The use of Unicist Quality Assurance allows transforming medical and business processes into adaptive processes or medical/business objects. It requires installing a quality assurance system that provides the necessary adaptive complements to ensure results. The energy saving produced varies between 10-35%. The technology of Unicist Object Driven Organization made the building of Medical/Business Objects possible and allowed the building of “smart interfaces” that use responsive systems to build and use unist objects.

Adaptive systems
Adaptive systems are systems that have been designed to interact with the external and internal environment to produce results. To be able to organize by objects it is necessary to use both adaptive and operational & control systems to organize the work processes.

Results
The production of results is the purpose of any adaptive system. They include the necessary quality assurance to guarantee the production of results. The only way to determine if an adaptive system is functioning as desired is by the results it produces.

Flexible procedures
In order to ensure the production of results, adaptive systems need to have flexible procedures so as to adapt to changes in the environment. The flexibility needs to be minimal to ensure the efficiency of the procedures.

Control through feedback
Feedback is an essential aspect of adaptive systems in order to provide the adequate responses to the environment. Feedback is the complement to ensure results.

Major discoveries that made the Unicist Quality Assurance possible:

1. The Unicist Logical Approach to Businesses
2. Object Driven Organization
3. Natural Organization including Client/Patient Centered Management
4. Adaptive Systems Design
5. Structure of Objects in the Organization of Nature
6. Unicist Ontology of Cognitive Objects
7. The Functionality of Concepts as Drivers of Human Behavior
Quality Assurance to Transform Business or Medical Processes into Unicist Objects

Quality assurance is what introduces the necessary reliability to transform a medical or business process into business objects. This allows building adaptive systems or introducing adaptiveness into operational systems.

Quality assurance is a characteristic that systems have, whether they include human action or not, to provide the accurate result to the point of being substituted by alternative systems in case of failure.

Nothing is absolutely certain, by definition, within the scope of science. When we refer to certainty we mean that there are at least three alternative plans in case of failure and that alternative processes have been designed to have a probability of failure of less than 0.01. In order to assure this level of certainty it is necessary to count on a validation process in real conditions that ensures the result or output.

The Maximal Strategy

The Quality Assurance concept implies that in the activity, which must bring about an added value, there is a Redundant Functionality and a Self-exclusion System within a framework of a Redundant Operational Method.

Quality assurance is of vital importance in the life sciences field. In those fields in which the lack of quality is not a life or death, success or failure determinant, the possibility of conceiving a Quality Assurance process turns distant. There is only quality assurance in those cultures and activities in which there is the attitude that things should be functionally right and certain as far as the value they add.

Elements included in a Quality Assurance System:

1. Plan A, B, C and D
2. Redundant Systems
3. Alarm System
4. Processes with redundancies
5. Stop System (stoppage/halt)
6. Control System
7. Self repairing/recovery System
8. Alternative Systems

Without quality assurance there is no reliability in results. The quality assurance concept is very hard to apprehend and internalize. In order to do so it is necessary to see the elements described above within oneself. It is only as of this that a quality assurance process can be developed.
Structural Segments of the Quality Assurance Concept

There are different ways to face Quality Assurance. In many cases quality control has been deemed synonymous to quality assurance. In fact, assurance itself enables that the system not be externally controlled. The control lies within its own system. Complex processes pose the development of the quality assurance concept in all its forms. This means that secure, controlled, reliable and automatic aspects intervene in a complex system. A complex system, by definition, implies the development of quality assurance that encompasses all the needs the system has.

Method Driven
Reliable
These are the quality assurance processes based on the method that offers the operational security that is required. They use the external control to the process as a quality assurance method but emphasizing on the compliance of the operational method. It is the most basic way to assure quality, through controlled operational methods, and appears included in all complex processes.

Control Driven
Controlled
These are the quality assurance processes in which the operation revolves around control. They are the typical work processes of a high analytical-abstract level in which the possibility of error is high. In this case, they are processes that include a permanent control through parameters, points of control and/or validation of results. The process is designed to comply with the specifications defined in the points of control. It is widely used in the industrial fields where 100% product reliability is required. These processes of external control to the process are based on the knowledge of the elements that determine their quality. When incorporated to the process, they cease to be controlled processes to become secure processes.

Redundancy Driven
Secure
These are quality assurance processes in which the operation is being controlled by redundant methods with a self-exclusion system to the process or of the part that has “failed”. These are processes designed so that all the elements produced be subject to self elimination if they do not meet the expected specifications. Their security lies in that they are mainly based on a system that sets an alternative process in motion to make results certain. The “Secure” segment includes all controls and redundancies within the same process to assure results.

Self-exclusion Driven
Automatic
It is the process that, designed by objects, produces maximum quality assurance to generate added value. It is the way to develop “robots”, unmanned planes, complex system diagnosis methods, etc. It is fundamentally based on a consecutive self-exclusion system, prior to self-repair, existence of processes with multiple redundancies in all critical processes and the existence of a stop system for emergency exits for the situation. This segment is the highest expression of quality assurance and its limit is given by the capacity of a system to adapt to unforeseen situations.
Adaptive Systems

Adaptive systems are systems that have open boundaries to interact with the external and internal environment. The difference between adaptive systems and systemic systems is that the first ones are driven by taxonomic procedures. Taxonomic procedures are those that are ruled by an ontological logic that has to be followed in order to achieve the planned results. Nature is an adaptive system.

We consider three levels of artificial adaptive systems:

1) **Taxonomy driven systems**
   Taxonomy driven systems are those that depend on human action to work.

2) **Robots**
   Robots are entities that can deal themselves with the feedback of the environment to achieve an objective.

3) **Artificial life systems**
   Artificial life systems are those that have a collective unconscious that makes them influence the environment. Organizations and countries belong to this type.

Businesses are typical adaptive systems. They are entities that interact with the environment having the characteristics of a complex system but with an implicit and explicit duty to produce a predefined result. We use the word “business” as a synonym of “work”.

Unicist Business Objects

Unicist Business Objects (UBO)

- Unicist Business Objects are adaptive systems designed to produce predefined results.
- The Unicist Research Institute has developed a set of ontology-based objects to deal with the nature of problems in the individual, institutional and social fields.
- In the business field, the Unicist Objects Bank contains the “business objects” that cover all aspects of business management.
- The Unicist Confederation provides the necessary Unicist certified organizational objects and installs them in the clients’ processes. UBOs are adapted to the market and type of business of the client.
- UBOs are provided as sets in order to work as a critical mass in the corresponding processes.
- The certification includes the monitoring of Pilot Tests. UBOs are centrally provided and the monitoring process is part of an Org-Lab or an Associated Consultant’s activity. The monitoring process is sustained by the Blue Eagle X-pert System.
- Unicist Business Objects can be bought or leased.

Unicist Business Objects are provided for the following uses:

- **Driving objects**
  To drive processes

- **Catalyzing objects**
  To accelerate processes

- **Entropy inhibiting objects**
  To inhibit the entropy of business processes

- **Inhibiting objects**
  To inhibit dysfunctional events in a business

- **Gravitational objects**
  To influence the results of processes
The Unicist Research Institute

TURI was the pioneer in complexity science research and became the major research organization in the world in the field of human adaptive systems.

The Unicist Research Institute (TURI) is a global research center specialized in complexity sciences focused on the research of the evolution of adaptive systems. Its applicative research is centered on social, institutional and individual evolution, using unicast ontological research to develop unicast ontogenetic maps and build objects for individual, institutional and social use.

Unicast object driven technologies

Nature is organized by objects. The discovery of the ontogenetic intelligence of nature, laid the groundings for the unicast ontology based technologies to build objects emulating nature. Unicast Objects are proven solutions based on the use of the unicast ontogenetic algorithms included in the Unicast Standard that can be installed in processes in order to save energy and increase quality to produce results.

Main ontologically structured markets

• Structure of the automobile market
• Structure of the food market
• Structure of the mass consumption market
• Structure of the Financial market
• Structure of the insurance market
• Structure of the sports and social institutions market
• Structure of the Information Technology (IT) market
• Structure of the communications market
• Structure of the perishable goods market
• Structure of the agribusiness market
• Structure of the health market
• Structure of the pharmaceutical market
• Structure of the oil market
• Structure of the chemical market
• Structure of the paints market
• Structure of the education market
• Structure of the services market
• Structure of the commerce and distribution market
• Structure of the mining market
• Structure of the Timber market
• Structure of the apparel market
• Structure of the passenger transportation market
• Structure of the communications market
• Structure of the cargo transportation market
• Structure of the professional services market
• Structure of the entertainment and show-business market
• Structure of the advertising market
• Structure of the gastronomic market
• Structure of the hotel-management market
• Structure of the credit card market
• Structure of the real estate market
• Structure of the fishing market
• Structure of the editorial market
• Structure of the Industrial Equipment market
• Structure of the Construction and Engineering market
• Structure of the bike, motorbike, scooter and moped market
• Structure of the sporting goods market

The Unicist Logical Approach to Businesses

Access: www.unicist.net/clipboard

Access the Unicist Approach to Complexity
www.unicist.org/what-are-complexity-sciences.pdf

Main unicast archetypes of countries

Argentina, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, Costa Rica, England, Finland, France, Germany, Holland, India, Israel, Korean Republic, Mexico, New Zealand, Italy, Japan, Norway, Peru, Poland, Russia, Saudi Arabia, Slovakia, Spain, Sweden, Switzerland, Uruguay, USA, Venezuela.

Acknowledgement

The development of the Unicist Standard was possible due to the participation in the research of hundreds of institutions and companies and thousands of individuals since its beginning in 1976. As it is known, complexity research has to be developed in the “real world” and doesn’t allow making artificial experimentation. Thus, more than 4,700 researches on unicast ontological structures of reality could be finished (July 2013) giving birth to the Unicist Standard which is based on the discovery of the ontogenetic intelligence of nature and the consequent Unicast Theory of Evolution.