Glossary

Abstraction Abstraction is understood (here) to be a form of bundling or category creation: For example, different behaviors are assigned to an ability, capabilities are in turn associated with a value or a basic assumption, etc ... Or, a system element is assigned to a system; a system is associated with a system of systems. Here, with each level of bundling or category creation, the bundles or categories become more abstract, since without further knowledge they can no longer be inferred by their specific context.

Actuality Actuality is the part of reality which has an effect on us and which we can observe.

Agile Organization An Agile Organization is present if the mindset of the organization allows a high level of flexibility and speed in adapting to its environment.

Antifragility Antifragility refers to a system property, in which the system is not broken by shock, but becomes stronger. To make this possible, the impact of the shock to the system may only be large enough for the system to adapt to learning. For example, a business is fragile, if the enterprise is primarily based on standardized processes and has no, or only a few mechanisms of adaptation, so that when large changes in customer behavior occur, there is little chance of survival. Fluid organizations are antifragile.

Attractor An attractor is a state of a system in a phase space defined by one or more order parameters.

Axiom An axiom is a statement that serves as the basis of a model or theory and is not derived or proved.

Basic assumption Basic assumptions are principles, underlying assumptions or belief systems that as a result of processed experiences, represent generalized mental models for the regulation of complexity. Basic assumptions act as situation-specific order parameters.

Bias A bias is a mental distortion, which leads perception in a specific direction.

Change Management By Change Management, we understand organizational change work, in which the starting point, the destination, and the path from source to destination are known. The change agent acts primarily as a manager who deliberately leads the organizational system in a specific predetermined direction.

Chaos A system displays chaos if it forms endless irregular states. The adopting of these states is assigned deterministically and depends heavily on the initial conditions of the system.

Coherent state A coherent state refers to a system state, in which the system elements form an internally consistent, interrelated and comprehensible whole.

Cohesive state A cohesive state refers to a coherent state, which is maintained by the system elements over time. The Collective Mind state is a cohesive state.

Coincidence Coincidence or coincident event is an event, the cause of which is unknown or not revealed to us.

Complex equivalence A complex equivalence exists if the behavior of a communication partner is unconsciously interpreted in the light of our own injured value or motive.

Complexity By complexity we understand the mechanisms of individual elements of the micro-tier of a system, based on a diversity of behavioral alternatives and entails a variety of behavior options at the macro-tier. We perceive complexity if
- a high degree of interconnections in time and/or place is present in a system,
- small changes have big effects,
- and erratic, inexplicable system behavior in time and/or place may occur.

Complexity domains Complexity drivers induce complexity in specfic domains of complexity. We distinguish between the two major complexity domains: "social complexity" and "solution complexity".

Complexity drivers Complexity drivers are factors that induce complexity. In projects, this includes: the scope, stakeholders and social organizations, as well as the wider environment.

Control parameter A control parameter is a parameter that allows us "to conduct" a system in different areas of the formation of emergent properties.

Correlation Correlation describes the interrelation between two or more features, events, states or functions. It does not describe a cause-effect relationship, but is a measure of the degree of pattern and structure formation in space and time. For example, a correlation function may indicate the likelihood that in a meeting, two people display the same behavior within a specific time interval.

Culture By culture, we understand the predominant mindset of an organization and model according to the Dilts Pyramid.

Decorrelating measures Decorrelating measures serve to prevent the interrelationship between two or more features, events, states or functions. For example, it may be necessary to prevent, or at least minimize, the interrelation of behavior of two or more people. This is especially true if mental biases occur in a team.

Dynamic Each model of a system contains, in addition to statics, statements on the dynamics, i.e. how the variables, describing the model, develop over time and space.

Emergent state An emergent (macro-) state is created by the mechanisms of complexity, based on the interaction of individual system elements. Strong emergence is caused by self-organization in a complex system, creating a new cohesive state on macro-tier, caused by "enslavement" of the individual system elements of the micro-tier.

Emergent properties Emergent properties are macro-tier properties of a dynamic system, which are neither present in the individual system elements of the micro-tier, nor inferable therefrom. Water molecules are not moist. Water itself has the weakly emergent property to be moist. Neurons cannot think. Our brain has the highly emergent property to generate consciousness.

Emergence Emergence is understood as the creation of emergent properties at the macro-tier of a system.

Empathy Empathy refers to the ability and willingness to identify, understand and empathize thoughts, emotions, motives and personality traits of another person.

Empiricism Empiricism relates to the specific observation of actuality, of gained information and methods for obtaining this information.

Entropy Entropy is a measure of the number of micro-states, representing a macro-state. Thus, entropy is a measure of "missing information": It is a measure of the information that is missing in a macro-state compared to a micro-state. For a solid body, the entropy is smaller than for a liquid body, because for a solid body, the number of micro-states which represent the "solid" macro-state are fewer than the number of micro-states which represent the "liquid" macro-state. Due to the interaction in the solid body, the degree of freedom is reduced, whereas the number of possible micro-states decreases. In a complex system, which is subject to self-organization, therefore forming a dynamic macro-state, entropy is also smaller than in a system without self-organization.

Evidence Evidence indicates a clear, coherent and obvious insight making a claim to truth. In the adjective "evidence-based", this understanding is reduced to "instance-based".

Flow Flow refers to a psychological or social status, where challenges and skills undergo a continuous re-balance. The Collective Mind requires a flow within the team as a supreme control parameter.

Fluid Organization A Fluid Organization exists if a network of Agile Organizations, consisting of a permanent organization, task-related temporary organization and temporary project organization, dynamically adapts to its environment.

Hypotheses Models and theories model reality. Hypotheses are statements derived from models and theories relating to actuality and practice. The validity of the hypotheses must be checked against actuality and practice. Hypotheses that cannot be confirmed by actuality or practice, result in falsification of models and theories.

Insight Theories provide an understanding of the perceived (observed) actuality. They give meaning to actuality and therefore give order, which results in insight. They thus contribute to knowledge of the actuality.

Integral theory An integral theory consists of several theories and models, but its meaning is revealed only by contemplation as a whole.

Intervention An intervention refers to an input (e.g. stimulus, irritation, selection, change) in a system, with the aim of achieving a targeted reaction. Since the reaction of a complex system cannot be predicted, and because the input is influenced by an interaction of the input and the system, interventions are not subject to linear cause-effect mechanisms.

Leadership parameters Leadership parameters of a social system are the setting parameters, the control parameters and the order parameters of the system.

Learning phase Learning phase refers to a personal or organizational state, of being aware of one's own actual competences within an area of competences. There are four phases of learning: unconscious incompetence, conscious incompetence, conscious competence, unconscious competence.

Learning stages Learning stages refers to degrees of meta-competency. These are categorized into learning stages I-IV.

Macro-tier The macro-tier of a system describes the system level of a system; a macro-tier "abstracted" from a micro-tier. The system "water" is described at a macro-tier by system properties such as wet or liquid.

Macro-structure The macro-structure of a system comprises all emergent system properties. For the system "water", the system property "wet" belongs to the macro-structure. For the system "organization", culture belongs to the macro-structure.

Management Management is a social technology, which develops models and theories for designing and leading social organizations, and applies these as social techniques.

Meme Memes are specific pieces of information that act as replicators of information by means of variation, selection and heredity, and are drivers of information evolution. Values or beliefs are memes.

Meta-competency Meta-competency means perceiving and categorizing the characteristics of one's own personality, that of communication partners and that of organizations, masterfully along the respective mindsets. This means that not only is behavior observed but also the context in which this behavior is shown, and the related manifestations of higher levels of logic. It also means, if necessary, removing yourself (mentally) from the respective system and observing the system from an external perception position (meta-perception position).

Meta-program Meta-programs are person-specific perception filters. They are structures and patterns of our personality that determine our thoughts and actions. They determine to a great extent, how we distort, obliterate and generalize information. The most important meta-programs are facets in MBTI dimensions.

Method A method is a planned process that when applied in a certain context, results in the solution of theoretical and practical tasks. Methods are derived from one or several models and related theories.

Micro-tier The micro-tier of a system describes elements and their interactions. The system "water" (in a pail) consists at the micro-tier, of water molecules and their interactions.

Mindset A mindset is a set of characteristics that a person or an organization has at all logical levels of the Dilts Pyramid. For individuals, it is thus a model of inner attitude, the personality. For organizations, the prevailing mindset is culture.

Model A model is a representation of actuality. Models are often components of a theory.

Motivational scheme A motivational scheme is behavior that satisfies one of our basic needs.

Motive A motive is the name for a collection of motivational schemes, which have a high level of similarity.

Neuroleadership Neuroleadership is the design of an individual working environment, according to an employee's four basic needs. A manager, will therefore need to apply different organizational and personnel management measures.

Neurological level Neurological level refers to a level in the Dilts Pyramid. The levels are, from bottom to top: context, behavior, capabilities, values and basic assumptions, identity, belongingness, mission and vision. Logical level is a synonym for this level.

Observation Observations are perceived events and phenomena of actuality. Theories explain observations that are made in actuality. Observations relate to specific segments of actuality, these segments are consciously designed in experiments (trials).

Order parameter An order parameter is a system parameter, which induces and characterizes an emergent macro-state.

Organization An organization is a social system consisting of a group of people who share a common purpose and use common resources.

PDCA PDCA refers to a cycle of Plan-Do-Check-Act:

"Plan" is the formation of a success factors – success criteria network, followed by the selection and assignment of theories and models for the design of success factors; as well as the formulation of hypotheses on the application and effect of specific aspects of the theories and models in the network of success factors – success criteria. Example: Based on a success factor team, a model is selected for the team setting and a concrete team setting is modeled (a hypothesis is formed). Here, e.g. project type is included.

"Do" means applying the hypothesis. Example: The team is composed in accordance with the team model and in practice, monitored on effectiveness in achieving success criteria.

"Check" means checking network success factors – success criteria. To achieve this, success factors and success criteria are checked for meaningfulness. Furthermore, the theories and models and the derived hypotheses are highly scrutinized.

"Act" making corrections in practice, based on "check". Subsequently, the PDCA cycle leads in a continuous sequence of cycles until the end of the project.

Phenomenon A phenomenon is an event which is observed and associated with actuality.

Phase space The phase space desribes the set of all possible states of a system. Every state of the system corresponds to one point in the phase space. If a temporal dimension is added to the phase space, we speak of a state space.

Practice Practice refers to the context "theory and practice". Practice includes all actions, which are based on mental conceptions. These mental conceptions are based on implicit or explicit theories.

Principle Principles are explicit basic assumptions about actuality and are the basis of models and theories.

Projections Projections are predictions, which are based on models and theories. Projections can include recommendations to act in a certain manner.

Reality Reality describes the world "in itself". We perceive this reality as an impression, as actuality.

Regulation of complexity By regulation of complexity, we mean any modeling of the complexity of a system to influence the complex behavior of the system. For this purpose, well-considered stimuli or interventions to the complex system are exercised. For the social system "project", a system development aims to be in line with the project goal and objectives. There are four categories of regulations: Regulation by shielding in space and time, regulation by forming models and intuition, regulation via targeted mental networking and by social self-organization and regulation by organizational setting parameters, control parameters and order parameters.

Resonant communication Resonant communication exists if dialog partners are able to align their own behavior to that of the perceived mindset of the other partner.

Reward system Reward systems are complex neural processes with strong feelings (of happiness), accompanied by neurotransmitters and neuromodulators like serotonin and dopamine, amongst other things.

Self-organization Self-organization creates, under certain conditions (setting, control and order parameters) and through the interaction of system elements on the micro-level, emergent properties on a macro-tier. The consequence of a self-organizing process is an ordered pattern, collective behavior or a new structure.

Self-referentiality Self-referentiality refers to the ability of a system to create a reference for itself, in order to distinguish it from its environment. The ability for self-referentiality is an important precondition for self-organization.

Sense Creating sense, refers to establishing meaningful connections to one's past, to one's present and to one's future.

Social Technologies Social Technologies (STs) are comprised of a set of social techniques.

Social techniques Social techniques are practical tools, based on theories and models, with the purpose of organizing people towards a goal or a vision.

Stakeholder Stakeholder refers to all persons, parties or groups interested in a particular project. They are the ones who "are at stake".

Stakeholder Management Stakeholder management identifies, supervises and proactively organizes, the chances and risks related to the stakeholders, and their interactions, for the sake of the project.

State State denotes the entirety of all observed properties of an object at a specified point in time and space. A state is therefore not static, but characterized by dynamics.

Success factors Success factors are factors that influence success criteria. The design of success factors, such as team composition or leadership, is made by theories and models, and is continually monitored in a PDCA cycle.

Success criteria Success criteria are the criteria by which a stakeholder measures the success of a project. Success criteria cannot be directly influenced.

Synergetics Synergetics is the theory of self-organization, which is applied in physics, biology, chemistry, psychology and sociology. The theory relies on the so called "formalism of master-equation".

System A system is an aggregate of elements, which relate in such a way to each other, that they can be thought of as purpose-, goal- or task-oriented unity, and in that regard, distinguishes itself from its environment. Models and methods are purpose-, goal- or task-oriented perspectives on the practice of a sytem.

Systemic project management Systemic project management refers to a project management style, which focuses on a systemic perspective. This dominant role of a systemic perspective, is supported by the fact that complex systems can be characterized by a micro-tier and a macro-tier. The micro-tier is the level of single elements or agents in the system. The macro-tier is the level of emergent structures. Systemic project management therefore, sheds light on the following questions: Which interactions exist between micro- and macro-tier? Which manifestations of the micro-tier lead to which manifestations of the macro-tier? Which manifestations of the macro-tier lead to which manifestations of the micro-tier? Which techniques of intervention exist on both micro- and macro-tiers, in order to influence the system in a goal-oriented way?

Target hierarchy Target hierarchy refers to the 3-tier model of the Collective Mind scheme: Goal-tier, What-tier and How-tier.

Theory A theory designs an image of reality or actuality.

A theory consists of one or more models, and attempts to explain observations made in actuality. Here the theory is supposed to satisfy certain quality criteria: falsifiability, auditability, consistency, fertility, operationalizability. The theory not only enables an explanation of the narrow span of observation, but also creates projections about actuality. It enriches human insight, which contributes to an extension of our knowledge.

Thesis A thesis is an assertion which requires proof.

Trajectory A trajectory relates to the sequence of all states, which describe the development of systems, with reference to an initial point in time and space.

Transformation management Transformation management is an organizational change work, when most of the starting point is known, however, the goal and the path from source to destination is unknown and open. The transformation agent acts primarily as a coach who accompanies organizational transformation through systemic interventions

Transition management Transition management is organizational change work where the starting point and the goal are known or defined, but the route from the starting point to the goal is unknown and open. The transition agent acts primarily as an advisor who specifies guidelines for the system, but in accordance with those, leaves a lot of freedom.

Typology A typology is a "typecast" for a certain field of application and often involves simplification. Fields of application are, for example, personality type and projects. Initially, with personality type models, the term typology was understood as an expression of polarized personality preferences: for example a person would thereafter be an extrovert or introvert (e.g. two poles). Today, we know that our personality "types" are based on continua. For example, every person shares both extrovert and introvert attributes. We apply the term typology in accordance with this insight and therefore deviate from the historically shaped understanding, even when we frequently use the term "type" in explanations and descriptions for the sake of simplicity.

Variety Variety describes the quantity of states of a system, either on the micro-tier or the macro-tier.

Values Values, value ideas or ideals are based on processed experience and are generalized, emotional guidelines for regulating complexity. Values are personal, organizational or social benchmarks for social action and are the foundation of the cohesion and further development of a society. Values can function as order- and control parameters. Examples: Love, Friendship, justice, duty, discipline, loyalty, integrity, human dignity, solidarity, liberty, tolerance...

Value-creating complexity Value-creating complexity exists if "the whole is more than the sum of its parts". A value-creating social complexity exists, if connections within the team or the organization result in communication processes which make "the whole more than the sum of its parts".

Value-destroying complexity Value-creating complexity exists if "the whole is less than the sum of its parts". A value-destroying social complexity exists, if connections within the team or the organization cause communication processes which make "the whole less than the sum of its parts".

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