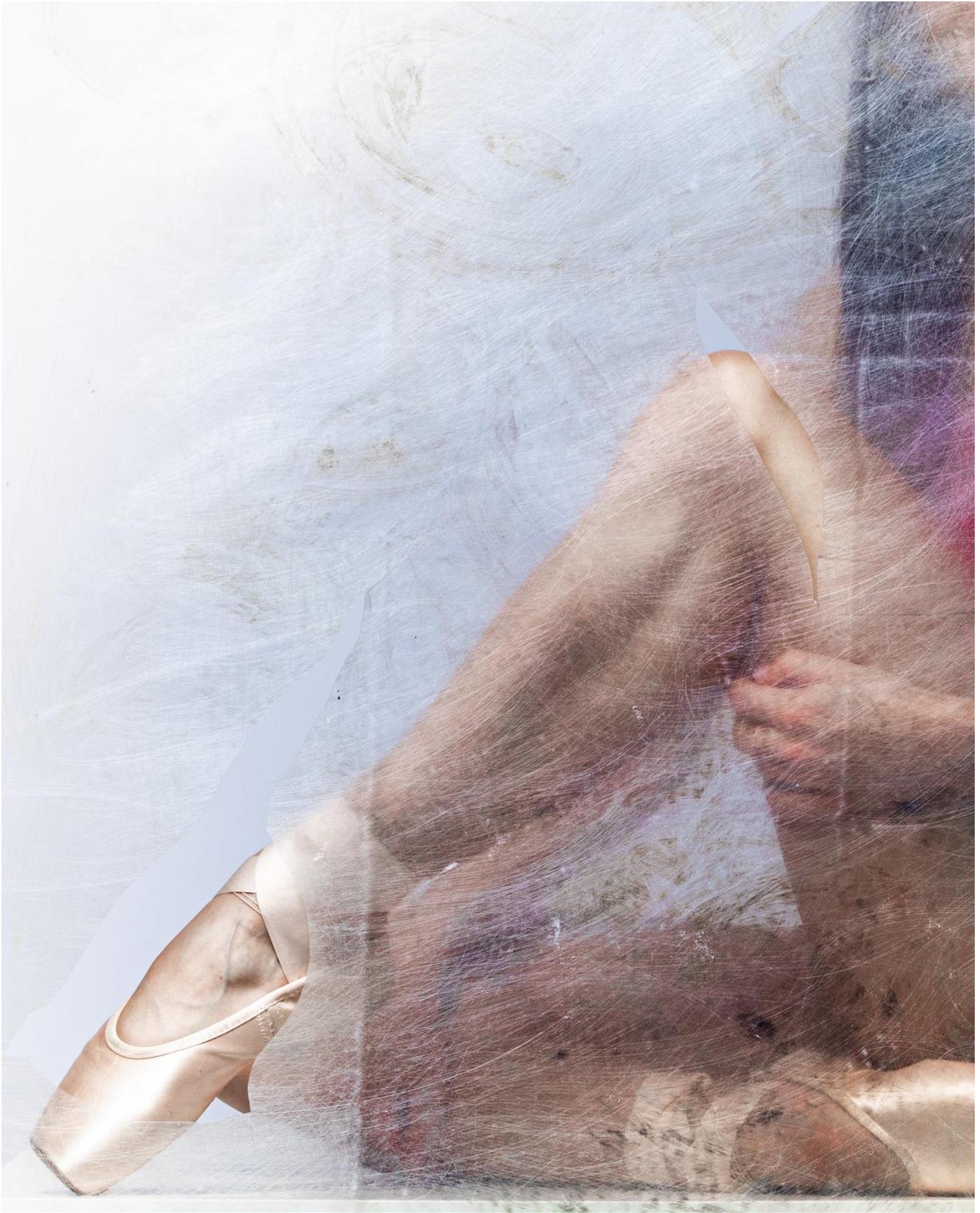




Artículos científicos





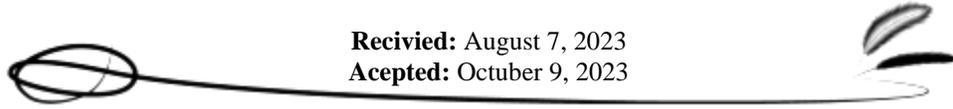
Artículos científicos

Planning system in a systemic approach A model and work scheme under the principles of the "Systemic view of life"

Raúl Pacheco Salazar¹

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Abstract

This document presents a synthesis of the model of thought and action, from the perspective of living systems, such as those that characterize the natural activity of human beings and organizations, called Planning System in a Systemic Approach: SISPLANES© (its acronym in Spanish). Planning is defined as an action preceded by reflection as an integrated whole that has emotion as a key factor. In other words, planning is conceived as a process inherent to the human being and its expression in organizations configured based on the functioning pattern of beings (living systems) which has been called the "systemic view of life". The fundamental contributions of SISPLANES© are to design a relational model for planning as an organic whole, in which action is preceded by reflection based on "emotion", defined under the principles of functioning of living systems, with which a scheme is configured of work for action, defining its organizational modality and its instruments (toolbox). The conceptual framework that supports the model and work regime is presented, as well as its particularities and dynamics, management philosophy and benefits. For more information, see: <http://sisplanes.com>.

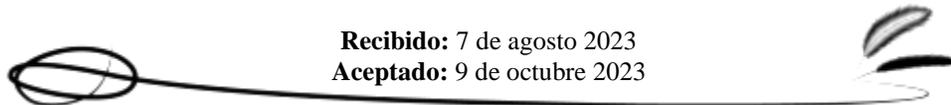
Keywords: Planning, project management, systems thinking, complexity, postmodernity, development projects.

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Sistema de planificación en un enfoque sistémico Un Modelo y Esquema de Trabajo bajo los principios del «Enfoque Sistémico de la Vida»

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Resumen

Mediante este documento se expone un resumen del modelo de pensamiento y acción, desde la perspectiva de los sistemas vivientes, como los que caracterizan el quehacer natural de los seres humanos y las organizaciones, denominado Sistema de Planificación en un Enfoque Sistémico: SISPLANES©. Se define la planificación como la acción precedida por una reflexión como una totalidad integrada que se sustenta por la emoción como factor clave. Es decir, la planificación se concibe como un proceso inherente al ser humano y su expresión en las organizaciones configurada desde el patrón de funcionamiento de los seres (sistemas vivos) que se ha denominado el “Enfoque Sistémico de la Vida”. Concebir un modelo relacional para la planificación como un todo orgánico donde la acción es precedida por la reflexión sustentada en el «emocionar», definido bajo los principios de funcionamiento de los sistemas vivos con lo cual se configura un esquema de trabajo para la acción definiendo su modalidad organizativa y sus instrumentos (caja de herramientas) son aportes clave del SISPLANES©. Se presenta el marco conceptual que da soporte al modelo y esquema de trabajo, así como sus particularidades y dinámicas, filosofía de gestión y beneficios. Para mayor información visitar: <http://sisplanes.com>.

Palabras clave: planificación, gerencia de proyectos, pensamiento sistémico, complejidad, postmodernidad, proyectos de desarrollo.

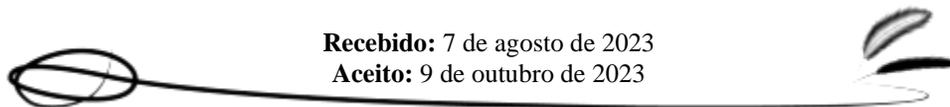
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Sistema de planejamento em uma abordagem sistêmica Um Modelo e esquema de trabalho segundo os princípios da "Visão Sistêmica da Vida"

Raúl Pacheco Salazar³

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Resumo

O presente documento apresenta uma síntese do modelo de pensamento e ação, na perspectiva dos sistemas vivos, como os que caracterizam a atividade natural dos seres humanos e das organizações, denominado Sistema de Planejamento numa Abordagem Sistêmica: SISPLANES© (seu acrônimo em espanhol). O planejamento é definido como uma ação precedida de reflexão como um todo integrado que tem como fator chave a emoção. Em outras palavras, o planejamento é concebido como um processo inerente ao ser humano e a sua expressão em organizações configurado a partir do padrão de funcionamento dos seres (sistemas vivos) que tem sido designado por "abordagem sistêmica da vida". São contribuições fundamentais do SISPLANES© conceber um modelo relacional para o planejamento como um todo orgânico, no qual a ação é precedida de uma reflexão baseada na "emoção", definida sob os princípios de funcionamento dos sistemas vivos, com a qual se configura um esquema de trabalho para a ação, definindo a sua modalidade organizativa e os seus instrumentos (toolbox). É apresentado o quadro conceitual que suporta o modelo e o regime de trabalho, bem como suas particularidades e dinâmicas, filosofia de gestão e benefícios. Para mais informações, consultar: <http://sisplanes.com>.

Palavras-chave: Planejamento, gestão de projetos, pensamento sistêmico, complexidade, pós-modernidade, projetos de desenvolvimento.

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Introducción

Currently, modern civilization is facing an unprecedented situation, where the challenges it faces are totally different from what it has experienced in previous decades. We are witnessing a profound transformation in the world order that has governed our conceptions of the world for the last two hundred years which, in terms of the perspective of knowledge, has been governed by the Cartesian paradigm where clear cause-effect relationships, linearity and the sequential predominate. As the 21st century progresses we see how our planet is full of major crises, all of them are actually "systemic problems", which mean, they are all interconnected and interdependent.

That is why a complete reassessment and the creation of new, more adequate models are necessary to face the growing complexity of our current world. Within this framework, I present an action-oriented planning model and a work scheme to act in complex environments that I call a Planning System in a systemic approach: SISPLANES.

The methodological proposal presented in SISPLANES was conceived for all those people who, although they have been trained within the framework of the Cartesian paradigm, characterized by mechanism, linearity and sequentiality, among other characteristics, and which has undoubtedly generated innumerable technical advances that have substantially improved the quality of life of human beings, perceive- through their professional and personal practice - that in modern times, it is imperative to develop and adopt new approaches that allow to address the growing complexity of today's reality.

The SISPLANES Model and Scheme of Work is of interest to professionals, technicians and practitioners in any discipline who perceive or feel the need for new approaches and ways of reflection-action for a better understanding of the current environment and to have Models for its representation and with adequate work schemes to act accordingly.

Of course, professionals and technicians in general, who have already immersed themselves in the paradigm of complex systems, will find in the Model and its Working Scheme offered by SISPLANES, abundant complementary information about this new paradigm, called Emerging Paradigm, and a Model that systematizes the representation of the current complex reality and that also constitutes a framework for action in the environments that today many call with the acronym VUCA: voluble, uncertain, complex and ambiguous.

Development

New approaches to reality we live in

Systems have spaces where their behavior allows the use and application of tools of the traditional paradigm (its symbol is the machine) and there, they operate adequately, but as complexity increases, spaces open up where these traditional approaches are not adequate and we must move to a new paradigm, which is based on the principles of functioning of living beings. In this sense we speak of

expansion in terms of the coexistence of both paradigms instead of substituting one paradigm for the other. In other words, in reality both paradigms coexist, the traditional and the emerging paradigm, where the relevant thing is that the emerging paradigm offers the perspective of approach in accordance with the nature of innumerable situations and behaviors of today's complex society. So that we can navigate and act in today's environments, we require not only theoretical approaches that are more in line with them, but also Models that enable us to act as part of them. Expanding ourselves by taking the good of the traditional paradigm (Cartesian) and incorporating new approaches that constitute what we call the emerging paradigm, combining both in our practice under the SISPLANES which is the base of the proposal.

SISPLANES proposes a Model of thought and action, from the perspective of living beings (systems), precisely as the natural task of human beings and organizations: an action preceded by reflection as an integrated whole which goes through emotion as a key factor. We call this PLANNING, i.e. planning as an inherent process to human beings and their organizations where an action is preceded by reflection in an organic whole.

For this, SISPLANES can address the three main challenges:

- Expand to a new paradigm that, taking the benefits of the traditional paradigm, incorporates a set of concepts and distinctions that form a new conceptual framework that allows a better knowledge and understanding of complex systems, mainly people, organizations and society as a whole. This conceptual frame of reference becomes an epistemological substratum from which we observe reality. For this purpose, we select and synthesize a variety of conceptual bodies that account for the emerging paradigm, which we have called the Systemic Approach to Life, the new board on which we will operate in our integrated approach to Planning-Management.

- To build and erect on the basis of the systemic paradigm (Approach) of life a Model, which we have called SISPLANES (Planning System in a Systemic Approach) that, under a new functional logic based on the operating principles of living systems, systematize work patterns that enable us for a better conscious appreciation of reality and organize adaptive functioning schemes that enable us for an action aligned with our personal or organizational objectives.

- Systematize the set of instruments from different disciplines such as Planning, Foresight, Management, Commitment Cycle Management and related disciplines into an organic whole, which provide the practitioner or professional with the "Tool Box" available at the time of applying the SISPLANES Model in real situations.

Expansion to the emergent paradigm leads us to operate in a new logic, which in addition to having an expanded understanding of living systems, incorporates action as part of that natural dynamics of people and organizations. This means, the incorporation of action within the SISPLANES Planning Model is an inherent property of the emerging paradigm. It takes from existing practices in planning and management those elements that constitute us and that remain valid, operating now from a new logic based on the Systemic Vision of Life.

What defines Sisplanes?

SISPLANES assumes that the interaction modality of any Entity (person, work team, organization) with its environment must be assumed in the same way as living beings and systems do. In this sense, it first explores and conceptualizes the dynamics of interaction of living beings (systems) with their environment, and characterizes their fundamental elements in order to characterize the dynamics of operation. Modeling is configured by taking these elements which results in a RELATIONAL MODEL.

Since THE SISPLANES refers specifically to planning, we first take our approach: planning is an integrated whole that goes from strategic reflection to action (looking beyond John Friedmann's statement that defines it as the union of knowledge and action) and that this process is based on "emotion" (in Humberto Maturana's terms). This approach is then nurtured with the perspective of quaternary thinking, which proposes going beyond dualisms and reasoning on four dimensions. Its application in planning is conceived as a bridge between the past and the future (axis of the creation of possibilities) and at the same time as a bridge between the purpose and the concrete (axis of action). The intersection of both generates four quadrants that, with their openings to the environment at each end of the axes, represent our approach to planning.

This planning operating model represents the operation of the Entity that is in constant exchanges with its environment in order to generate recurring exchanges (through the execution of the plan) with the environment and thereby achieving the progress of the plan while maintaining the relationship of congruence with the environment as living beings (systems) do.

In this framework, SISPLANES as a planning function that operates systemically in an organization, is related to the Management Subsystem of plan or project management in a 2nd order cybernetic relationship (Stafford Beer: Organizational Cybernetics⁴). In this way, the management of the project or plan leads or governs the Production Subsystem, intertwined with the PLANNING function materialized in the SISPLANES.

The SISPLANES model

Based on the previous postulates, the Planning System is built in a Systemic Approach - SISPLANES - which models the dynamics of PLANNING mentioned above (Quaternary thinking model from the crossing of the axis of creation of possibilities with the axis of action) in a dynamic of interaction of the Entity (where planning keeps a cybernetic relationship of 2nd order with the management) with its significant environment (Work Object and its context of influence), where the results of the action of the plan or project have an impact and are manifested.

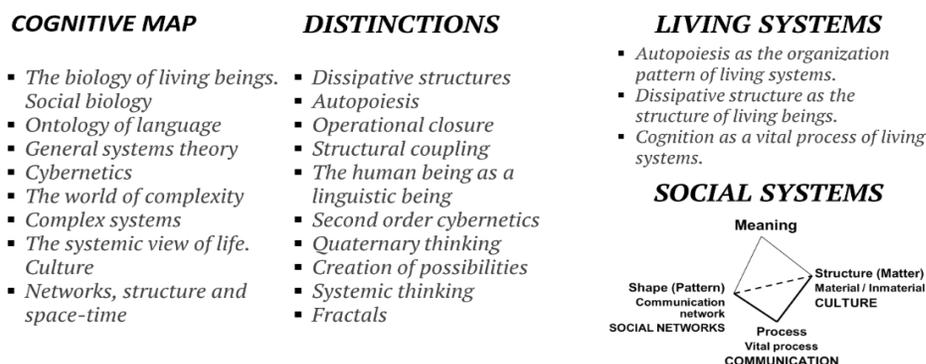
⁴Organizational cybernetics studies organizational design, and the regulation and self-regulation of organizations from a systems theory perspective also drawing on Beer and cybernetics, but also takes the social dimension into consideration

To generate the SISPLANES Model, the dynamics of the internal functioning of the Entity as responsible for the processes of planning and its relationship with its significant environment are characterized in order to have a relational model of the same, as a living system. For this purpose, in addition to the planning and management of programs and projects, several fields of knowledge and fundamental distinctions were used to define the components of SISPLANES as well as for its conceptual and functional elaboration.

Below we list the main distinctions and concepts that we require for the construction of the SISPLANES model: from the biology of being and culture the concepts about the inner workings of living beings (systems), the linguistic characteristics of human beings, system dynamics, complexity in systems, the relationships of living beings (systems) with their environment, networks, structures and space-time, the cybernetic relationship of planning and organization, and so on.

The following outline presents a brief synthesis of the SISPLANES conceptual framework.

Figure 1. Fields of knowledge and fundamental distinctions in SISPLANES..



Source: Own elaboration

According to Fritjof Capra, the processes that sustain a social network are communication processes, which generate shared or consensual meanings and rules of behavior (network culture), as well as a common body of knowledge. Culture is created and sustained by a network (form) of communications (process), which endows it with meaning. The material embodiment of culture (matter) includes artifacts, buildings, and written texts, through which meaning is transmitted from generation to generation.

Consequently, the basic components with their respective characteristics and properties are then defined and then their interactions are established in order to configure the operating structure of SISPLANES. For this purpose, two planes of operation were defined, the operational plane and the running plane.

In the first plane is where the planning action is executed through recurrent interactions with the environment, both its own metabolism of internal processes that we call modes, as well as the relational management that links the Entity with its environment that we call tactical movements.

In the second plane, we have the management of SISPLANES, that we call the strategy, which is the body that integrates and directs the work of SISPLANES from a perspective of a longer time horizon and a comprehensive view of the complex of ongoing processes.

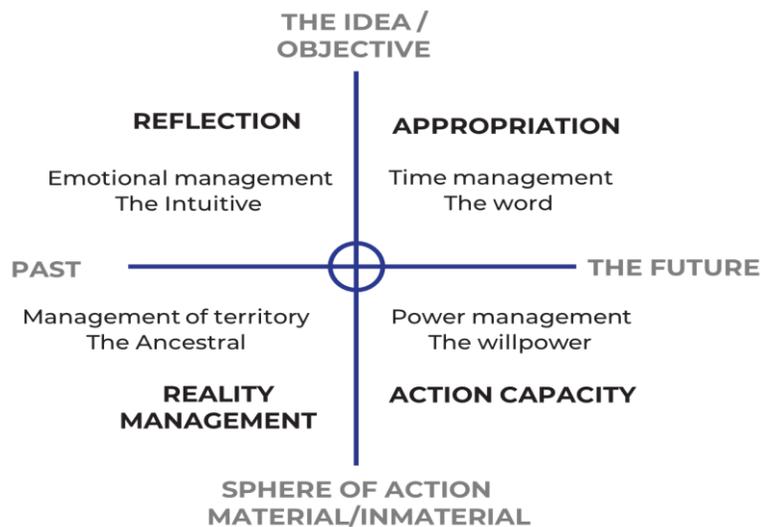
Operational plane

SISPLANES operates on two levels where in the operational level we have the modes and the tactical movements. The modes serve the tactical movements, this means, the functioning of the modes operates in a closed grid (autopoiesis in terms of Humberto Maturana y Francisco Varela) that opens to the outside (operational closure in terms of Niklas Luhmann y Humberto Maturana) managing recurrent exchanges (dissipative structure in terms of Ilya Prigogine) with which are managed, through the tactical movements, the Directionality, the Feasibility, the Coordination of Actions and the Observation of reality for the advancement of the plan or project.

The modes

The modes constitute the internal processes of planning that are generated by crossing the axis of the creation of possibilities (the past with the future) and the axis of action (the purpose with the concrete), a concept developed from the model of dr. maria veronica atencio. due to its quaternary root the model has four modes each one in its respective quadrant.

Figure 2. Representation of MODES in SISPLANES



Source: Own elaboration

Reflection mode. In the quadrant made up of the relationship between the past and the purpose as the process of reflection, the mental maps and explanatory and management models that we devise. In this mode the management of intuition and emotion predominates.

Appropriation mode. In the quadrant made up of the relationship between the purpose and the future is represented by the appropriation, the scope, the strategic guidelines and the declaration of the intention of action, generally expressed as the work program. This mode is dominated by time and word management.

Action capacity mode. In the quadrant made up of the relationship between the future and the sphere of action is represented as the capacity for action that operates through the strategies and organization of execution, as well as the structures and systems of conduction. In this MODE the management of will and power predominates.

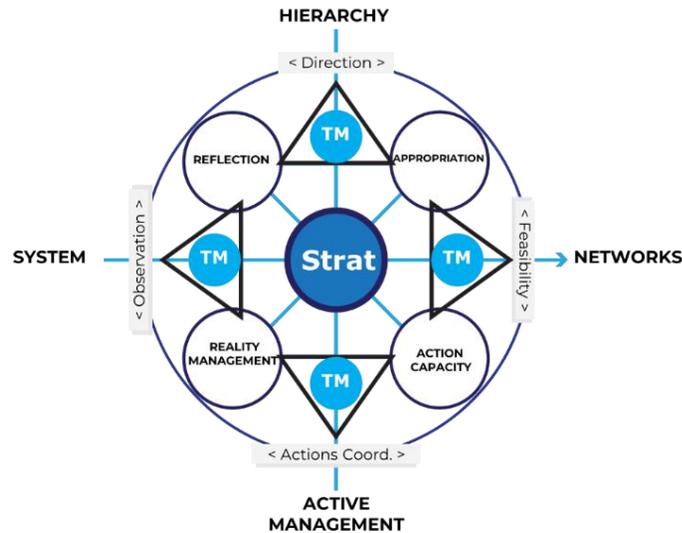
Reality management mode. In the quadrant formed by the relationship between the concrete (sphere of action) and the past is represented as the management of reality, where the effects of the actions of the plan or project accumulate on the inertias of the past, a reality that we perceive by virtue of the specific Observer that we configure. In this mode predominates the management of the territory (space of results) and of what precedes us (the ancestral).

Each of the modes has its specific characteristics derived from its location in the quadrants and makes a significant contribution to planning.

The tactical movements

Tactical movements constitute the relational instances of planning with its environment. they are defined at each end of the axes of both possibility creation and action. each tactical movement is defined by the nature of the interaction with the environment: towards "the purpose" the relationship with the hierarchy where management processes are managed; towards "the future" the relationship with influential actors (which we call networks) where feasibility is managed; towards "the concrete" (material and immaterial production) the relationship with those responsible for the execution (which we call active management) where the coordination of actions is managed; and towards "the past" the relationship with the work object and its environment of influence (which is called system) where the observation is managed to have a conscious appreciation of the reality linked to the plan or project.

Figure 3. SISPLANES representation: MODES, TACTICAL MOVEMENTS and STRATEGY.



Source: Own elaboration

Tactical movement of direction. In the relationship with the purpose, the relationship with the hierarchy is managed. With this instance, the fundamental parameters and strategies of the plan or project are defined, periodically reported and, if necessary, adjustments to these parameters are negotiated, defining the equivalent of new initial conditions that will be compared with the baseline that is established.

Tactical feasibility movement. In the relationship with the axis to the future, the relationship with the influential actors who influence the development of the plan or project is managed which are called networks due to the need to build support networks for their viability. In this relationship, the strategic management of influential actors (stakeholders) and the management of network construction (networking) operate.

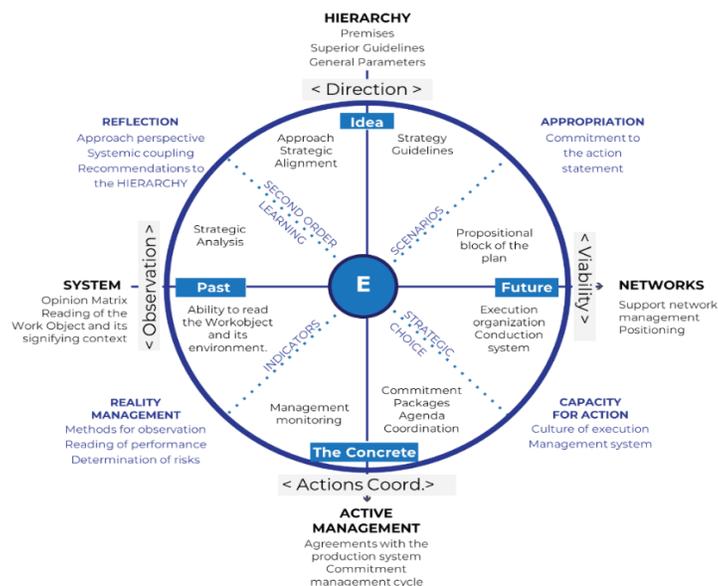
Tactical movement of coordination of actions in the relation with the sphere of action is where the execution of the plan that generates its products and delivers value to the organization takes place. in this contextual relationship, actions are coordinated with what is called active management, this means, the high-level managers of the units or entities responsible for the execution of the plan or project. this coordination of actions is carried out mainly through the management of the cycle of commitments in response to each execution agreement.

Tactical observation movement. in relationship with the past, the observation is linked to the accumulations and new states acquired by the object of work and its environment of influence, entities that have been grouped under the denomination of system. in this contextual relationship, the conscious appreciation of reality takes place, where the observation operates from a particular perspective in accordance with the objectives of the plan or project, which is exercised through the measurement of management, performance and results.

Relationship between modes and tactical movements

Each mode has specific processes given its nature where a central process that articulates the task within them predominates. the mode receives from the preceding tactical movement, thereby providing key inputs for its production, which feeds the following tactical movement the results of its contextual management thus providing key inputs for its production, which feeds the following tactical movement to carry out its management with the corresponding significant environment. thus, we have:

Figure 4. Relationship between modes and tactical movements.



Source: Own elaboration

Reflection mode: through 2nd grade learning (central process) the strategic analysis is articulated with the Alignment that is configured between the Explanatory Models and the Management Model, which feed the tactical management movement.

Appropriation mode: through prospective with its construction of scenarios (central process) the strategic guidelines are articulated with the work programs, which feed the tactical feasibility movement.

Action capacity mode: through the strategic choice approach⁵ (central process) the organization of the execution and the conduction systems are articulated with the definition of the Work Packages and the Coordination of Agendas, which feed the tactical movement of coordination of actions.

Reality management mode: through the establishment of management, performance and results indicators (central process), the satisfaction criteria of the commitment management agreements are articulated with the quantitative and qualitative measurement system, which feed the tactical observation movement.

⁵Refers to the Strategic Choice Approach method. Friend, J. & Hickling, A. (2002). "Planning Under Pressure. El Enfoque de Escogencia Estratégica". Caracas: Publications of the Venezuelan Institute of Planning (IVEPLAN).

As we can see, in the relationship between modes and tactical movements there is a permanent exchange where in the former the technical dimension predominates in the planning function, so that the latter carry out the management with their corresponding context where the relational dimension predominates. Here we observe that the modes operate in a closed grid (autopoiesis) that opens to the environment (operational closure) and that through the tactical movements exchange energy and information with the environment (dissipative structure) in such a way that the incremental advance of the plan occurs in the directional arc defined by the strategy and maintain the relationship of congruence that means the maintenance of existence in living systems

In addition to the interaction in a primary current that starts from the tactical movement of direction (on receiving a request for a rule or making an offer to the hierarchy) and that operates in a clockwise direction, the modes and the tactical movements interact in a network pattern that entails permanent exchanges between them.

Conduction plane

The strategy operates in the driving (conduction) plane, which in the SISPLANES constitutes the space for the integration of all its operations and, in a comprehensive view, directs the actions of the tactical movements, which manage the contextual relationships, articulating and giving meaning to the modes (the relational conditions internal management). It includes the totalizing acts of alignment, which occurs in the dynamics of virtuous structural coupling between the organism (Entity) and its significant environment, in such a way that it generates coordination of behaviors that mobilizes social forces (actors, resources, commitments, etc.) and generates actions based on the objectives of the plan.

In SISPLANES, the strategy is an intentional act that finds its purpose in the objectives of the plan. The actions that it articulates emerge from the interaction between the structural coupling of The Entity (organism) with its environment, and the directionality that it gives to its actions.

The strategy is located above the set of Tactical Movements and through them, leading the agenda of the modes, manages the threads of orientation and coordination of actions in the SISPLANES, from a higher vantage point with a vision of totality, with a longer time horizon, directional arc and structural directional elements.

In this sense, the strategy emerges from the interaction of the tactical movements with its context based on the operation of the modes, recurrent operations that give SISPLANES its identity. The view at the strategy level is one of totality and of greater depth (it looks at the structural, coupling the circumstantial) and in a longer time horizon, thus generating the master guidelines for the dimensions of work in SISPLANES, which are materialized in the tactical movements.

We can affirm that the strategy constitutes an emergent (systemic) process from the interaction of the modes with the tactical movements and its significant environment, giving the SISPLANES as a whole unity and integrity of operation, and in this sense the "emergency" of the strategy is given by its coupling with the changing conjuncture, the internal dynamics and the fractality of its operation, which are not linear properties of the elements of the system that constitute it.

Summary of the structure and operation of SISPLANES

In summary, SISPLANES operates on two planes; in an operational level where the modes represent the internal functioning of planning (linking the past with the future and the idea/purpose with the sphere of action where the execution of the plan takes place) and support relational management with the environment that is carried out through tactical movements. and in a management level, in which the alignment and coordination of the conductive threads with the operational plane are practiced from the strategy.

In this way, SISPLANES has an internal metabolism (modes) that processes information and generates proposals giving support to the management with the environment (tactical movements) on which the plan or project acts. this operation at the operational level is conducted from the strategy that couples the purpose (objectives of the plan) with the actions in deployment integrating times and dimensions of work in a whole so that the *kairos*⁶ appears, the time in which things happen.

The conduction and integration of these processes in multiple dimensions of quaternary thinking are carried out from the strategy, an instance of greater relevance not because of a hierarchical level or place in the organization chart, but because of its degree of connectivity in SISPLANES.

SISPLANES as a Relational Model focuses its attention on the management of the relationship of the Entity with its environment (tactical movements) based on internal processes (modes) proper to planning. In the conception of open system according to the concepts of dissipative structures, structural coupling and autopoiesis itself (concepts that are the basis of the Model), SISPLANES operates relationally with the multiple environments in which it is systemically framed. In this sense, the relational approach of SISPLANES goes beyond the Work object and its impact space, emphasizing those spaces where management must be deployed (recurring interaction) for the advancement of the plan or project. In this sense, it is linked to the hierarchy or higher instance with which it is articulated, with the networks or influential actors in the future of the plan or project, with the active managements or the direction of those responsible for the execution of each initiative of the plan or project and with the system represented by the work object and its environment, where the deliverables are generated and where the impact of our work is produced, precisely where the space of results is located. the governance and articulation of the components in the operational level of SISPLANES is carried out from the strategy, responsible for conduction aimed at maintaining the relationship of congruence with the environment and generating actions for the advancement of the plan.

⁶Kairos is a Greek term that refers to an opportune moment, the right time to do something; a critical moment, when a situation can be taken advantage of to achieve a specific goal. Kairos was personified by a god who was represented by a scale, symbolizing the need to balance the ideal moment with the right action. Unlike Chronos, which refers to sequential or linear time

Recursivity of the model at all scales

The operational cycle of planning is repeated identically at the different levels of the organization (in its divisions and its people) and outwardly in organizational arrangements (corporations, governments, transnationals, etc.), thus showing a property known as fractal.

This behavior of identity of the operational cycle at any scale of the organization is similar to the behavior of the fractals illustrated by Mandelbrot, in that this cycle repeats itself identically at different scales.

This concept is used to convey that the operational cycle of planning repeats its organizational pattern, no matter what the organizational level or scale at which it occurs, be it an individual, a small group or the entire organization, whatever the hierarchy (management, general management, managerial or operational sectors) or specialty (human resources, finance, production, etc.) applies it.

Although the SISPLANES proposal deals with the procedural dimension of planning, it is difficult not to comment on the substantive side, the contents that in the end are expressed as a system of plans with their associated planning processes for each one.

An indisputable advantage is that having a homogeneous and stratified work scheme (fractal property of SISPLANES), by configuring planning processes at different levels and positions within the organization, plan or project, the operationalization is approached with similar work patterns that will facilitate both horizontal and vertical integration.

Processes in the SISPLANES

The main processes are presented through the contributions of each of its components, in the operational level the modes and the tactical movements and in the conduction level the strategy. Likewise, the processes are interpreted in terms of the continuous operation of each component contributing to the development of the plan or project, always in permanent interaction among them in a network organization pattern.

The modes

In the modes operate the technical processes of the planning function that will interact with the tactical movements that are responsible for the interaction with the significant context, as well as with the strategy from where its operation will be oriented, framing it in the strategic directionality of the plan or project.

The modes constitute specialized spaces of the internal network with primed nodes in a polycentric scheme (by nature), which is open to the outside through communication processes, but from the internal perspective is closed (operational closure), i.e. it generates its own components (autopoiesis). In the logic of this process of closure, there are interactions that historically become recurrent, in such a way that the entities (other persons, groups, organization and their environment, among others) are coupled at the level of the structure (structural coupling), which allows the preservation of their individuality (identity) in the long history of their interactions.

Each node will of course have connections with the others in a variable geometry configuration, a fundamental characteristic of networks (in Manuel Castells' terms) that adjusts over time and connects with production points (activities) in its direct area of influence (neighborhood in the space of flows given by functional similarity to the planning process) and with other nodes in the network and even linkages with neighboring networks.

Tactical movements

The tactical movements operate the coupling between the Entity and its significant context, attending to the dynamics of social systems as a principle of SISPLANES. They open up to the environment through contextual relationships by means of communication as a vital process of social systems.

Through the relationship with the hierarchy, they manage the process of direction, with the network (influential actors) they manage the process of construction of viability, with the active management they manage the process of coordination of actions and with the system (object of work and its significant context) they manage the process of observation.

Tactical movements, as processes, have a fundamentally relational (managerial) characteristic and through them, behaviors are coordinated on the basis of exchanges of energy and information, they manage conversations and manage commitments according to the objectives of the plan and to maintain the congruence relationship.

Tactical directional movement

It involves managing of the relationship with the Management of the subsystem's management (in a second-order cybernetic relationship). It is the source of the request or requirement that activates the planning process and that is cyclically updated, influencing its decisions through recommendations and the contribution of points of view, perspectives of knowledge or analysis, and so on. with the hierarchy there will be continuous reports and negotiations that may lead to adjustments of the strategy and in major cases to the renegotiation of some general parameters of the plan and thus to the implementation of systemic reframing. it allows the development of the relational dynamics with the hierarchy, in which it defines and contributes to the definition of the general terms of the plan: higher guidelines of the what, the how, financial and investment aspects, legal frameworks, and so on.

These results feed into the teams working in the ownership mode, providing them with the definitions and upper parameters of the plan that they will have to develop downstream in programs and work dynamics between the internal teams and the networks (those selected actors that influence the plan's evolution) that contribute to the plan's viability.

Tactical feasibility movement

This includes the management of the relationship with the ecosystem of actors with influence on the development of the plan, both external and internal. In this relationship, there are support agreements,

neutralization, or in the event of disagreements, co-optation or other techniques. The variety of actors also leads to a variety of ways of managing relationships depending on the nature of the input or constraint offered by the actor in question. There are cooperative relationships where actors have a shared interest in the objectives of the plan. There may also be rigid or subservient relationships where the actor influences in an inflexible manner (e.g. legal or permitting bodies). There may be cases of confrontational relationships in which actors have conflicting positions with the objectives of the plan. Of course, there will also be relationships in which external actors will be influenced and their positions will be aligned with the objectives of the plan. In other words, there is a wide range of relationships, and each type will require tailor-made strategies to ensure that the contributions of each actor contribute in quantity, quality and time to the development of the plan, as well as to neutralize the actors that hinder its progress. In this way, networking and strategic stakeholder management are used to organize the ecosystem of influential actors (key suppliers, financial dimension, implementers, technological solutions, economic, social or political influence, legal restrictions, etc.), which is a key aspect for building the viability of the plan.

Tactical action coordination movement

This includes the management of the relationship with those responsible for the direct execution of the plan, its programs and projects. In addition to decision-making (agreements, commitments, contracts, etc.), it manages the coordination of actions to advance the execution of the plan, both with each executor and in the articulation between them. This is the area of management where, for each commitment with an executor, the management of the commitment cycle is carried out (in Fernando Flores' terms), which includes to formalize the agreement or commitment, establishing the conditions of satisfaction, managing the execution and verification of progress (quality assurance and control), progressive compensation for the work carried out, and the review and closure process once the conditions of satisfaction have been met.

Tactical observation movement

It comprises the management of the relationship with the Work Object and its significant context. It deals with the pre-existing structures and the accumulations that are progressively generated as a result of the progress of the plan's initiatives, as well as the initiatives of other actors (whether they agree or disagree with the plan) and the dynamics of this context. The operation of the observer in which we are constituted is managed by taking on the one hand the reading of the reality of the system (constituted by the work object and its significant context), and with the information coming from the management mode of reality, a totality view of the relationship between the advances of the execution and the impacts that these generate in the work object and its context is constructed.

In this tactical movement the "conscious appreciation" is nourished with new interpretations which feed the process of strategic analysis that operates in the reflection mode. the "external environment" ceases to be a passive subject as previously seen in space and environment, and becomes an active player in the configuration of new realities based on the characteristics and potentialities it offers.

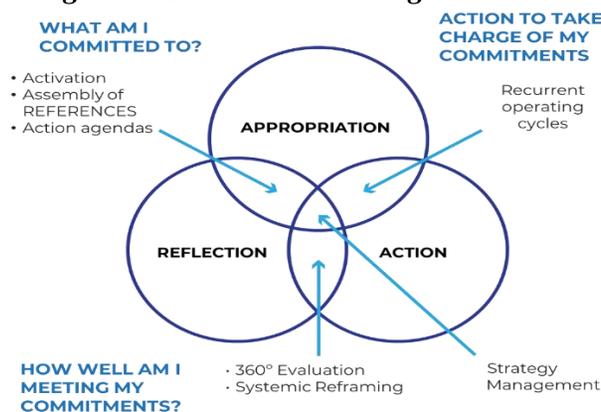
The strategy. The driving planes

The operation in the management plane corresponds to the strategy where the management is carried out through three moments, where the first refers to our commitment (what did we commit to?), the second includes the actions deployed accordingly (what are we doing? to take charge of our commitments?) and in the third a 360° evaluation is carried out and gaps are determined to correct the course or to make major adjustments that we call systemic reframing that entails carrying out negotiations with the upper line of command. the information that is handled at this level comes from the analyzes carried out at the level of operation of the modes and from their articulation with the contextual management represented in the tactical movements. the strategy is fed with this information where action agendas and directional adjustments are built.

From a more general perspective, at the driving level, the SISPLANES presents the following processes:

- Activation and Initial Systemic Framing,
- Assembly of referents.
- Recurrent operational cycles.
- The strategy adjustment cycles and Systemic Reframing.

Figure 5. STRATEGY management outline.



Source: Own elaboration

Consequently, the dynamics of the functioning of SISPLANES operates under the same principles of the greek triangle⁷, focusing the work on the relationships between them. thus, in the relationship between reflection and appropriation, the "activation and assembly of references" is addressed; in the relationship between appropriation and action, the "recurrent operational cycles" (in an upward spiral) are worked on; and in the relationship between action and reflection, the "adjustments of the strategy and systemic reframing" are worked on.

⁷The three components of the Greek triangle: logos (thought, rationality, discourse), epithumia (desire in all its aspects, the noble and the less noble) and erga (actions, achievements). The marriage between passion and reason, between heart and spirit is the key to the success of action and the complete development of the individual (the body).

Organization for strategy management

Strategy summarizes and concentrates a set of functions that give SISPLANES its uniqueness and identity. At this level, the tactical moods and movements, the technical function of planning and its relational management are directed and coordinated, respectively, in a network organization pattern in Manuel Castells' terms. In this sense, strategy must reconcile attention to immediate action within the established directional framework with a medium and long-term view, the prospective, as Gaston Berger, one of the fathers of prospective, points out: "today's societies try to move very fast, in the dark and on unfamiliar paths; therefore, they need lights that shine far into the distance, that is, they desperately need to look into the future to illuminate the present". Likewise, the strategy must become the center of communications, as well as fulfil the functions of a technical secretariat that coordinates agendas, records narratives and agreements, and manages the documentation center. Thus, one of the many forms that the organization of the strategy can take (which we describe based on our experience) is that it should contain at least:

- Agendas derived from strategic prospective⁸.
- Agendas derived from the 360° gap analysis
- Coordination of commitment management
- Communications center
- Technical secretariat

Particularities of SISPLANES

The particularities of SISPLANES that differentiate it from many planning methods are based on its conception, which is born from two pillars: the definition of the function of planning from the quaternary thinking and from a new look focused on the dynamics of living beings (systems) that maintain their internal dynamics and the relationship with their environment (Relational Model). This new look is built on a set of concepts and references that constitute fundamental "twists" in the optics with which we see and relate to reality, that conforms our approach to planning

The following is a summary of the main "twists" incorporated and thus the implications of the new approach to the conception of planning that we propose in SISPLANES.

• **Perspective of knowledge.** It proposes the *shift from* the mechanistic conception of the human being in its operation towards the biological and systemic conception of the being as a linguistic entity, whose actions are based on its emotional substrate. The social dimension is conceived as the web of communications between the subject and his environment, where culture, values and shared beliefs constitute the perimeter of belonging, and with it, the identity.

- Planning has traditionally been seen as an instrument of "reason", in which decisions are the product of logic and rational thinking.

⁸Michel Godet (1983), the third founder of prospective, points out: "The fact is that if prospective shows us the alternatives for the future that an organization can have, strategy tells us how to build the future that is most convenient. One without the other would be meaningless. Godet uses the scenario technique as the main tool for reflecting on coherent sets of probable hypotheses on the key variables of the system and on the possible strategies of the actors."

- In contrast, SISPLANES incorporates the intuitive element and the emotional substrate that influences decisions and action. Likewise, as a relational model, it privileges participation, free flowing and recurrent exchanges with the environment, that is, the management of the plan or project.

• **Building commitments to the plan.** It comprises the *shift from the* rational declaration (assertion or presentation made by the instance responsible for the plan) of the directional elements of the plan towards appropriation as a process responsible for incorporating (taking appropriation) and reproducing (sounding board) in the influential actors in the future of the plan, the statement of action to which we commit. We are moving towards a conception that privileges appropriation process carried out by influential actors (internal and external) of the contents of the directional block of the plan as a network of commitment. This appropriation process in the network of influential actors configures a favorable and expansive field of force for the development and feasibility of the plan. Reaching an effective ownership involves communication processes in which the use of words and time is essential.

• **Planning integrates Management.** Emphasizes the *shift from* Planning as a specialized function in a hierarchical division of labor where the design of the plan and the prescription of initiatives in compartmentalized divisions correspond towards processes that integrate strategic reflection and transformative action based on "emotion". In this sense, in the integrated planning process management is incorporated in all areas, especially in the coordination of actions with those responsible for the execution of the plan through what we call action capacity, The management arrangements of the direction and conduction systems, organization, the shared conformation of agendas (Commitment Packages) and commitment management cycles, among others. Our approach incorporates in its internal processes the direct articulation in the execution of the plan through the coordination of actions with the Active Management Direction responsible for the execution by fulfilling a commitment management cycle. We consider that the plan-management pair is one and indissoluble. This relationship is established under second-order cybernetics mechanisms with the management subsystem and the production subsystem

• **Reality management is carried out by an Observer who is part of the planned system.** It highlights the shift from the classical paradigm of monitoring and evaluation as an external entity (scientific, rational, objective and therefore unequivocal and exact activity), towards a conception of the observer (you see what you want to see – you see what you are) that is configured according to the objectives of the plan and its course of action, incorporating the systemic relations of reality management within which the Observer is immersed, where he acts and which he is a part of. From the logic of functioning of living systems, the Observer focuses on its field of interest, the actions and their impacts according to the plan (from the operative closure and the structural coupling) and at the same time comprises a broad view given the existing systemic approach

• **Recurrent, simultaneous and synergistic conception of processes, circular time.** It highlights the *shift from* the conception of linearity, of linear time where some steps follow others in predefined steps or sequence, towards a conception of circular time, of recurrent processes that operate intertwined and in unison, strategic orchestration. This means the conception of a set of processes that operate in parallel and in permanent interaction, where the regulation mechanisms (the systemic reframing and its impact on the strategy and the adjustment of the initial conditions) maintain the structural coupling

between SISPLANES and its environment within the framework of advances in the directionality established by the strategic framework in execution (the scores).

• **Every action that starts from a reflection (based on emotion) is planning.** A *shift from* the conception of planning as a separate and specialized unit or organization for prescribing actions, in which experts concur, towards a conception in which planning operates as living systems do and this entails a lively exchange with the Work Object and its environment with which it maintains a relationship of congruence and generates processes that affect the progress of the plan. Its fractal characteristic means that the cycle and dynamics of SISPLANES allows it to operate at all scales or units within an organization, so that the articulation configures a system of aligned plans through the communication of their respective components.

Conclusiones

The management philosophy of the organization is a set of internal organizational principles, moral and administrative rules, a system of values and beliefs shared by all workers and aimed at achieving the global objective of the organization. The organization's management philosophy is designed to connect the meanings of the organization's existence with the meanings of the work of its members, configuring its identity perimeter and thus finding consensus, harmony and aligning their behaviors.

Sisplanes management philosophy

The SISPLANES management philosophy can be summarized as a way of understanding and approaching the management of plans and projects from a broader perspective, of a systemic nature, which goes beyond the mere fulfillment of specific objectives. It refers to a holistic and strategic vision that approaches the management of plans and projects as an integral process, which considers the implications in time and in the space of results, both in the delivery of value and in the impact on influential actors and in the evolution of our organization.

There are several characteristics of the SISPLANES management philosophy, among which we can highlight the following:

- **Focus on value:** The management philosophy seeks the satisfaction of project stakeholders, not only at the level of specific objectives, but also taking into account the benefits that the plan or project can bring to the organization as a whole, the stakeholders and the environment of the plan or project.
- **Orientation to continuous improvement:** The management philosophy contemplates 1st and 2nd order learning processes (in Rafael Echeverría's terms) that affect continuous improvement in the management of plans and projects, as well as in their environment, to achieve greater efficiency, effectiveness and quality in the results.
- **Management approach with prospective vision and risk management.** The management philosophy seeks the integration of short-term actions (those that allow incremental progress of the plan) with medium-term directionality and forecasts (those that define strategic directionality). It combines work on time horizons and risk management. Working by scenarios

integrates short-term management with medium-term forecasts and through the early identification of risks in the plan or project generates the implementation of preventive measures.

- Team focus. The management philosophy emphasizes teamwork, commitment management and collaboration, to achieve more effective management of the plan or project and greater involvement of the team in the project's objectives. Promotes work organized in a network under MATRIZTIC⁹ principles that generate professional and affective bonds in the work teams generating strong identity perimeters.
- Emphasis on management transparency and accountability in the contribution of each executor in the plan or project. Through accountability and impact measurement, effective feedback is generated both to those responsible for execution and to the managers or directors of the project. Focus on the establishment of systems that allow for structural coupling with the environment.
- Emphasis on communication. The management philosophy promotes horizontal, fluid and effective communication at all stages of the plan or project to ensure that all stakeholders are aligned and committed to the project.
- Recurring exchanges with the management environment: through TACTICAL MOVEMENTS, recurring management is maintained with the Work Object and its significant environment (SYSTEM) to align with the agreements with the HIERARCHY, for the construction of feasibility with influential actors (NETWORKS), to coordinate actions with those responsible for execution (ACTIVE MANagements) and manage the OBSERVER for a better conscious appreciation of reality¹⁰ based on the objectives of the plan or project and create greater adaptability of the organization through learning. This focus for action with the environment allows maintaining the congruence relationship with the environment while driving progress in the execution of the plan.

In short, the management philosophy focuses on the integration of the different elements of a plan or project and its organized management in a network in an efficient, efficient and effective way, to achieve a result that meets the objectives of the plan or project, and that adds value to the organization and its environment.

Benefits of sisplanes

The fundamental benefit of SISPLANES is that the Representation Model of reality (Explanatory Model) and the Work Scheme to be used (Management Model) are isomorphic, this means that there is complete alignment between the way we interpret reality and the way in which we act before it. That entails congruence between thinking and action.

⁹According to Humberto Maturana, matriztic recognizes that all living beings are interconnected and reality is seen as a continuous process of creation through the interaction between living beings and their environment. Matrix theory and systems theory share the perspective of reality as a complex system of dynamic relationships, in which individual elements are interdependent and mutually influence each other. Both theories recognize the importance of feedback, recursion and the relationship between systems and their environment.

¹⁰Conscious appreciation of reality involves being fully present in the present moment, perceiving reality in its essence and without judgment, and being open to learning from our experience and finding value and meaning in it.

In this sense, the main contributions of SISPLANES can be summarized as:

- Strengthens directive and managerial intelligence, achieving alignment of actions with defined objectives, both organizationally and culturally, and the values of its members.
- Develop business intelligence and transactional skills to integrate strategic thinking into creative and transformative action.
- Generates self-adaptive organizations with learning capacity.
- Develop organizations aligned and in harmony with their environment.
- Feeds the "being" of work teams by providing a clear identity and sense of purpose through work with "meaning" that takes place in the organizational and social context.

« In a world that revolves around uncertainty, the only thing that can resemble certainty is commitment. What are you committed to and what are you willing to do to make that happen? »
(Hidalgo, 2016)

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