth of the "Era of Conceptualization".

The Birth of the Era of Conceptualization

The Era of Conceptualization began when individuals were able to manage the root causes of things to develop structural solutions. This Era was triggered by two discoveries:

On the one hand, the discovery of the intelligence that underlies nature allowed for defining the structure of the intrinsic concepts that regulate the evolution of living beings and the structure of the functional (extrinsic) concepts that define the functionality of things, which made the management of concepts possible.



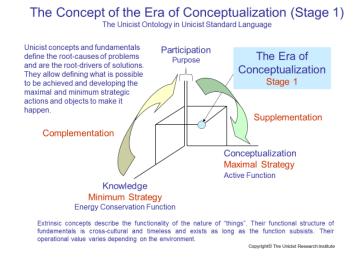
On the other hand, the research on human intelligence drove the discovery that "mental concepts" drive human actions and that conceptual short-term memory triggers the reactions of individuals.

This implies that human actions follow the concepts people have. The integration of the knowledge of functional concepts and the functionality of human intelligence allowed understanding the concepts of processes that allows understanding their nature and developing structural solutions.

It has to be considered that the structure of functional concepts is crosscultural and timeless but their functionality is environment-dependent.

Synthesis

The Era of Conceptualization is the Era of functional actions that ensure the functionality of participation integrating the need for knowledge as a complement to ensure the social value of actions.



This Era separates the people who prefer to follow "Big Brother" from those who adopt an autonomous interactive role in their environments.

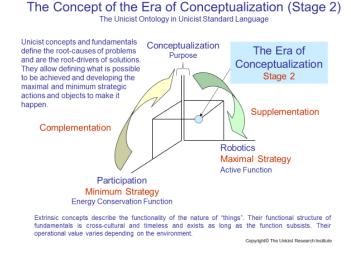
It separates people who follow, judging and blaming others and the environment for what does not work, from people who use their self-criticism to make things happen.

The Era of Conceptualization sustains participation, making it functional by recovering those aspects of the Era of Knowledge, that allows people to assume an adaptive role in the environment.

This Era expands the gap between adaptive and over-adaptive cultures, increasing the violence of the clash that occurs between them. It also separates the roles in micro-cultures and institutions.

The second stage of the Era of Conceptualization will be giving birth to the Era of Robotics, which has already begun in the laboratories of different countries, beginning with Japan and the USA.

This new Era will introduce structural changes at work and in social life.



It will be based on the management of the nature of processes and will introduce robotics as the most effective way to generate reliable goods at low costs.

5) The Next Stage

Growth is the challenge in the world to provide a safe framework for the following generations. Growth requires managing the concepts of what is being done to ensure that it is possible and to know how to make it happen.

That is why a change in College Education needs to be promoted to go from the traditional theory-practice model, which is functional to develop tasks at an operational level, to an action-reflection-action model that allows every person to deal with the generation of value in their field of expertise.

Unicist Functionalist Management is part of the Era of Conceptualization. It applies both to personal management and business management.

It is the synthesis of the nature of management. It includes the management of the future scenario that allows designing a strategy, the knowledge of the root causes of problems and the root drivers of solutions, the development of the conceptual design to define these solutions, and the development of the maximal and minimum strategy actions to ensure results.

Without managing concepts, "like seeking" and comfortable "automatisms" will prevail over value generation. It is time for having the structure of the concepts of what one is doing to ensure results and to ensure being "on the same" page when things are done in teams.

It is up to you to make this happen in your area of influence.

The Unicist Research Institute (TURI) has been, since 1976, the pioneer in the research of complexity where the roots of evolution and the structure of concepts were discovered. It is specialized in the research of the roots of evolution, beginning with Natural Sciences and ending with Social Sciences. In the business world, TURI developed a Root Cause Library based on the structures of concepts, which define the nature of business functions that allow managing the root causes to develop structural solutions. www.unicist.org/

Peter Belohlavek was born on April 13, 1944, in Zilina, Slovakia. He discovered the ontogenetic intelligence of nature that defines the root causes of evolution. His works expanded the boundaries of science. He is the creator of:

- 1. The functionalist principles that define the functionality of things, whatever their kind.
- 2. The unicist theory, which explains the dynamics and evolution of living beings and complex adaptive entities.
- 3. The unicist theory of evolution, which allows the development of future research.
- 4. The epistemological structure of complexity sciences, which allows for managing the complex aspects of reality.
- 5. The unicist theory of the unified field in nature, which allows managing the unified field of complex adaptive systems.

He is the founder of The Unicist Research Institute, More information: www.unicist.org/peter-belohlavek.php

.