



## Practical Foresight Guide

### Chapter 11 - Foresight Glossary

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## 11.0 Foresight glossary

- Actor: any stakeholder (person, group or organization) that can affect a system under study.
- Action research: comparative research on the conditions and effects of various forms of social action and research leading to social action
- Action science: one of the major theories within action research and designed to generate knowledge that is both theoretically valid and practically useful
- [Act\(ion\)](#): something done or performed.
- Adversarial collaboration: techniques) for adversaries to find mutual benefit and to agree to act in concert.
- [Alert](#): alarm or warning.
- Allhistory: a history of what might have been
- [Alternate future](#): a possible future that may or may not ever come to pass.
- [Alternative futures](#): see scenario.
- [Alternative history](#): a subgenre of speculative fiction that is set in a world in which history has diverged from history as it is generally known.
- [Ambiguity](#): communication interpreted in more than one way.
- [Analogy](#): the cognitive process of transferring information from a particular subject (the analogue or source) to another particular subject (the target).
- [Analysis](#): examine in detail in order to discover meaning.
- [Analytical hierarchy process](#): structured technique for helping people deal with complex decisions.
- [Anticipation](#): forethought.
- Anticipatory action learning (AAL): a method that develops a unique style of questioning the future with the intent to transform organization and society.
- AQAL: stands for "all quadrants all levels", Ken Wilber argues that manifest reality is comprised of four domains, and that each domain, or "quadrant" has its own truth-standard, or test for validity. See Integral Futures.
- Archetype: common system structures that produce characteristic patterns of behaviour.
- Argument mapping: method to put a single hypothesis through a rigorous and step-wise test.
- [Assumption surfacing](#): reveals the underlying assumptions of a policy or plan and helps create a map for exploring them.
- Autopoiesis: expresses a fundamental dialectic between structure and function
- [Baby-boomer](#): a person who was born during the post-World War II baby boom between 1946 and the early 1960s.
- [Backcasting](#): working backwards from a vision to the present day.
- [Balanced feedback loop](#): a stabilizing, goal-seeking, regulating feedback loop, also known as a "negative feedback loop".
- [Bellwether](#): any entity in a given arena that serves to create or influence trends or to presage future happenings.

- [Benchmarking](#): a process in which organizations evaluate various aspects of their processes in relation to best practice, usually within their own sector.
- [Bounded rationality](#): the logic that leads to decisions or actions that make sense within one part of the system but are not reasonable within a broader context or when seen as part of a wider system.
- [Bibliometrics](#): a set of methods used to study or measure texts and information.
- [Brainstorming](#): intensive discussion method to solve problems or generate ideas.
- Business model: defines the architecture of an organization ... expansion paths develop from there on out.
- [Butterfly effect](#): encapsulates the more technical notion of sensitive dependence on initial conditions in chaos theory. Small variations of the initial condition of a dynamical system may produce large variations in the long term behavior of the system.
- [Causal attribution](#): a necessary relationship between one event (called cause) and another event (called effect) which is the direct consequence (result) of the first.
- Causal layered analysis (CLA): a method for examining the causes of social change that produces forecasts as to the future course of those changes.
- [Causal loop diagram](#) (CLD): a diagram that aids in visualizing how interrelated variables and feedback loops affect one another without distinguishing between the natures of the interconnected variables
- [Causal models](#): techniques used as a means to inquire into the causes of social phenomena and to generate a set of forecasts as to the future course of the phenomena.
- Causality. Relationships represented in cognitive maps and oval maps by an arrow where the arrow should be read as "leads to."
- Cause and effect analysis: identifies the root cause of a problem as distinct from the symptoms.
- [Change agent](#): actor, influencer.
- [Change management](#): to make or become different by systems engineering.
- [Chaos](#): complete disorder, utter confusion.
- [Chaos theory](#): describes the behavior of certain dynamical systems - that is, systems whose state evolves with time - that may exhibit dynamics that are highly sensitive to initial conditions (popularly referred to as the butterfly effect).
- Chronology: sequenced events or actions in the order they occurred; see timeline.
- [Citation analysis](#): the examination of the frequency and pattern of citations in articles and books.
- [Citizen panels \(juries\)](#): virtual or conference-based activity to uncover public concerns on critical issues.
- Concept fan: method to create a lot of creative solutions in a logical manner to see the bigger future.
- Cognitive bias: the human tendency to make systematic errors in certain circumstances based on cognitive factors rather than evidence
- Cognitive map: a mind map that represents the perspectives and inputs of an individual. Typically used to clarify or to communicate thinking
- Cognitive psychology: focuses primarily on human perception and cognition

- Cognitive science: used to describe the study of intelligence and is closely related to cognitive psychology but includes the use of algorithms to simulate behaviour in computer simulation and is closely related cybernetics
- Cohort: a group of subjects with a common defining characteristic - typically age group.
- Competing hypotheses: a method to identify and refute all hypotheses arguments.
- Concept map: a mind map that represents the perspectives and inputs of multiple individuals
- Conjecture: a mathematical statement which appears likely to be true, but has not been formally proven to be true under the rules of mathematical logic. A statement based on inference and presumed to be real, true, or genuine though based on inconclusive grounds as opposed to a hypothesis, which is a testable statement
- Constructive technology assessment: studies the process of technological change.
- Content analysis: (sometimes called textual analysis) a standard methodology in the social sciences for studying the content of communication.
- Correlation: indicates the strength and direction of a linear relationship between two random variables.
- Co-incident indicator: an indicator that reflects changes happening in the present.
- Collaboration: to work with another or others on a joint project.
- Complexity: used to characterize something with many parts in intricate arrangement.
- Concept map: a mind map reflecting a single individual's thoughts
- Convergence: the blending of culture and ideas into a single product.
- Context analysis: see Environmental Scanning.
- Commentator: classifies commentators by whether their focus is on far, medium, or near term horizon.
- Complexity theory: the study of complex systems.
- Correlation: indicates the strength and direction of a linear relationship between two random variables.
- Critical technologies: evaluates the future impact and potential of super new and emerging technologies.
- Cross-impact analysis: analyses of conditional probabilities of events or issues and their impact on each other.
- Complexity manager: technique for assessing the likely outcome of a policy or strategy and to identify ways to manage risk and seize opportunities.
- Concept map: visual representations of how people perceive an interest topic.
- Cost-benefit analysis: a term that refers both to:
  - a formal discipline used to help appraise, or assess, the case for a project or proposal, which itself is a process known as project appraisal; and
  - an informal approach to making decisions of any kind.
- Counter-factual: seeks to explore history and historical incidents by means of extrapolating a timeline in which certain key historical events did not happen or had an outcome which was different from that which did in fact occur
- Counter-intuitive: counter to normal expectations.

- Creeping normalcy: refers to the way a major change can be accepted as normality if it happens slowly, in unnoticed increments, when it would be regarded as objectionable if it took place in a single step or short period
- Deception detection: a checklist method used in counter-intelligence.
- Decision: judgement, conclusion, verdict. The act of making up one's mind.
- Decision analysis: the discipline comprising the philosophy, theory, methodology, and professional practice necessary to address important decisions in a formal manner.
- Decision matrix: technique for determining trade-offs between competing choices.
- Decomposition: Breaking down a forecast into its component trends.
- Delphi method: a systematic, interactive forecasting method which relies on a panel of independent experts.
- Devil's Advocate: a technique to take a counter position against an offered decision or hypothesis.
- Diachronic: viewing the past through events or narrative to look for causes of change in history.
- Diagnostic reasoning: methods to apply hypothesis testing to the evaluation of significant new information.
- Diagram: used to represent a visually oriented form of communication, including pictures, drawings, video, causal loop diagrams, matrices, etc., as opposed to verbal, textual, or sentential communication.
- Diffusion: denotes the net motion from an area of high concentration to an area of low concentration.
- Dimensional analysis: a conceptual tool often applied in physics, chemistry, and engineering to understand physical situations involving a mix of different kinds of physical quantities.
- Discontinuity: major shift in a trend that is so drastic it cannot be accounted for by normal variation.
- Divergence: separation of culture and ideas into many products.
- Divination: the art or practice of discovering future events or unknown things the act or state of expecting or the state of being expected.
- Double-loop learning: involves not only recognizing the mismatch between actual and desired states, but also using the mismatch to evaluate and modify mental models and rules involved in determining an action to respond to the mismatch.
- Driving force: a cluster of individual trends on the same general subject moving trends in certain directions, broad in scope and long term in nature (for example, globalization).
- Dynamic equilibrium: the condition in which the state of a stock (its level or size) is steady and unchanging, despite inflows or outflows; this is possible only when all inflows equal all outflows.
- Dynamics: the behavior over time of a system or any of its components.
- Dystopia: any real or imaginary society with many undesirable features.
- Effective connections: comes from the study of nutrient flows in ecosystem food webs and represents the nature of supply of a nutrient.
- Effects: all the linked changes that change it self causes.
- Emerging issue: emerging issues reflect the potential impacts of changes and trends occurring in the wider business or policy context. They are often unclear, complex, and uncertain; may reflect

conflict or differences across values or priorities among different groups; can shift in focus, priority and awareness - from fringe to mainstream - rapidly depending on the context within which they are occurring.

- [Econometrics](#): concerned with the tasks of developing and applying quantitative or statistical methods to the study and elucidation of economic principles.
- [Emerging Issues Analysis](#): seeks to identify trends that have not yet emerged, and may never fully emerge, from the periphery.
- [Endogenous](#): means "arising from within," the opposite of exogenous.
- [Entropy](#): the amount of disorder or randomness present in any system.
- [Environmental impact assessment](#): an assessment of the likely positive and/or negative influence a project may have on the environment.
- [Environmental scanning](#): process of collecting information to carry out a systematic analysis of the forces effecting organizations and identifying potential threats and opportunities with a view to generating future strategies.
- [Episteme](#): the "apparatus" which makes possible the separation, not of the true from the false, but of what may be from what may not be characterised as scientific.
- [Ethnography](#): a genre of writing that uses fieldwork to provide a descriptive study of human societies.
- [Event](#): something happening in the internal or external organizational environment which can be observed and tracked; usually documented as a "scanning hit".
- [Event sequence analysis](#): study of repetition in historical events
- [Evolutionary development](#): a field of biology that compares the developmental processes of different animals and plants in an attempt to determine the ancestral relationship between organisms and how developmental processes evolved.
- [Exogenous](#): see Endogenous.
- [Expectancy](#): something expected especially on the basis of a norm or an average.
- [Expert](#): knowledgeable person.
- [Expert panel](#): a committee or jury used to decide some matter.
- [Exploratory futures](#): futures research into plausible futures without consideration of desirability
- [Extrapolation](#): extending a trend into the future by assuming the variables will continue to behave as they have in the past.
- [Facta](#): events that have occurred and are knowable, as opposed to the future that is unknown and unknowable.
- [Failure mode](#): procedure for analysis of potential failure modes within a system for the classification by severity or determination of the failure's effect upon the system.
- [Feedback](#): a process whereby some proportion of the output signal of a system is passed (fed back) to the input.
- [Feedback loop](#): the mechanism (rule or information flow or signal) that allows a change in a stock to affect a flow into or out of that same stock.
- [Field Anomaly Relaxation Method](#): identifies key drivers for change and produces a set of possible future states.

- [Flow](#): material or information that enters or leaves a stock over a period of time.
- [Focus group](#): a form of qualitative research in which a group of people is asked about their attitude towards a product, service, concept, advertisement, idea, or packaging.
- [Folksonomy](#): unstructured and uncontrolled arrangement of things using no classification system other than by the self-interested user.
- [Force-field analysis](#): provides a framework for looking at the factors (forces) that influence a situation, originally social situations.
- [Forecasting](#): an estimate/best guess of what might happen in the future but not a definitive prediction
- Foreknowledge: knowledge of an event or thing before it exists, prescience.
- [Foresight](#): knowledge or insight gained by looking into the future, perception of the nature of events before they occur
- Futura: events that have not yet occurred and are unknowable, as opposed to the past that has occurred and is knowable
- [Future](#): the time yet to come.
- Futures: routinely refers in the plural, as futures to emphasise the multiplicity of possible futures.
- [Future history](#): a postulated history of the future that some science fiction authors construct as a common background for fiction.
- Future present: the present-day of the future any image describes, or the future considered as if we were living in it now, with our present its past.
- [Future shock](#): too much change in too short a period of time.
- [Future studies](#): the systematic exploration of the future.
- Futures thinking: see Futurology.
- [Futures workshop](#): enables a group of people to develop new ideas or solutions of social problems.
- [Futures wheel](#): an instrument for graphical visualization of direct and indirect future consequences of a particular change or development.
- Futuring: the act, art, or science of identifying and evaluating possible future events. see Futurology.
- [Futurist](#): a person who engages in a great deal of futuring or otherwise demonstrates a serious rational or scientific concern for the future.
- Futuristics: see Futurology.
- [Futurology](#): the study of the future postulating possible, probable, and preferable futures.
- Futuribles: see Futurology.
- Game changer: refers to events and actions that change the game
- [Gaming](#): participation in particular kinds of future orientated games.
- Genius forecasting: see Technology Forecasting.
- [GenX](#): term used to describe generations in many countries around the world born from 1965 to around 1982.
- GenY: refers to a specific cohort of individuals born from around 1981-2001
- [Gestalt](#): a German word for form or shape. It is used in English to refer to a concept of "wholeness".



- Heuristic: a useful mental shortcut, an approximation, or a rule-of-thumb for guiding searches and enabling adaptive decision-making and thinking.
- [Hierarchy](#): systems organized in such a way as to create a larger system; subsystems within systems.
- Hindsight: the opposite of foresight.
- High Impact/Low probability: an analysis to determine white (opportunistic) and black (threat) spaces and to seek pre-emptive solutions.
- Historic analogy: using past events to create similar mental images of an updated potential future.
- Holon: a system that contains other systems, and is itself contained within a larger system.
- Horizon scanning: the initial and continuing process of reviewing and analysing current literature, web sites, and other media to identify and describe noteworthy trends and their possible development and future.
- Hypotheses: possible explanation of the past, current or future.
- Hypothesis generation: a technique to discover all possible hypotheses.
- Image of the future: an imaginary description (in any format or media) of a possible future outcome for a given item of interest: a person, a community, an organization, nation, society, bioregion, planet, etc.
- Impacts: See Environmental scanning.
- Incasting: living in a particular future scenario, and working through its implications.
- Indicator: a phenomenon that can be tracked periodically to spot change.
- Indicator validator: a tool to easily assess the diagnostic power of indicators.
- Influence diagram: a graphical rendition of factors in a problem or situation, including arrows and signs (+ or - for polarity) to show the relationship between them. Similar to causal loop diagram but follows slightly different conventions.
- [Industry](#): organized economic activity.
- [Innovation](#): refers to both radical and incremental changes in thinking, in things, in processes, or in services.
- [Innovation stage](#): tracks the line of progress of an innovation from the creation of an idea to its development.
- [Input-output model](#): uses a matrix representation of a nation's (or a region's) economy to predict the effect of changes in one industry on others and by consumers, government, and foreign suppliers on the economy
- [Insight](#): an observation or manifestation of change.
- [Institutional analysis](#): that part of the social sciences which studies how institutions, i.e., structures and mechanisms of social order and cooperation governing the behavior of two or more individuals, behave and function.
- [Interview](#): a conversation between two or more people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee.
- [Integral futures](#): seeks a comprehensive understanding of humans and the universe by combining, among other things, scientific and spiritual insights.

- Interesting future: involves enough uncertainty that the future cannot be readily inferred or predicted with any confidence.
- Intimation: hint, suggest, proclaim, make known.
- [Issue trees](#): logical structuring of issues.
- Judgemental forecasting: Making a numerical forecast using expert judgement or intuition. See Forecasting.
- [Kondratiev wave](#): regular, sinusoidal cycles in the modern (capitalist) world economy.
- Key assumptions check: systematic technique for questioning assumptions.
- Lagging indicator: an indicator that reflects warnings that have already occurred.
- [Law of diminishing/accelerating returns](#): in a production system with fixed and variable inputs (say factory size and labour), beyond some point, each additional unit of variable input yields less and less additional output. Conversely accelerating returns exhibits the opposite effect.
- Leading indicator: an indicator that reflects early warnings of change.
- [Lead time](#): the period of time between the initiation of any process of production and the completion of that process.
- Level: a term used for what is now more commonly referred to as a stock.
- [Lifestyle](#): the way a person lives.
- [Likelihood](#): probability.
- [Limiting factor](#): a necessary system input that is the one limiting the activity of the system at a particular moment.
- [Limits to Growth](#): a book modeling the consequences of a rapidly growing world population and finite resource supplies.
- Linear relationship: a relationship between two elements in a system that has constant proportion between cause and effect and so can be drawn with a straight line or graph. The effect is additive.
- [Literature review](#): a body of text that aims to review the critical points of current knowledge on a particular topic.
- Macrohistory: see Social cycle theory.
- Manifestation: see Insight.
- Maturity: development stage of an idea, issue etc. ranging from an immature new-born or newly emergent state to a highly mature condition of senescence.
- [Media type](#): formats of resources.
- Megatrend: a widespread (i.e., more than one country) trend of major impact, composed of sub-trends which in themselves are capable of major impacts.
- Metaphor: the concept of understanding one thing in terms of another.
- [Modeling](#): system representation of indicative relationships allowing for hypothesis testing.
- Mission: brief description of a company's fundamental purpose. A mission statement answers the question, "Why do we exist?"
- Mitigation analysis: see Risk Management.
- [Monitoring](#): continuous (or on-going) observation of certain aspects of something.
- [Morphological box](#): multi-dimensional, non-quantifiable problems where causal modeling and simulation do not function well or at all.

- [Multi-Criteria Decision Analysis](#): a discipline aimed at supporting decision makers who are faced with making numerous and conflicting evaluations.
- [Narrative analysis](#): making meaning out of fragmented, user-generated, and shared information.
- Negative feedback: a form of circular causality within a causal loop where the impact of an increase of one element in the loop feeds back through the loop such that the traced impact results in a decrease of the variable that began the chain.
- Network analysis: maps associations between people, organizations or other entities.
- Nightmare (scenario): an image of the future which articulates an individual's or group's greatest concerns, worries, and fears, in a negative statement of a highly feared future outcome.
- Nominal Group Technique: A form of brainstorming that presents ideas one at a time in round robin fashion.
- Non-linear relationship: a relationship between two elements in a system where the cause does not produce a proportional (straight-line) effect.
- [Normative](#): generically, it means relating to an ideal standard or model. In practice, it has strong connotations of relating to a typical standard or model.
- Normative futures: refers to futures research which involves consideration of the desirability of the outcome and typically involves planning and proactive action to achieve more desirable outcomes.
- No Surprise Future: used to refer to a future in which past patterns and relationships continue.
- Observation: see Insight.
- [Organizational network analysis](#): a method for studying communication networks:
- [Organizational storytelling](#): development of evocative narratives to convey core messages.
- Outside-in thinking: technique that broadens thinking by looking at an issue from an external perspective.
- Oval Map: a mind map developed by a group and is the equivalent of a concept map. An oval map differs from a cognitive map in that it represents group insights as opposed to those of an individual.
- [Paradigm shift](#): a pattern or model change.
- [Path dependence](#): means simply "history matters" - a broad conception - while others use it to mean that institutions are self-reinforcing - a narrow conception.
- [Pattern](#): a theme of reoccurring events or objects sometimes referred to as elements of a set. These elements repeat in a predictable manner.
- [Pattern language](#): a structured method of describing good design practices within a field of expertise.
- Penetration: the proportion of the total number of potential purchasers of a product or service who are either aware of its existence or actually buy it.
- [PEST analysis](#): stands for "Political, Economic, Social, and Technological analysis" and describes a framework of macro-environmental factors used in environmental scanning.
- Picture of the future: a mental image or vision of tomorrow and beyond.
- [Plan\(ning\)](#): a detailed scheme or a method.
- Polling: voting systems.

- Positive feedback: a form of circular causality within a causal loop where the impact of an increase of one element in the loop feeds back through the loop such that the traced impact results in an increase of the variable that began the chain.
- Possible: a future capable of being achieved.
- Potential: possible but not yet actual future.
- Precursor events: an event necessary for another event to occur.
- Prediction: a specific statement that something will happen in the future
- Prediction market: crowd-based speculation technique to assess probable future outcomes.
- Preferable: preferred or more desirable future.
- Premonition: an intuition of a future, usually unwelcome, occurrence or foreboding.
- Pre-mortem analysis: Identifies and analyses the impact of potential future failure before it occurs.
- Prepared: to make ready or suitable in advance.
- Presentiment: a sense of something about to happen.
- Primary/secondary/tertiary effects: order of magnitude ripple effects on a system.
- Priority: right of precedence over others, something given specific attention.
- Pros-cons: technique for evaluating policy ideas.
- Probable: likely to be or to happen future but not necessarily so.
- Probable futures: tends to be associated with the concept of "the most probable future".
- Probability: the likelihood or chance that something is the case or will happen.
- Process mapping: a consistent graphical representation of how a system or process works.
- Prognosis: term denoting a prediction of how a problem will progress, and whether there is chance of recovery.
- Project management: discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals.
- Projection: a forecast developed by assuming that a trend will continue into the future.
- Policy outcomes forecasting model: technique for estimating the impact of future political change.
- Prospective evaluation: Evaluating the success of a project that hasn't yet begun.
- Quadrant crunching: a systematic process for determining all feasible combinations between several sets of variables.
- Qualitative: qualitative research, featuring a high degree of subjectivity
- Quantitative: an attribute that exists in a range of magnitudes, and can therefore be measured.
- Quantitative scenarios: allows users to input alternative assumptions to generate alternative results.
- Rate: used for what is now more commonly referred to as a flow.
- Red Hat analysis: technique for playing the role of others to identify new opportunities and risks.
- Red Team analysis: a team-based technique for challenging conventional wisdom.
- Regional potential: analyses change by both physical and virtual zonal impacts.
- Reframing: Considers a situation or problem in a different way, or from a different point of view, often using multiple perspectives.
- Reflexivity: an act of self-reference where examination or action "bends back on," refers to, and affects the entity instigating the action or examination.

- [Reinforcing feedback loop](#): an amplifying or enhancing feedback loop, also known as a "positive feedback loop" because it reinforces the direction of change; these are vicious cycles and virtuous circles.
- [Relevance tree](#): an analytical technique that subdivides a large subject into increasingly smaller subtopics.
- [Requirements analysis](#): encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product, taking account the possibly of conflicting requirements of the various stakeholders.
- Resilience: the ability of a system to recover from perturbation; the ability to restore or repair or bounce back after a change due to an outside force.
- [Risk](#): issues which may develop, or which already exist that are difficult to quantify and may have a high potential impact. Issues marked by a high degree of uncertainty; even basic information, which would help adequately assess the frequency and severity of a given risk, is often lacking. Such risks can occur as a result of economic, technology, sector specific, social changes, etc.
- [Risk management](#): a structured approach to managing uncertainty related to a threat, through a sequence of human activities including: risk assessment, strategies development to manage it, and mitigation of risk using managerial resources. Risk is a concept that denotes the precise probability of specific eventualities. Technically, the notion of risk is independent from the notion of value and, as such, eventualities may have both beneficial and adverse consequences; however, in general usage the convention is to focus only on potential negative impact to some characteristic of value that may arise from a future event. Risk can be defined as "the threat or probability that an action or event will adversely or beneficially affect an organization's ability to achieve its objectives".
- Roadmapping: a graphic representation showing key components of how the future might evolve. Usually applied to a new product or process, or to an emerging technology matching short and long term goals with specific solutions.
- Role playing: Acting out a future scenario.
- Run chart: a visual display of data that enables monitoring of a process to determine whether there is a systematic change in that process over time.
- Satisficing: describes a form of bounded rationality for making a choice from an unknown set of options.
- Scanning: see Environmental scanning.
- Scatter diagram: a graphic display of data plotted along 2+ dimensions. Scatter diagrams are used to rapidly screen for a relationship between variables.
- [Scenario](#): a predicted sequence of events that might possibly occur in the future.
- [Scenario planning](#): a strategic planning method that some organizations use to make flexible long-term plans.
- Self-critique: Team based technique to identify weaknesses in hypotheses.
- [Self-fulfilling prophecy](#): a prediction that directly or indirectly causes itself to become true.
- Self-organization: the ability of a system to structure itself, to create new structure, to learn, or diversify.

- [Sigmoid curve \(S-curve\)](#): a curve where the rate of growth accelerates to a maximum and then slows.
- Shifting dominance: the change over time of the relative strengths of competing feedback loops.
- Signal strength: measure of incitement to action.
- Single-loop learning: describes control behaviour wherein the gap between the desired condition and actual results in action but without any examination or reconsidering of the mental models underlying the action.
- [Simulation](#): imitation of some real thing, state of affairs, or process.
- [Social change](#): examines change from the perspective of individual needs.
- [Social cycle theory](#): argues that events and stages of society and history are generally repeating themselves in cycles.
- [Social network analysis](#): views social relationships in terms of nodes and ties.
- Solution effect analysis: a structured method of checking the knock-on effects of possible futures.
- Source: the point or place from which something originates.
- Stakeholder analysis: connecting the dots and ranking the influence and power of stakeholders over each other.
- Starbursting: a form of brainstorming that focuses on question generation rather than ideas or answers.
- [State of the Future Index](#): a measure of the ten-year outlook for the future.
- [Statistical methods](#): investigate causality and in particular to draw a conclusion on the effect of changes in the values of predictors or independent variables on dependent variables or response.
- Stock: an accumulation of material or information that has built up in a system over time.
- [Strategy](#): the art or science of planning.
- [Strategic foresight](#): the planning that results when future thinking is applied to existing, real-world situations.
- Structured debate: A courtroom style argument that takes alternative views and presents arguments and counter arguments to a decision or hypothesis.
- Sub-optimization: the behavior resulting from a sub-system's goals dominating at the expense of the total system's goals.
- [Sustainability](#): a characteristic of a process or state that can be maintained at a certain level indefinitely. The term, in its environmental usage, refers to the potential longevity of vital human ecological support systems, such as the planet's climatic system, systems of agriculture, industry, forestry, fisheries, and the systems on which they depend.
- Surprise: a gap that arises suddenly between peoples' perceptions and expectations of a situation.
- [SWOT analysis](#): acronym and technique to evaluate (s)trengths, (w)eaknesses, (o)pportunities and (t)hreats.
- [Synchronicity](#): the experience of two or more events which occur in a meaningful manner, but which are causally un-related. In order to be "synchronistic," the events must be related to one another temporally, and the chance that they would occur together by random chance must be very small.

- Synectics: more demanding method of Brainstorming that drives out actions rather than just ideas.
- Synergy: the behaviour of whole systems unpredicted by the behaviour of their parts.
- System: a set of elements or parts that is coherently organized and inter-connected in a pattern or structure that produces a characteristic set of behaviors, often classified as its "function" or "purpose".
- Systems analysis: characterises and links systems and properties into a coherent whole.
- System sciences: refers to the collective disciplines that study systems and system-related phenomena and their associated knowledge base, including such sciences as biology, cybernetics, electrical engineering, evolutionary ecology, mathematical biology.
- System dynamics: an approach to understanding the behavior of complex systems over time using quantitative modeling.
- Systems thinking: a framework that is based on the belief that the component parts of a system will act differently when the system's relationships are removed and it is viewed in isolation.
- Systems theory: represents the conceptual framework of system-related principles, theorems, and logic from across the system sciences.
- Taxonomy: structured, semantic arrangement of things using deterministic, rule-based classification systems.
- Technology acceptance model: an information systems theory that models how users come to accept and use a technology.
- Technology assessment: Systematic method for exploring future technology developments and assessing their potential societal effects
- Technology forecasting: potential characteristics of technology, such as levels of technical performance.
- Technology road-mapping: road-mapping aids planning and placing products with the use of scientific and technological resources.
- Technology sequence analysis: statistical combination of estimates of the time required to achieve intermediate technological steps.
- Terminal scenario: an end state from which there is no perceived future change.
- Time-frame: the period of time that one is assuming for the purposes of decision making and planning.
- Timeline: chronological ordering of a sequence of events.
- Time series: a sequence of data points, measured typically at successive times, spaced at (often uniform) time intervals.
- Time series analysis: methods that attempt to understand such time series, often either to understand the underlying context of the data points (where did they come from? what generated them?), or to make forecasts (predictions)
- TINA: (T)here (i)s (n)o (a)lternative.
- Trend: general tendency or direction evident from past events increasing or decreasing in strength of frequency of observation; usually suggests a pattern.
- Trend impact analysis: collecting information and attempting to spot a pattern, or trend, and assess its influence from the information.



- Trend extrapolation: using the past and present to project likely tomorrows.
- Triple-loop learning: describes three single-loops of learning, each involving a different center of learning. The three center's relate to the three questions "Are we doing the things right, and are we doing the right things, and is rightness buttressed by mightiness and/or mightiness buttressed by rightness".
- TRIZ: a methodology, tool set, knowledge base, and model-based technology for generating innovative ideas and solutions for problem solving.
- Turbulence: refers to the variation in the nature and frequency of events, disturbances, and developments that impact upon a system. The events and disturbances of concern may arise within the area of study or in the external environment and includes such things as seasonal.
- Uncertainty: state of having limited knowledge where it is impossible to exactly describe an existing state or future outcome, or more than one possible outcome.
- Unpresaged: something that portends or foreshadows a future event; an omen, prognostic, or warning indication.
- Unprepared: not ready or suitably in advance.
- Urgency: requiring speedy or compelling action.
- Utopia: any real or imaginary society with many desirable features.
- Value: a basic belief in what is good and true, values can be seen as desirable qualities.
- Variable: a quantifiable subject of study, the value of which can change over time.
- Variation: a difference in a systems behaviour resulting from external influences.
- Visioning: a vivid mental image produced by the imagination.
- Visualise: to form a mental image.
- Volatility: a measure of the state of instability.
- Weak signal: the sources of change - the first case; the original idea or invention; the watershed event; the social outliers expressing a new value.
- WhatIf?: An analysis of unlikely events that could happen.
- Wild card: an unpredictable event or situation. Events that have a low probability but a high impact. Often recognized and known, but discounted, even when the event is relatively certain over a period of years.
- Wind tunnelling: testing chosen objectives against alternative futures.
- Worldview: the framework of ideas and beliefs through which an individual interprets the world and interacts with it. How one sees the world and makes meaning of what is seen; also influences what one ignores or doesn't see when scanning.
- Zeitgeist: the spirit of the age.
- Zero-sum game: describes a situation in which a participant's gain or loss is exactly balanced by the losses or gains of the other participant(s).