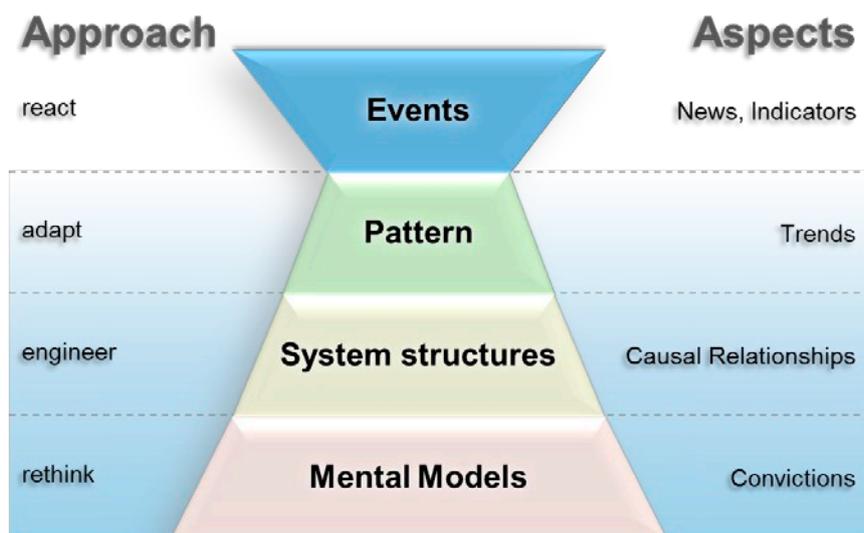


System Levels

System Levels is a model for discussion on systems. The iceberg based on Peter Senge serves as a metaphor. Above the water surface the visible incidents are found, i.e. the events that are visible to everybody. Under water are lying levels of views that on one hand represent reaction approaches and on the other hand contain aspects that enable solutions. Each system level needs a certain response time - the deeper the longer. The sustainability of the effect increases with the depth of the level, e.g. after the development of convictions, they function for a long time and can only be changed again with huge efforts. The conscious selection of the system level simplifies the solution and accelerates realization by concentrating on the specific level.



The individual system levels become more complex, the deeper they are. This leads to bigger efforts for the description and task realization.

- Event**
 Events are news and indicators that occur and are documented. The objective description consists of visible facts, e.g. description (which), time (when, how often, which intervals), a cause (trigger), effect (result). Spontaneous solutions can be defined here, if they are not present yet. Crisis plans describe immediate reactions for anticipated crisis situations. On this level fast reactions are required without understanding the deeper mechanisms of the system (Black Box).
- Pattern**
 Patterns are trends that develop within a defined time. Usually they illustrate ideal distribution and can be assigned to models (Kondratiev-wave, Hype-cycle) or systems archetypes (e.g. escalation, growth). These patterns are the basis for experience-based adjustments. Due to the behavior-over-time adaption steps are available, which can affect the trend as desired. On this level the determination of patterns needs a certain time, e.g. events have to be collected and evaluated for the determination of behavior-over-time in the first step. The system is not yet understood, but an experience-based reaction is possible.
- System structure**
 System structures describe causes and effects. These can be analyzed with the help of the systems archetypes and potential solution approaches may be derived. If there are several causal loops it is called system model. The development of a system model and its analysis need much time, because the participants have to model, analyze and discuss the events to eventually derive measures. On this level the system is considered for the first time, i.e. common understanding is reached that creates starting points that enable a fundamental improvement of the system behavior.



Felt is not recognized; recognized is not thematized; thematized is not drafted; drafted is not formulated; formulated is not perceived; perceived is not understood; understood is not agreed; agreed is not done; done is not known.

- **Mental model**

Mental models are all convictions that affect the participants and their actions, i.e. values, strategies (vision, mission, critical success factors, strength weaknesses/ opportunity risks, strategic direction, strategic goals), assumptions, expectations and personal meta-programs. The system model, as a description of the reality, gets from the mental models the underlying explanation of the situation. The study of mental models needs most of time, since it concerns fundamental attitudes of each participant. To determine and formulate these hard to seize aspects as well as to finally realize the approaches for rethinking goes far beyond the duration of a single project. It requires usually an overall organizational development.