



EIILM UNIVERSITY
S I K K I M

CHANGE MANAGEMENT

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Chapter 1

Introduction to Change Management

Change management is an approach to transitioning individuals, teams, and organizations to a desired future state. In a project management context, change management may refer to a project management process wherein changes to the scope of a project are formally introduced and approved.

History

Everett Rogers wrote the book *Diffusion of Innovations* in 1962. There would be five editions of the book through 2003 - during which time the statistical study of how people adopt new ideas and technology would be documented over 5000 times. The scientific study of hybrid corn seed adoption led to the commonly known groupings of types of people: Innovators, Early Adopters, Early Majority, Late Majority and Laggards. In 1969, Elisabeth Kubler-Ross wrote the book *On Death and Dying*, which addressed the various stages of grief. In 1974, Daryl Conner founded Conner Partners and in 1993, he wrote the book, *Managing at the Speed of Change*. In this seminal work, Conner penned the analogy "burning platform" based on the 1988 Piper off shore oil rig fire (North Sea off the coast of Scotland). Conner Partners influenced the large Management Consulting firms over the 80s and 90s as firms needed to understand the human performance and adoption techniques to help ensure technology innovations were absorbed and adopted as best as possible.

Linda Ackerman Anderson states in *Beyond Change Management* that in the late 1980s and early 1990s, top leaders, growing dissatisfied with the failures of creating and implementing changes in a top-down fashion, created the role of the change leader to take responsibility for the human side of the change. The first "State of the Change Management Industry" report in the *Consultants News* was published in February 1995.

McKinsey consultant Julien Phillips first published a change management model in 1982 in the journal *Human Resource Management*; though it took a decade for his change management peers to catch up with him. Marshak credits the big 6 accounting firms and management consulting firms with creating the change management industry when they branded their reengineering services groups as change management services in the late 1980s.

In 2010, based on her book "RIMER Managing Successful Change", Christina Dean, Managing Director of Uniforte Pty Ltd, established Change Management as a formal vocation in Australia by writing the Australian National Competency Standards in Organisational and Community Change Management, which led to the developed of the first Australian Diploma of Organisational Change Management, and which is an internationally recognized qualification.

Top-down and bottom-up design

In management and organizational arenas, the terms "top-down" and "bottom-up" are used to indicate how decisions are made.

A "top-down" approach is one where an executive, decision maker, or other person or body makes a decision. This approach is disseminated under their authority to lower levels in the hierarchy, who are, to a greater or lesser extent, bound by them. For example, a structure in which decisions either are approved by a manager, or approved by his or her authorized representatives based on the manager's prior guidelines, is top-down management.

A "bottom-up" approach is one that works from the grassroots—from a large number of people working together, causing a decision to arise from their joint involvement. A decision by a number of activists, students, or victims of some incident to take action is a "bottom-up" decision. Positive aspects of top-down approaches include their efficiency and superb overview of higher levels. Also, external effects can be internalized. On the negative side, if reforms are perceived to be imposed 'from above', it can be difficult for lower levels to accept them (e.g. Bresser Pereira, Maravall, and Przeworski 1993). Evidence suggests this to be true regardless of the content of reforms (e.g. Dubois 2002). A bottom-up approach allows for more experimentation and a better feeling for what is needed at the bottom.

State organization

Both approaches can be found in the organization of states, this involving political decisions. In bottom-up organized organizations, e.g. ministries and their subordinate entities, decisions are prepared by experts in their fields, which define, out of their expertise, the policy they deem necessary. If they cannot agree, even on a compromise, they escalate the problem to the next higher hierarchy level, where a decision would be sought. Finally, the highest common principal might have to take the decision. Information is in the debt of the inferior to the superior, which means that the inferior owes information to the superior. In the effect, as soon as inferiors agree,

the head of the organization only provides his or her “face” for the decision which their inferiors have agreed upon.

Among several countries, the German political system provides one of the purest forms of a bottom-up approach. The German Federal Act on the Public Service provides that any inferior has to consult and support any superiors, that he or she – only – has to follow “general guidelines” of the superiors, and that he or she would have to be fully responsible for any own act in office, and would have to follow a specific, formal complaint procedure if in doubt of the legality of an order. Frequently, German politicians had to leave office on the allegation that they took wrong decisions because of their resistance to inferior experts' opinions (this commonly being called to be “beratungsresistent”, or resistant to consultation, in German). The historical foundation of this approach lies with the fact that, in the 19th century, many politicians used to be noblemen without appropriate education, who more and more became forced to rely on consultation of educated experts, which (in particular after the Prussian reforms of Stein and Hardenberg) enjoyed the status of financially and personally independent, indismissable, and neutral experts as Beamte (public servants under public law).

A similar approach can be found in British police laws, where entitlements of police constables are vested in the constable in person and not in the police as an administrative agency, this leading to the single constable being fully responsible for his or her own acts in office, in particular their legality. The experience of two dictatorships in the country and, after the end of such regimes, emerging calls for the legal responsibility of the “aidees of the aidees” (Helfershelfer) of such regimes also furnished calls for the principle of personal responsibility of any expert for any decision made, this leading to a strengthening of the bottom-up approach, which requires maximum responsibility of the superiors.

In the opposite, the French administration is based on a top-down approach, where regular public servants enjoy no other task than simply to execute decisions made by their superiors. As those superiors also require consultation, this consultation is provided by members of a cabinet, which is distinctive from the regular ministry staff in terms of staff and organization. Those members who are not members of the cabinet are not entitled to make any suggestions or to take any decisions of political dimension.

The advantage of the bottom-up approach is the level of expertise provided, combined with the motivating experience of any member of the administration to be responsible and finally the

independent “engine” of progress in that field of personal responsibility. A disadvantage is the lack of democratic control and transparency, this leading, from a democratic viewpoint, to the deferment of actual power of policy-making to faceless, if even unknown, public servants. Even the fact that certain politicians might “provide their face” to the actual decisions of their inferiors might not mitigate this effect, but rather strong parliamentary rights of control and influence in legislative procedures (as they do exist in the example of Germany).

The advantage of the top-down principle is that political and administrative responsibilities are clearly distinguished from each other, and that responsibility for political failures can be clearly identified with the relevant office holder. Disadvantages are that the system triggers demotivation of inferiors, who know that their ideas to innovative approaches might not be welcome just because of their position, and that the decision-makers cannot make use of the full range of expertise which their inferiors will have collected.

Administrations in dictatorships traditionally work according to a strict top-down approach. As civil servants below the level of the political leadership are discouraged from making suggestions, they use to suffer from the lack of expertise which could be provided by the inferiors, which regularly leads to a breakdown of the system after an few decades. Modern communist states, which the People's Republic of China forms an example of, therefore prefer to define a framework of permissible, or even encouraged, criticism and self-determination by inferiors, which would not affect the major state doctrine, but allows the use of professional and expertise-driven knowledge and the use of it for the decision-making persons in office.

Approach

Organizational change is a structured approach in an organization for ensuring that changes are smoothly and successfully implemented to achieve lasting benefits. In the modern business environment, organizations face rapid change like never before. Globalization and the constant innovation of technology result in a constantly evolving business environment. Phenomena such as social media and mobile adaptability have revolutionized business and the effect of this is an ever increasing need for change, and therefore change management. The growth in technology also has a secondary effect of increasing the availability and therefore accountability of knowledge. Easily accessible information has resulted in unprecedented scrutiny from stockholders and the media. Prying eyes and listening ears raise the stakes for failed business

endeavors and increase the pressure on struggling executives. With the business environment experiencing so much change, organizations must then learn to become comfortable with change as well. Therefore, the ability to manage and adapt to organizational change is an essential ability required in the workplace today.

Due to the growth of technology, modern organizational change is largely motivated by exterior innovations rather than internal moves. When these developments occur, the organizations that adapt quickest create a competitive advantage for themselves, while the companies that refuse to change get left behind. This can result in drastic profit and/or market share losses.

Organizational change directly affects all departments from the entry level employee to senior management. The entire company must learn how to handle changes to the organization. When determining which of the latest techniques or innovations to adopt, there are four major factors to be considered:

- Levels, goals, and strategies
- Measurement system
- Sequence of steps
- Implementation and organizational change

Regardless of the many types of organizational change, the critical aspect is a company's ability to win the buy-in of their organization's employees on the change. Effectively managing organizational change is a four-step process:

- Recognizing the changes in the broader business environment
- Developing the necessary adjustments for their company's needs
- Training their employees on the appropriate changes
- Winning the support of the employees with the persuasiveness of the appropriate adjustments

As a multi-disciplinary practice that has evolved as a result of scholarly research, organizational change management should begin with a systematic diagnosis of the current situation in order to determine both the need for change and the capability to change. The objectives, content, and process of change should all be specified as part of a Change Management plan.

Change management processes should include creative marketing to enable communication between changing audiences, as well as deep social understanding about leadership's styles and group dynamics. As a visible track on transformation projects, Organizational Change Management aligns groups' expectations, communicates, integrates teams and manages people training. It makes use of performance metrics, such as financial results, operational efficiency, leadership commitment, communication effectiveness, and the perceived need for change to design appropriate strategies, in order to avoid change failures or resolve troubled change projects.

Successful change management is more likely to occur if the following are included:

- Benefits management and realization to define measurable stakeholder aims, create a business case for their achievement (which should be continuously updated), and monitor assumptions, risks, dependencies, costs, return on investment, dis-benefits and cultural issues affecting the progress of the associated work
- Effective communication that informs various stakeholders of the reasons for the change (why?), the benefits of successful implementation (what is in it for us, and you) as well as the details of the change (when? where? who is involved? how much will it cost? etc.)
- Devise an effective education, training and/or skills upgrading scheme for the organization
- Counter resistance from the employees of companies and align them to overall strategic direction of the organization
- Provide personal counseling (if required) to alleviate any change-related fears
- Monitoring of the implementation and fine-tuning as required

Examples

- Mission changes
- Strategic changes
- Operational changes (including Structural changes)
- Technological changes
- Changing the attitudes and behaviors of personnel
- Personality Wide Changes

Chapter 2

Strategic Change

Strategic management analyzes the major initiatives taken by a company's top management on behalf of owners, involving resources and performance in internal and external environments. In management theory and practice, a distinction is often made between operational management and strategic management. Operational management is concerned primarily with responses to internal issues such as improving efficiency and controlling costs. Strategic management is concerned primarily with responses to external issues such as in understanding customers' needs and responding to competitive forces. Widely-cited Harvard Business School professor Michael Porter identifies three principles underlying strategic positioning: creating a "unique and valuable position", making trade-offs by choosing "what not to do", and creating "fit" by aligning company activities to with one another to support the chosen strategy.

Strategic management provides overall direction to the enterprise and is closely related to the field of Organization Studies. In short, it entails specifying the organizations objectives, developing policies and plans designed to achieve these objectives, and then allocating resources to implement the plans. Academics and practicing managers have developed numerous models and frameworks to assist in strategic decision making and in understanding infinitely complex macro-economic environments. Strategic management is not static in nature; the models often include a feedback loop to monitor execution and inform the next round of planning.

Models and conceptual frameworks of strategic management

The difficulty of fully comprehending and responding to the complex issues faced by an organization has led to a proliferation of strategic management models and frameworks. Each of the various models attempts to organize a number of issues and make them more readily understandable. One of the most basic and widely-used frameworks is the SWOT analysis, which examines both internal elements of the organization — Strengths and Weaknesses — and external elements — Opportunities and Threats.

Many other frameworks are commonly used in management and taught in business schools. Some of the more common are listed below.

PEST analysis or STEEP analysis examines macro-economic environmental factors such as politics, economics, social factors, and government regulation. Common variations include SLEPT, PESTLE, STEEPLE, and STEER analysis, each of which incorporates slightly different emphases.

The Balanced Scorecard attempts to measure the performance of an organization from the perspective of various stakeholders. While often used in a performance management or operational management context, the balanced scorecard is also valuable to strategic management in helping to define and maintain competitive advantage. The Porter Five Forces Analysis framework helps to determine the competitive intensity and therefore attractiveness of a market.

Strategic change

In 1969, Peter Drucker coined the phrase Age of Discontinuity to describe the way change disrupts lives. In an age of continuity attempts to predict the future by extrapolating from the past can be accurate. But according to Drucker, we are now in an age of discontinuity and extrapolating is ineffective. He identifies four sources of discontinuity: new technologies, globalization, cultural pluralism and knowledge capital.

In 1970, Alvin Toffler in *Future Shock* described a trend towards accelerating rates of change. He illustrated how social and technical phenomena had shorter lifespans with each generation, and he questioned society's ability to cope with the resulting turmoil and accompanying anxiety. In past eras periods of change were always punctuated with times of stability. This allowed society to assimilate the change before the next change arrived. But these periods of stability had all but disappeared by the late 20th century. In 1980 in *The Third Wave*, Toffler characterized this shift to relentless change as the defining feature of the third phase of civilization (the first two phases being the agricultural and industrial waves).

In 1978, Dereck Abell (Abell, D. 1978) described "strategic windows" and stressed the importance of the timing (both entrance and exit) of any given strategy. This led some strategic planners to build planned obsolescence into their strategies.

In 1983, Noel Tichy wrote that because we are all beings of habit we tend to repeat what we are comfortable with. He wrote that this is a trap that constrains our creativity, prevents us from exploring new ideas, and hampers our dealing with the full complexity of new issues. He developed a systematic method of dealing with change that involved looking at any new issue from three angles: technical and production, political and resource allocation, and corporate culture.

Peters and Austin (1985) stressed the importance of nurturing champions and heroes. They said we have a tendency to dismiss new ideas, so to overcome this, we should support those few people in the organization that have the courage to put their career and reputation on the line for an unproven idea.

In 1988, Henry Mintzberg looked at the changing world around him and decided it was time to reexamine how strategic management was done. He examined the strategic process and concluded it was much more fluid and unpredictable than people had thought. Because of this, he could not point to one process that could be called strategic planning. Instead Mintzberg concludes that there are five types of strategies:

- Strategy as plan – a direction, guide, course of action – intention rather than actual
- Strategy as ploy – a maneuver intended to outwit a competitor
- Strategy as pattern – a consistent pattern of past behaviour – realized rather than intended
- Strategy as position – locating of brands, products, or companies within the conceptual framework of consumers or other stakeholders – strategy determined primarily by factors outside the firm
- Strategy as perspective – strategy determined primarily by a master strategist

In 1998, Mintzberg developed these five types of management strategy into 10 “schools of thought” and grouped them into three categories. The first group is normative. It consists of the schools of informal design and conception, the formal planning, and analytical positioning. The second group, consisting of six schools, is more concerned with how strategic management is actually done, rather than prescribing optimal plans or positions. The six schools are entrepreneurial, visionary, cognitive, learning/adaptive/emergent, negotiation, corporate culture and business environment. The third and final group consists of one school, the configuration or

transformation school, a hybrid of the other schools organized into stages, organizational life cycles, or “episodes”.

In 1989, Charles Handy identified two types of change. "Strategic drift" is a gradual change that occurs so subtly that it is not noticed until it is too late. By contrast, "transformational change" is sudden and radical. It is typically caused by discontinuities (or exogenous shocks) in the business environment. The point where a new trend is initiated is called a "strategic inflection point" by Andy Grove. Inflection points can be subtle or radical.

In 1990, Richard Pascale (Pascale, R. 1990) wrote that relentless change requires that businesses continuously reinvent themselves. His famous maxim is “Nothing fails like success” by which he means that what was a strength yesterday becomes the root of weakness today, We tend to depend on what worked yesterday and refuse to let go of what worked so well for us in the past. Prevailing strategies become self-confirming. To avoid this trap, businesses must stimulate a spirit of inquiry and healthy debate. They must encourage a creative process of self-renewal based on constructive conflict.

In 1996, Adrian Slywotzky showed how changes in the business environment are reflected in value migrations between industries, between companies, and within companies. He claimed that recognizing the patterns behind these value migrations is necessary if we wish to understand the world of chaotic change. In “Profit Patterns” (1999) he described businesses as being in a state of strategic anticipation as they try to spot emerging patterns. Slywotzky and his team identified 30 patterns that have transformed industry after industry.

In 1997, Clayton Christensen (1997) took the position that great companies can fail precisely because they do everything right since the capabilities of the organization also define its disabilities. Christensen's thesis is that outstanding companies lose their market leadership when confronted with disruptive technology. He called the approach to discovering the emerging markets for disruptive technologies agnostic marketing, i.e., marketing under the implicit assumption that no one – not the company, not the customers – can know how or in what quantities a disruptive product can or will be used without the experience of using it.

In 1999, Constantinos Markides reexamined the nature of strategic planning. He described strategy formation and implementation as an on-going, never-ending, integrated process requiring continuous reassessment and reformation. Strategic management is planned and emergent, dynamic and interactive.

J. Moncrieff (1999) stressed strategy dynamics. He claimed that strategy is partially deliberate and partially unplanned. The unplanned element comes from emergent strategies that result from the emergence of opportunities and threats in the environment and from "strategies in action" (ad hoc actions across the organization).

David Teece pioneered research on resource-based strategic management and the dynamic capabilities perspective, defined as "the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments". His 1997 paper (with Gary Pisano and Amy Shuen) "Dynamic Capabilities and Strategic Management" was the most cited paper in economics and business for the period from 1995 to 2005. In 2000, Gary Hamel discussed strategic decay, the notion that the value of every strategy, no matter how brilliant, decays over time. In 2000, Malcolm Gladwell discussed the importance of the tipping point, that point where a trend or fad acquires critical mass and takes off.

A number of strategists use scenario planning techniques to deal with change. The way Peter Schwartz put it in 1991 is that strategic outcomes cannot be known in advance so the sources of competitive advantage cannot be predetermined. The fast changing business environment is too uncertain for us to find sustainable value in formulas of excellence or competitive advantage. Instead, scenario planning is a technique in which multiple outcomes can be developed, their implications assessed, and their likeliness of occurrence evaluated. According to Pierre Wack, scenario planning is about insight, complexity, and subtlety, not about formal analysis and numbers.

Some business planners are starting to use a complexity theory approach to strategy. Complexity can be thought of as chaos with a dash of order. Chaos theory deals with turbulent systems that rapidly become disordered. Complexity is not quite so unpredictable. It involves multiple agents interacting in such a way that a glimpse of structure may appear.

The Dynamic Model of the Strategy Process

Several theorists have recognized a problem with this static model of the strategy process: it is not how strategy is developed in real life. Strategy is actually a dynamic and interactive process. Some of the earliest challenges to the planned strategy approach came from Linblom in the 1960s and Quinn in the 1980s. Charles Lindblom (1959) claimed that strategy is a fragmented

process of serial and incremental decisions. He viewed strategy as an informal process of mutual adjustment with little apparent coordination.

James Brian Quinn (1978) developed an approach that he called "logical incrementalism". He claimed that strategic management involves guiding actions and events towards a conscious strategy in a step-by-step process. Managers nurture and promote strategies that are themselves changing. In regard to the nature of strategic management he says: "Constantly integrating the simultaneous incremental process of strategy formulation and implementation is the central art of effective strategic management." (?page 145). Whereas Lindblom saw strategy as a disjointed process without conscious direction, Quinn saw the process as fluid but controllable.

Joseph Bower (1970) and Robert Burgelman (1980) took this one step further. Not only are strategic decisions made incrementally rather than as part of a grand unified vision, but according to them, this multitude of small decisions are made by numerous people in all sections and levels of the organization.

Henry Mintzberg (1978) made a distinction between deliberate strategy and emergent strategy. Emergent strategy originates not in the mind of the strategist, but in the interaction of the organization with its environment. He claims that emergent strategies tend to exhibit a type of convergence in which ideas and actions from multiple sources integrate into a pattern. This is a form of organizational learning, in fact, on this view, organizational learning is one of the core functions of any business enterprise (See Peter Senge's *The Fifth Discipline* (1990)). Constantinos Markides (1999) describes strategy formation and implementation as an on-going, never-ending, integrated process requiring continuous reassessment and reformation.

A particularly insightful model of strategy process dynamics comes from J. Moncrieff (1999). He recognized that strategy is partially deliberate and partially unplanned, though whether the resulting performance is better for being planned or not is unclear. The unplanned element comes from two sources : "emergent strategies" result from the emergence of opportunities and threats in the environment and "Strategies in action" are ad hoc actions by many people from all parts of the organization. These multitudes of small actions are typically not intentional, not teleological, not formal, and not even recognized as strategic. They are emergent from within the organization, in much the same way as "emergent strategies" are emergent from the environment. However, it is again not clear whether, or under what circumstances, strategies would be better if more planned.

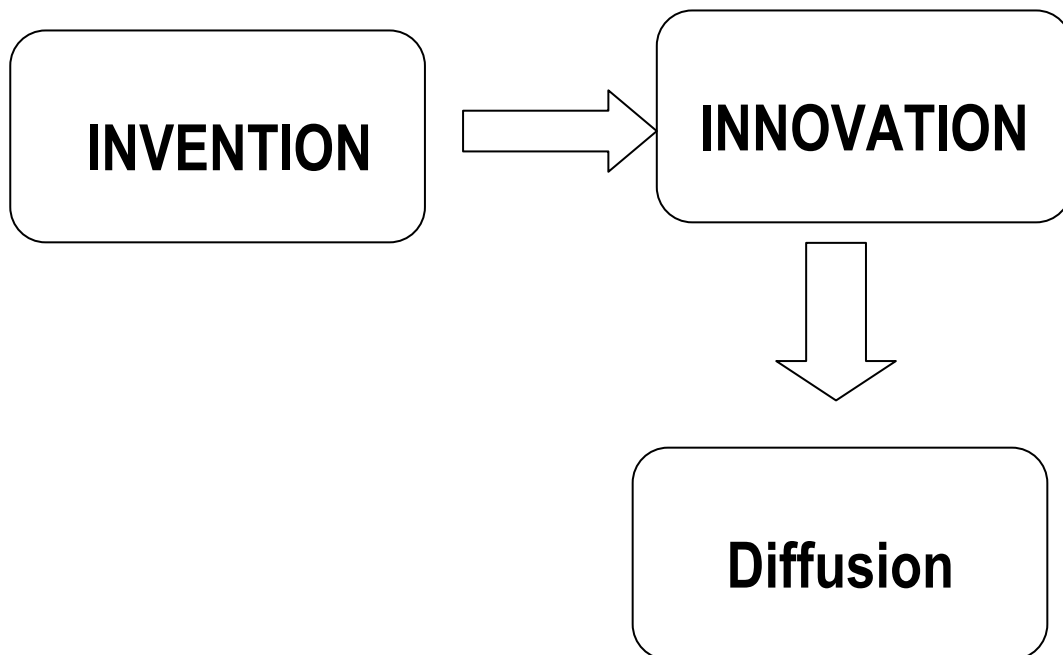
In this model, strategy is both planned and emergent, dynamic, and interactive. Five general processes interact. They are strategic intention, the organization's response to emergent environmental issues, the dynamics of the actions of individuals within the organization, the alignment of action with strategic intent, and strategic learning.

The alignment of action with strategic intent (the top line in the diagram), is the blending of strategic intent, emergent strategies, and strategies in action, to produce strategic outcomes. The continuous monitoring of these strategic outcomes produces strategic learning (the bottom line in the diagram). This learning comprises feedback into internal processes, the environment, and strategic intentions. Thus the complete system amounts to a triad of continuously self-regulating feedback loops. Actually, quasi self-regulating is a more appropriate term since the feedback loops can be ignored by the organization. The system is self-adjusting only to the extent that the organization is prepared to learn from the strategic outcomes it creates. This requires effective leadership and an agile, questioning, corporate culture. In this model, the distinction between strategy formation and strategy implementation disappears.

Chapter 3

Technological Change

Technological change (TC) is a term that is used to describe the overall process of invention, innovation and diffusion of technology or processes. The term is synonymous with technological development, technological achievement, and technological progress. In essence TC is the invention of a technology (or a process), the continuous process of improving a technology (in which it often becomes cheaper) and its diffusion throughout industry or society. In short, technological change is based on both better and more technology.



Technological change as a social process

Underpinning the idea of technological change as a social process is general agreement on the importance of social context and communication. According to this model, technological change is seen as a social process involving producers and adopters and others (such as government) who are profoundly affected by cultural setting, political institutions and marketing strategies.

In free market economies, the maximization of profits is a powerful driver of technological change. Generally, only those technologies are developed and reach the market that promise to

maximize profits for the owners of incoming producing capital. Any technologies that fail to meet this criterion even though they may satisfy very important societal needs, are not developed. Therefore, technological change is a social process strongly biased by the financial interests of capital. There are currently no well established democratic processes, such as voting on the social or environmental desirability of a new technology prior to development and marketing, that would allow average citizens to direct the course of technological change.

Elements of diffusion

Emphasis has been on four key elements of the technological change process:

- (1) an innovative technology
- (2) communicated through certain channels
- (3) to members of a social system
- (4) who adopt it over a period of time. These elements are derived from Everett M. Rogers Diffusion of innovations theory using a communications-type approach.

Innovation

Innovation is the application of better solutions that meet new requirements, inarticulated needs, or existing market needs. This is accomplished through more effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. The term innovation can be defined as something original and, as consequence, new that "breaks in to" the market or into society. One usually associates to new phenomena that are important in some way. A definition of the term, in line with these aspects, would be the following: "An innovation is something original, new, and important - in whatever field - that breaks in to (or obtains a foothold in) a market or society."

Rogers proposes that there are five main attributes of innovative technologies which influence acceptance, which he calls the ACCTO criteria. These are relative Advantage, Compatibility, Complexity, Trialability, and Observability. Relative advantage may be economic or non-economic, and is the degree to which an innovation is seen as superior to prior innovations fulfilling the same needs. It is positively related to acceptance (i.e., the higher the relative advantage, the higher the adoption level, and vice versa). Compatibility is the degree to which

an innovation appears consistent with existing values, past experiences, habits and needs to the potential adopter; a low level of compatibility will slow acceptance. Complexity is the degree to which an innovation appears difficult to understand and use; the more complex an innovation, the slower its acceptance. Trialability is the perceived degree to which an innovation may be tried on a limited basis, and is positively related to acceptance. Trialability can accelerate acceptance because small-scale testing reduces risk. Observability is the perceived degree to which results of innovating are visible to others and is positively related to acceptance.

Communication channels

Communication channels are the means by which a source conveys a message to a receiver. Information may be exchanged through two fundamentally different, yet complementary, channels of communication. Awareness is more often obtained through the mass media, while uncertainty reduction that leads to acceptance mostly results from face-to-face communication.

Social system

The social system provides a medium through which and boundaries within which, innovation is adopted. The structure of the social system affects technological change in several ways. Social norms, opinion leaders, change agents, government and the consequences of innovations are all involved. Also involved are cultural setting, nature of political institutions, laws, policies and administrative structures.

Time

Time enters into the acceptance process in many ways. The time dimension relates to the innovativeness of an individual or other adopter, which is the relative earlyness or lateness with which an innovation is adopted.

Technological transitions

Technological innovations have occurred throughout history and rapidly increased over the modern age. New technologies are developed and co-exist with the old before supplanting them. Transport offers several examples; from sailing to steam ships to automobiles replacing horse-based transportation. Technological transitions (TT) describe how these technological

innovations occur and are incorporated into society. Alongside the technological developments TT considers wider societal changes such as “user practices, regulation, industrial networks (supply, production, distribution), infrastructure, and symbolic meaning or culture”. For a technology to have use, it must be linked to social structures human agency and organisations to fulfil a specific need Hughes refers to the ‘seamless web’ where physical artefacts, organisations, scientific communities, and social practices combine. A technological system includes technical and non-technical aspects, and it a major shift in the socio-technical configurations (involving at least one new technology) is when a technological transition occurs. The study of technological transitions has an impact beyond academic interest. The transitions referred to in the literature may relate to historic processes, such as the transportation transitions studied by Geels, but system changes are required to achieve a safe transition to a low carbon-economy. Current structural problems are apparent in a range of sectors. Dependency on oil is problematic in the energy sector due to availability, access and contribution to greenhouse gas (GHG) emissions. Transportation is a major user of energy causing significant emission of GHGs. Food production will need to keep pace with an ever-growing world population while overcoming challenges presented by global warming and transportation issues. Incremental change has provided some improvements but a more radical transition is required to achieve a more sustainable future.

Developed from the work on technological transitions is the field of transition management. Within this is an attempt to shape the direction of change complex socio-technical systems to more sustainable patterns. Whereas work on technological transitions is largely based on historic processes, proponents of transition management seek to actively steer transitions in progress.

Culture change

Culture change is a term used in public policy making that emphasises the influence of cultural capital on individual and community behavior. It places stress on the social and cultural capital determinants of decision making and the manner in which these interact with other factors like the availability of information or the financial incentives facing individuals to drive behavior.

These cultural capital influences include the role of parenting, families and close associates; organisations such as schools and workplaces; communities and neighbourhoods; and wider social influences such as the media. It is argued that this cultural capital manifests into specific values, attitudes or social norms which in turn guide the behavioural intentions that individuals adopt in regard to particular decisions or courses of action. These behavioural intentions interact with other factors driving behaviour such as financial incentives, regulation and legislation, or levels of information, to drive actual behaviour and ultimately feed back into underlying cultural capital.

The term is used by Knott et al. of the Prime Minister's Strategy Unit in the publication: *Achieving Culture Change: A Policy Framework* (Knott et al., 2008). The paper sets out how public policy can achieve social and cultural change through 'downstream' interventions including fiscal incentives, legislation, regulation and information provision and also 'upstream' interventions such as parenting, peer and mentoring programmes, or development of social and community networks.

The key concepts the paper is based on include:

- Cultural capital - such as the attitudes, values, aspirations and sense of self-efficacy which influence behaviour. Cultural capital is itself influenced by behaviour over time
- The shifting social zeitgeist - whereby social norms and values that predominate within the cultural capital in society evolve in over time
- The process by which political narrative and new ideas and innovations shift the social zeitgeist over time within the constraint of the 'elastic band' of public opinion
- The process of behavioural normalisation - whereby behaviour and actions pass through into social and cultural norms (for example, Knott et al. argue that the UK experience of seat belt enforcement established and reinforced this as a social norm)

- The use of customer insight
- The importance of tailoring policy programmes around an ecological model of human behaviour to account for how policy will interact with cultural capital and affect it over time
- Knott et al. use examples from a range of policy areas to demonstrate how the culture change framework can be applied to policymaking. For example:
- To encourage educational aspiration they recommend more use of early years and parenting interventions, an improved childhood offer, and development of positive narratives on education as well as integrated advisory systems, financial assistance and targeted social marketing approaches.
- To promote healthy living and personal responsibility they recommend building healthy living into community infrastructure, building partnerships with schools and employers, more one-to-one support for wellbeing alongside use of regulation and legislation on unhealthy products, provision of robust health information and health marketing to promote adaptive forms of behaviour.
- To develop environmentally sustainable norms they recommend reinforcing sustainability throughout policy narratives, using schools and the voluntary sector to promote environmental messages, development of infrastructure that make sustainable choices easy, together with a wider package of measures on fiscal incentives, regulation, advisory services and coalition movements.

Chapter 4

Behavioral Change

Behavioural change theories' are attempts to explain why behaviours change. These theories cite environmental, personal, and behavioural characteristics as the major factors in behavioural determination. In recent years, there has been increased interest in the application of these theories in the areas of health, education, criminology, energy and international development with the hope that understanding behavioural change will improve the services offered in these areas.

General theories and models

Each behavioural change theory or model focuses on different factors in attempting to explain behavioural change. Of the many that exist, the most prevalent are the learning theories, Social Cognitive Theory, Theories of Reasoned Action and Planned Behaviour, Transtheoretical Model and the Health Action Process Approach. Research has also been conducted regarding specific elements of these theories, especially elements like self-efficacy that are common to several of the theories.

Self-efficacy

Self-efficacy is an individual's impression of their own ability to perform a demanding or challenging task such as facing an exam or undergoing surgery. This impression is based upon factors like the individual's prior success in the task or in related tasks, the individual's physiological state, and outside sources of persuasion. Self-efficacy is thought to be predictive of the amount of effort an individual will expend in initiating and maintaining a behavioural change, so although self-efficacy is not a behavioural change theory per se, it is an important element of many of the theories, including the Health Belief Model, the Theory of Planned Behaviour and the Health Action Process Approach.

Learning theories/behaviour analytic theories of change

From behaviourists such as B. F. Skinner come the learning theories, which state that complex behaviour is learned gradually through the modification of simpler behaviours. Imitation and

reinforcement play important roles in these theories, which state that individuals learn by duplicating behaviours they observe in others and that rewards are essential to ensuring the repetition of desirable behaviour. As each simple behaviour is established through imitation and subsequent reinforcement, the complex behaviour develops. When verbal behaviour is established the organism can learn through rule-governed behaviour and thus not all action needs to be contingency shaped.

Social learning/social cognitive theory

According to the social learning theory, which is also known as the social cognitive theory, behavioural change is determined by environmental, personal, and behavioural elements. Each factor affects each of the others. For example, in congruence with the principles of self-efficacy, an individual's thoughts affect their behaviour and an individual's characteristics elicit certain responses from the social environment. Likewise, an individual's environment affects the development of personal characteristics as well as the person's behaviour, and an individual's behaviour may change their environment as well as the way the individual thinks or feels. Social learning theory focuses on the reciprocal interactions between these factors, which are hypothesised to determine behavioural change.

Theory of Reasoned Action

The Theory of Reasoned Action assumes that individuals consider a behaviour's consequences before performing the particular behaviour. As a result, intention is an important factor in determining behaviour and behavioural change. According to Icek Ajzen, intentions develop from an individual's perception of behaviour as positive or negative together with the individual's impression of the way their society perceives the same behaviour. Thus, personal attitude and social pressure shape intention, which is essential to performance of a behaviour and consequently behavioural change.

Theory of Planned Behaviour

In 1985, Ajzen expanded upon the theory of reasoned action, formulating the Theory of Planned Behaviour, which also emphasises the role of intention in behaviour performance but is intended to cover cases in which a person is not in control of all factors affecting the actual

performance of a behaviour. As a result, the new theory states that the incidence of actual behaviour performance is proportional to the amount of control an individual possesses over the behaviour and the strength of the individual's intention in performing the behaviour. In his article, Further hypothesises that self-efficacy is important in determining the strength of the individual's intention to perform a behaviour. In 2010, Fishbein and Ajzen introduced the Reasoned action approach, the successor of the Theory of Planned Behaviour.

Transtheoretical/Stages of Change Model

According to the Transtheoretical Model, which is also known as the Stages of Change Model, behavioural change is a five-step process. The five stages, between which individuals may oscillate before achieving complete change, are precontemplation, contemplation, preparation, action, and maintenance. At the precontemplation stage, an individual may or may not be aware of a problem but has no thought of changing their behaviour. From precontemplation to contemplation, the individual develops a desire to change a behaviour. During preparation, the individual intends to change the behaviour within the next month, and during the action stage, the individual begins to exhibit new behaviour consistently. An individual finally enters the maintenance stage once they exhibit the new behaviour consistently for over six months

Health Action Process Approach

The Health Action Process Approach (HAPA) is designed as a sequence of two continuous self-regulatory processes, a goal-setting phase (motivation) and a goal-pursuit phase (volition). The second phase is subdivided into a pre-action phase and an action phase. Motivational self-efficacy, outcome-expectancies and risk perceptions are assumed to be predictors of intentions. This is the motivational phase of the model. The predictive effect of motivational self-efficacy on behaviour is assumed to be mediated by recovery self-efficacy, and the effects of intentions are assumed to be mediated by planning. The latter processes refer to the volitional phase of the model.

Education

Behavioural change theories can be used as guides in developing effective teaching methods. Since the goal of much education is behavioural change, the understanding of behaviour

afforded by behavioural change theories provides insight into the formulation of effective teaching methods that tap into the mechanisms of behavioural change. In an era when education programs strive to reach large audiences with varying socioeconomic statuses, the designers of such programs increasingly strive to understand the reasons behind behavioural change in order to understand universal characteristics that may be crucial to program design. In fact, some of the theories, like the Social Learning Theory and Theory of Planned Behaviour, were developed as attempts to improve health education. Because these theories address the interaction between individuals and their environments, they can provide insight into the effectiveness of education programs given a specific set of predetermined conditions, like the social context in which a program will be initiated. Although health education is still the area in which behavioural change theories are most often applied, theories like the Stages of Change Model have begun to be applied in other areas like employee training and developing systems of higher education.

Criminology

Empirical studies in criminology support behavioural change theories. At the same time, the general theories of behavioural change suggest possible explanations to criminal behaviour and methods of correcting deviant behaviour. Since deviant behaviour correction entails behavioural change, understanding of behavioural change can facilitate the adoption of effective correctional methods in policy-making. For example, the understanding that deviant behaviour like stealing may be learned behaviour resulting from reinforcers like hunger satisfaction that are unrelated to criminal behaviour can aid the development of social controls that address this underlying issue rather than merely the resultant behaviour.

Specific theories that have been applied to criminology include the Social Learning and Differential Association Theories. Social Learning Theory's element of interaction between an individual and their environment explains the development of deviant behaviour as a function of an individual's exposure to a certain behaviour and their acquaintances, who can reinforce either socially acceptable or socially unacceptable behaviour. Differential Association Theory, originally formulated by Edwin Sutherland, is a popular, related theoretical explanation of

criminal behaviour that applies learning theory concepts and asserts that deviant behaviour is learned behaviour.

Energy

Recent years have seen an increased interest in energy consumption reduction based on behavioural change, be it for reasons of climate change mitigation or energy security. The application of behavioural change theories in the field of energy consumption behaviour yields interesting insights. For example, it supports criticism of a too narrow focus on individual behaviour and a broadening to include social interaction, lifestyles, norms and values as well as technologies and policies—all enabling or constraining behavioural change.

Objections

Behavioural change theories are not universally accepted. Criticisms include the theories' emphases on individual behaviour and a general disregard for the influence of environmental factors on behaviour. In addition, as some theories were formulated as guides to understanding behaviour while others were designed as frameworks for behavioural interventions, the theories' purposes are not consistent. Such criticism illuminates the strengths and weaknesses of the theories, showing that there is room for further research into behavioural change theories.

Personality changes

Some debates have pervaded the field of psychology since its genesis. Perhaps one of the most salient ones deals with the nature of personality. Personality psychology studies one's distinctive style of cognition, behavior, and affect. However, this concept elicits discord among psychologists as some have insisted that it does not exist,[citation needed] while others struggle with issues of measurement.

Personality exists

Personality, one's characteristic way of feeling, behaving and thinking, is often conceptualized as a person's standing on each Big Five trait (extraversion, neuroticism, openness to experience, agreeableness and conscientiousness). A person's personality profile is thus gauged

from his standing on five broad concepts which predict, among other life outcomes, behavior and the quality of interpersonal relationships. Initially, it was believed that one's Big Five profile was static and dichotomous in that one was either at one extreme of each trait or another. For example, people are typically categorized as introverted or extraverted. Personality was therefore assessed in terms of generalities or averages. In noticing the strong inconsistencies in how people behaved across situations, some psychologists dismissed personality as nonexistent.

This school of thought attributes human behavior to environmental factors, relegating individual differences to situational artifacts and contesting the existence of individual predispositions. It was led by situationists like Walter Mischel (1968). Their contention held that personality was a fictitious concept. For them, the discrepancies observed across one's behaviors were evidence that interindividual differences did not exist. Some aspects of the situationist perspective even suggest that all human beings are the same and that the differences we observe are simply illusory byproducts of the environment.

However, personologists soon integrated these inconsistencies into their conceptualization of personality. They modified the old, more monolithic construct by measuring how people differ across situations. Their new methods of personality assessment describe fluctuations in personality characteristics as consistent and predictable for each person based on the environment he is in and his predispositions. Some work suggests that people can espouse different levels of a personality dimension as the social situations and time of day change.

Therefore, someone is not conscientious all the time, but can be conscientious at work and a lot less so when she is home. This work also suggests that intrapersonal variations on a trait can be even larger than interpersonal variations. Extraversion varies more within a person than across individuals, for example. This work was based on individual self-ratings during the day across a long period of time. This allowed for researchers to assess moment-to-moment and day to day variations on personality attributes. Personologists now tend to agree that people's personalities are variegated and are not to be conceptualized through bipolar characterizations.

(e.g. extraversion vs introversion). Rather people oscillate between the two extremes of a trait. The pattern of this oscillation then constitutes personality.

The impact of social roles

In addition, social roles (e.g. employee) have been identified as a potential source of personality change. Researchers have found strong correspondences between the demands of a social role and one's personality profile. If the role requires that the person enacting it be conscientious, her standing on this trait is more likely to be high. Conversely, once he leaves that role and or takes on another which entails less conscientiousness, he will manifest a lower level standing on that trait. Longitudinal research demonstrates that people's personality trajectories can often be explained by the social roles they espoused and relinquished throughout their life stages. Thus social roles are often studied as fundamental predictors of personality. The goals associated with them elicit the appropriation of certain personality profiles by the people enacting them. For example employees judged effective by their peers and superiors are often described as conscientious as well.

Personality also changes through life stages. This may be due to physiological changes associated with development but also experiences that impact behavior. Adolescence and young adulthood have been found to be prime periods of personality changes, especially in the domains of extraversion and agreeableness. Subsequent research endeavors have integrated these findings in their methods of investigation. Researchers distinguish between mean level and rank order changes in trait standing during old age. Their study of personality trajectories is thus contingent on time and on age considerations. Mottus, Johnson and Geary (2012) found that instability engendered by aging does not necessarily affect one's standing within an age cohort. Hence, fluctuations and stability coexist so that one changes relative to one's former self but not relative to one's peers. Similarly, other psychologists found that Neuroticism, Extraversion (only in men), and Openness decreased with age after 70, but Conscientiousness and Agreeableness increased with age (the latter only in men). Moreover, they suggest that there is a decline on each trait after the age of 81.

Inconsistency as a trait

Personality inconsistency has become such a prevalent consideration for personologists that some even conceptualize it as a predisposition in itself. Fleisher and Woehr (2008) suggest that that consistency across the Big Five is a construct that is fairly stable and contributes to the predictive validity of personality measures. Hence inconsistency is quantifiable much like a trait and constitutes an index of and enhances the fit of psychological models.

To accommodate the inconsistency demonstrated on personality tests, researchers developed the Frame Of Reference principle (FOR). According to this theory, people tend to think of their personality in terms of a specific social context when they are asked to rate them. Whichever environment is cognitively salient at the time of the personality measurement will influence the respondent's ratings on a trait measure. If, for example, the person is thinking in terms of their student identity, then the personality ratings he reports will most likely reflect the profile he espouses in the context of student life. Accounting for the FOR principle aims at increasing the validity of personality measures. This demonstrates that the predictive validity of personality measures which specify a social context is a lot higher than those measures which take a more generic approach.

This point is substantiated by yet another body of work suggesting that FOR instructions moderated the link between extraversion and openness scores on manager ratings of employee performance. This research thus recognizes the importance of intrapersonal fluctuations contingent on personality is context specific and is not necessarily generalizable across social domains and time.

Chapter 5

Social Change

Social change refers to an alteration in the social order of a society. Social change may include changes in nature, social institutions, social behaviors, or social relations. Social change may refer to the notion of social progress or socio cultural evolution, the philosophical idea that society moves forward by dialectical or evolutionary means. It may refer to a paradigmatic change in the socio-economic structure, for instance a shift away from feudalism and towards capitalism. Accordingly it may also refer to social revolution, such as the Socialist revolution presented in Marxism, or to other social movements, such as Women's suffrage or the Civil rights movement. Social change may be driven by cultural, religious, economic, scientific or technological forces.

Prominent theories of social change

Change comes from two sources. One source is random or unique factors such as climate, weather, or the presence of specific groups of people. Another source is systematic factors. For example, successful development has the same general requirements, such as a stable and flexible government, enough free and available resources, and a diverse social organization of society. So, on the whole, social change is usually a combination of systematic factors along with some random or unique factors.

There are many theories of social change. Generally, a theory of change should include elements such as structural aspects of change (like population shifts), Processes and mechanisms of social change, and directions of change.

Hegelian: The classic Hegelian dialectic model of change is based on the interaction of opposing forces. Starting from a point of momentary stasis, Thesis countered by Antithesis first yields conflict, then it subsequently results in a new Synthesis.

Marxist: Marxism presents a dialectical and materialist concept of history; Humankind's history is a fundamental struggle between social classes.

Kuhnian: The philosopher of science, Thomas Kuhn argues in *The Structure of Scientific Revolutions* with respect to the Copernican Revolution that people are unlikely to jettison an unworkable paradigm, despite many indications that the paradigm is not functioning properly, until a better paradigm can be presented.

Heraclitan: The Greek philosopher Heraclitus used the metaphor of a river to speak of change thus, "On those stepping into rivers staying the same other and other waters flow" (DK22B12). What Heraclitus seems to be suggesting here, later interpretations notwithstanding, is that, in order for the river to remain the river, change must constantly be taking place. Thus one may think of the Heraclitan model as parallel to that of a living organism, which, in order to remain alive, must constantly be changing. A contemporary application of this approach is shown in the social change theory SEED-SCALE which builds off of the Complexity Theory subfield of Emergence.

Daoist: The Chinese philosophical work *Dao De Jing*, I.8 and II.78 uses the metaphor of water as the ideal agent of change. Water, although soft and yielding, will eventually wear away stone. Change in this model is to be natural, harmonious and steady, albeit imperceptible.

Social Development Theory

Social development theory attempts to explain qualitative changes in the structure and framework of society, that help the society to better realize its aims and objectives. Development can be broadly defined in a manner applicable to all societies at all historical periods as an upward ascending movement featuring greater levels of energy, efficiency, quality, productivity, complexity, comprehension, creativity, mastery, enjoyment and accomplishment. Development is a process of social change, not merely a set of policies and programs instituted for some specific results. This process has been going on since the dawn of history. But during the last five centuries it has picked up in speed and intensity, and during the last five decades has witnessed a marked surge in acceleration.

The basic mechanism driving social change is increasing awareness leading to better organization. Life evolves by consciousness and consciousness in turn progresses by organization. When

society senses new and better opportunities for progress it accordingly develops new forms of organization to exploit these new openings successfully. The new forms of organization are better able to harness the available social energies and skills and resources to use the opportunities to get the intended results.

Development is governed by many factors that influence the results of developmental efforts. There must be a motive that drives the social change and essential preconditions for that change to occur. The motive must be powerful enough to overcome obstructions that impede that change from occurring. Development also requires resources such as capital, technology, and supporting infrastructure.

Development is the result of society's capacity to organize human energies and productive resources to meet challenges and opportunities. Society passes through well-defined stages in the course of its development. They are nomadic hunting and gathering, rural agrarian, urban, commercial, industrial, and post-industrial societies. Pioneers introduce new ideas, practices, and habits that conservative elements initially resist. At a later stage, innovations are accepted, imitated, organized, and used by other members of the community. Organizational improvements introduced to support the innovations can take place simultaneously at four different levels—physical, social, mental, and psychological. Moreover four different types of resources are involved in promoting development. Of these four, physical resources are most visible, but least capable of expansion. Productivity of resources increases enormously as the quality of organization and level of knowledge inputs rise.

Development pace and scope varies according to the stage society is in. The three main stages are physical, vital (vital refers to the dynamic and nervous social energies of humanity that propel individuals to accomplish), and mental.

Three stages of development

Society's developmental journey is marked by three stages: physical, vital, and mental.[citation needed] These are not clear-cut stages, but overlap. All three are present in any society at time. One of them is predominant while the other two play subordinate roles. The term 'vital' denotes

the emotional and nervous energies that empower society's drive towards accomplishment and express most directly in the interactions between human beings. Before the full development of mind, it is these vital energies that predominate in human personality and gradually yield the ground as the mental element becomes stronger. The speed and circumstances of social transition from one stage to another varies.

Physical stage

The physical stage is characterized by the domination of the physical element of the human personality. During this phase, society is preoccupied with bare survival and subsistence. People follow tradition strictly and there is little innovation and change. Land is the main asset and productive resource during the physical stage and wealth is measured by the size of land holdings. This is the agrarian and feudal phase of society. Inherited wealth and position rule the roost and there is very little upward mobility. Feudal lords and military chiefs function as the leaders of the society. Commerce and money play a relatively minor role. As innovative thinking and experimental approaches are discouraged, people follow tradition unwaveringly and show little inclination to think outside of established guidelines. Occupational skills are passed down from parent to child by a long process of apprenticeship.

Guilds restrict the dissemination of trade secrets and technical knowledge. The Church controls the spread of new knowledge and tries to smother new ideas that does not agree with established dogmas. The physical stage comes to an end when the reorganization of agriculture gives scope for commerce and industry to expand. This happened in Europe during the 18th century when political revolutions abolished feudalism and the Industrial Revolution gave a boost to factory production. The shift to the vital and mental stages helps to break the bonds of tradition and inject new dynamism in social life.

Vital stage

The vital stage of society is infused with dynamism and change. The vital activities of society expand markedly. Society becomes curious, innovative and adventurous. During the vital stage emphasis shifts from interactions with the physical environment to social interactions between people. Trade supplants agriculture as the principal source of wealth.

The dawning of this phase in Europe led to exploratory voyages across the seas leading to the discovery of new lands and an expansion of sea trade. Equally important, society at this time began to more effectively harness the power of money. Commerce took over from agriculture, and money replaced land as the most productive resource. The center of life shifted from the countryside to the towns where opportunities for trade and business were in greater abundance.

The center of power shifted from the aristocracy to the business class, which employed the growing power of money to gain political influence. During the vital stage, the rule of law becomes more formal and binding, providing a secure and safe environment for business to flourish. Banks, shipping companies and joint-stock companies increase in numbers to make use of the opportunities. Fresh innovative thinking leads to new ways of life that people accept as they prove beneficial. Science and experimental approaches begin to make a headway as the hold of tradition and dogma weaken. Demand for education rises.

As the vital stage matures through the expansion of the commercial and industrial complex, surplus income arises, which prompts people to spend more on items so far considered out of reach. People begin to aspire for luxury and leisure that was not possible when life was at a subsistence level.

Mental stage

This stage has three essential characteristics: practical, social, and political application of mind. The practical application of mind generates many inventions. The social application of mind leads to new and more effective types of social organization. The political application leads to changes in the political systems that empower the populace to exercise political and human rights in a free and democratic manner. These changes began in the Renaissance and Enlightenment, and gained momentum in the Reformation, which proclaimed the right of individuals to relate directly to God without the mediation of priests. The political application of mind led to the American and French Revolutions, which produced writing that first recognized the rights of the common man and gradually led to the actual enjoyment of these rights.

Organization is a mental invention. Therefore it is not surprising that the mental stage of development is responsible for the formulation of a great number of organizational innovations. Huge business corporations have emerged that make more money than even the total earnings of some small countries. Global networks for transportation and communication now connect the nations of the world within a common unified social fabric for sea and air travel, telecommunications, weather reporting and information exchange.

In addition to spurring technological and organizational innovation, the mental phase is also marked by the increasing power of ideas to change social life. Ethical ideals have been with humanity since the dawn of civilization. But their practical application in daily social life had to wait for the mental stage of development to emerge. The proclamation of human rights and the recognition of the value of the individual have become effective only after the development of mind and spread of education. The 20th century truly emerged as the century of the common man. Political, social, economic and many other rights were extended to more and more sections of humanity with each succeeding decade.

The relative duration of these three stages and the speed of transition from one to another varies from one society to another. However broadly speaking, the essential features of the physical, vital and mental stages of development are strikingly similar and therefore quite recognizable even in societies separated by great distance and having little direct contact with one another.

Moreover, societies also learn from those who have gone through these transitions before and, therefore, may be able to make the transitions faster and better. When the Netherlands introduced primary education in 1618, it was a pioneering initiative. When Japan did the same thing late in the 19th century, it had the advantage of the experience of the USA and other countries. When many Asian countries initiated primary education in the 1950s after winning independence, they could draw on the vast experience of more developed nations. This is a major reason for the quickening pace of progress.

Some major current social changes

One of the most obvious changes currently occurring is the change in the relative global population distribution between countries. In the recent decades, developing countries became a larger proportion of world population, increasing from 68% in 1950 to 82% in 2010, while population of the developed countries has declined from 32% of total world population in 1950 to 18% in 2010. China and India continue to be the largest countries, followed by the US as a distant third. However, population growth throughout the world is slowing. Population growth among developed countries has been slowing since the 1950s, and is now at 0.3% annual growth. Population growth among the less developed countries excluding the least developed has also been slowing, since 1960, and is now at 1.3% annual growth. Population growth among the least developed countries has not really slowed, and is the highest at 2.7% annual growth.

Chapter 6

Theory of Change

Theory of Change (ToC) is a specific type of methodology for planning, participation, and evaluation that is used in the philanthropy, not-for-profit and government sectors to promote social change. Theory of Change defines long-term goals and then maps backward to identify necessary preconditions. Theory of Change explains the process of change by outlining causal linkages in an initiative, i.e., its shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped –as the “outcomes pathway” – showing each outcome in logical relationship to all the others, as well as chronological flow. The links between outcomes are explained by “rationales” or statements of why one outcome is thought to be a prerequisite for another. The innovation of Theory of Change lies (1) in making the distinction between desired and actual outcomes, and (2) in requiring stakeholders to model their desired outcomes before they decide on forms of intervention to achieve those outcomes. Theory of Change can begin at any stage of an initiative, depending on the intended use. A theory developed at the outset is best at informing the planning of an initiative. Having worked out a change model, practitioners can make more informed decisions about strategy and tactics. As monitoring and evaluation data become available, stakeholders can periodically refine the Theory of Change as the evidence indicates. A Theory of Change can be developed retrospectively by reading program documents, talking to stakeholders and using monitoring and evaluation data. This is often done during evaluations reflecting what has worked or not in order to understand the past and plan for the future. A common error in describing Theory of Change is the belief that it is simply a methodology for planning and evaluation. Theory of Change is instead a form of critical theory that ensures a transparent distribution of power dynamics. Further, the process is necessarily inclusive of many perspectives and participants in achieving solutions.

History

Theory of Change emerged from the field of program theory and program evaluation in the mid 1990s as a new way of analyzing the theories motivating programs and initiatives working for social and political change. Theory of Change is focused not just on generating knowledge about whether a program is effective, but also on explaining how what methods it uses to be effective.

Theory of Change as a concept has strong roots in a number of disciplines, including environmental and organizational psychology, but has also increasingly been connected to sociology and political science. Within industrial-organizational psychology, Austin and Bartunek have noted that approaches to organizational development are frequently based on more or less explicit assumptions about

- 1) The processes through which organizations change,
- 2) The interventions needed to effect change.

Within evaluation practice, Theory of Change emerged in the 1990s at the Aspen Institute Roundtable on Community Change as a means to model and evaluate comprehensive community initiatives. Notable methodologists, such as Huey Chen, Peter Rossi, Michael Quinn Patton, Heléne Clark, and Carol Weiss, had been thinking about how to apply program theories to evaluation since 1980. The Roundtable's early work focused on working through the challenges of evaluating complex community initiatives. This work culminated in a 1995 publication, 'New Approaches to Evaluating Comprehensive Community Initiatives'. In that book, Carol Weiss, a member of the Roundtable's steering committee on evaluation, hypothesized that a key reason complex programs are so difficult to evaluate is that the assumptions that inspire them are poorly articulated. She argued that stakeholders of complex community initiatives typically are unclear about how the change process will unfold and therefore place little attention on the early and mid-term changes needed to reach a longer term goal.

Weiss popularized the term "Theory of Change" as a way to describe the set of assumptions that explain both the mini-steps that lead to the long-term goal of interest and the connections between program activities and outcomes that occur at each step of the way. She challenged designers of complex community-based initiatives to be specific about the theories of change guiding their work and suggested that doing so would improve their overall evaluation plans and would strengthen their ability to claim credit for outcomes that were predicted in their theory. She called for the use of an approach that, at first glance, seems like common sense: lay

out the sequence of outcomes that are expected to occur as the result of an intervention, and plan an evaluation strategy around tracking whether these expected outcomes are actually produced. Her stature in the field, and the apparent promise of this idea, motivated a number of foundations to support the use of this technique—later termed “the Theory of Change approach”—in the evaluations of community change initiatives. In the years that followed, a number of evaluations were developed around this approach, fueling more interest in the field about its value and potential application.

Between 2000 - 2002, the Aspen Roundtable for Community Change led the dissemination and case studies of the Theory of Change approach, although still mostly applied to the field of community initiatives. As the Aspen Roundtable concluded its leadership in the field and moved on to apply Theory of Change to such topics as structural racism, ActKnowledge expanded the visibility and application of Theory of Change into international development, public health, human rights and more. The visibility and knowledge of Theory of Change grew with the creation in 2002 of theoryofchange.org and later of Theory of Change Online software. Recent interest has burgeoned with some excellent reviews commissioned by Comic Relief in the UK, the Department for International Development in the UK, the Asia Foundation and Oxfam Australia to name a few.

Recent interest has burgeoned with some excellent reviews commissioned by Comic Relief in the UK, the Department for International Development in the UK, the Asia Foundation and Oxfam Australia to name a few. The explosion of knowledge of the term, and demand for "theories", led to the formation in 2013 of the first non-profit dedicated to promoting and clarifying standards for Theory of Change.

In the early days of Theory of Change, Anne Kubisch and others established three quality control criteria. These are:

- Plausibility
- Feasibility
- Testability

Plausibility refers to the logic of the outcomes pathway. Does it make sense? Are the outcomes in the right order? Are the preconditions each necessary and collectively sufficient to reach the long-term outcomes and ultimate impact? Are there gaps in the logic? Feasibility refers to whether the initiative can realistically achieve its long-term outcomes and impact. Does the organization have adequate resources? Does it need partners? Does the scope, expectations, or timeline of the theory need adjustment? Testability refers chiefly to the indicators: Are they solid and measurable? Will they yield sufficient information to evaluate the success of the initiative? Will they be convincing to necessary audiences? In addition to these three basic quality control criteria, ActKnowledge has added another key criterion: Appropriate Scope. An actionable theory that can be communicated to the key audiences is dependent in part upon choosing the right scope: broad enough to leave no gaps in the model, yet focused enough on the opportunities and resources at hand. Appropriate Scope also integrates the evaluation concept of “accountability”. Many Theory of Change outcome pathways include an “accountability ceiling,” often a dashed line drawn across the pathway that separates outcomes the organization will monitor and claim credit for attaining from higher-order outcomes that are beyond its power to achieve—e.g., “a just society.”

Outcomes Pathway – Theory of Change’s Basic Structure

The outcomes pathway is a set of needed conditions relevant to a given field of action, which are placed diagrammatically in logical relationship to one another and connected with arrows that posit causality. Outcomes along the pathway are also preconditions to outcomes above them. Thus, early outcomes must be in place for intermediate outcomes to be achieved; intermediate outcomes must be in place for the next set of outcomes to be achieved; and so on. An outcomes pathway therefore represents the change logic and its underlying set of assumptions, which are spelled out in the rationales given for why specific connections exist between outcomes and in the theory narrative.

Indicators: Measuring Change

The ultimate success of any Theory of Change lies in its ability to demonstrate progress on the achievement of outcomes. Evidence of success confirms the theory and indicates that the initiative is effective. Therefore, the outcomes in a Theory of Change must be coupled with

indicators that guide and facilitate measurement. Indicators may be said to operationalize the outcomes – that is, they make the outcomes understandable in concrete, observable and/or measurable terms. The relationship of indicator to outcome can be confusing and may be clarified with this simple formula: “I’ll know [outcome reached] when I see [indicator].” For example, “I’ll know that teenagers in the program understand the prenatal nutrition and health guidelines when I see program participants identifying foods that are good sources of nutrition.” Ideally, every outcome on the outcomes pathway (below the dashed accountability ceiling) should have an indicator, but available resources often make that difficult to do. Many groups want to designate priority outcomes – that is, outcomes they know they need to measure if the theory is going to hold. These are the outcomes that must be operationalized (that is, made measurable by one or more indicators.) At a minimum, every outcome for which initial interventions will be designed should have at least one indicator.

Evaluation and Monitoring

As the origins of Theory of Change lie in the field of evaluation and monitoring, developments over the years have ensured that Theory of Change continues to be an invaluable method to conduct evaluations of many different types of projects and organizations. Often posing theory-based evaluation questions helps to focus evaluation efforts on key concerns. As well, there may be a need to pick the right indicators from among the many available, and one can use “monitoring questions” to select the indicators that will be most helpful. The monitoring questions take the form of “What do we really need to know in order to manage grant-making directed to the achievement of this outcome? It is important to understand success beyond just knowing “what works”. Experience has shown that blindly copying or scaling an intervention hardly ever works. An important task for monitoring and evaluation is to gather enough knowledge and understanding so as to be able to predict – with some degree of confidence – how an initiative and set of activities might work in a different situation, or how it needs to be adjusted to get similar or better results. We also need to be able to combine evidence from a number of studies in order to build a stronger picture of what is taking place, how it is unfolding, and, most importantly, how context influences the initiative.

Just as development of a Theory of Change is a participatory process, a ToC-based monitoring and evaluation system can be designed in a participatory way. For example, grant managers

can be involved in choosing the outcomes of greatest interest to them in their decision-making. Similarly, people on the ground can have input into which indicators to use and how to operationalize them, choices of instruments and methods of data collection, and which existing sources of data may be used in tracking indicators.

The Growth of Theory of Change: From Evaluation to Planning and Beyond

The use of Theory of Change in planning and evaluation has increased exponentially among philanthropies, government agencies, international NGOs, the UN, and many other major organizations in both developed and developing countries. This has led to new areas of work, such as linking the Theory of Change approach to systems thinking and complexity. Change processes are no longer seen as linear, but as having many feedback loops that need to be understood. Consequently, Theory of Change is strengthening monitoring, evaluation and learning. They are also helping to understand and assess impact in hard to measure areas, such as governance, capacity strengthening and institutional development. Innovations continue to emerge. Despite the growing ubiquity of Theory of Change, however, especially in the development arena, understanding of the approach and the methods necessary to implement it effectively are not uniform. In fact, there is evidence of some confusion about what the term ‘theory of change’ actually means; in some cases, what some program developers describe as a Theory of Change is, in essence, simply log frame, strategic plan or another approach that does not encompass the complexity of the theory of change approach.

Theory of Change compared to other models

Practitioners have developed logic models and logical frameworks as strategies and tools to plan and evaluate social change programs. While these models well articulate the goals and resources of an initiative or organization, they give less focus to the complex social, economic, political and institutional processes that underlie social and societal change. Thus, while logic models and logframes have developed an Implementation Theory behind their work, they can lack an underlying Theory of Change. Theory of Change also contrasts with logic models and log frames by beginning with a participatory process to clearly define desired outcomes and to air and challenge one another’s assumptions. Theory of Change begins by first working out

program goals or desired impact and working backwards on outcome pathways, rather than engaging in conventional forward oriented “so-that” reasoning. As an example of "so-that" reasoning: a grantee decides to increase media coverage on the lack of health insurance among children so that public awareness increases so that policymakers increase their knowledge and interest so that policies change so that more children have health insurance. In Theory of Change, by contrast, the group begins not with its intervention but with its long-term goal and outcomes and then works backward (in time) toward the earliest changes that need to occur. Only when the pathway has been developed is it time to consider which interventions will best produce the outcomes in the pathway.

Many organizations, including the Rockefeller Foundation and the United States Agency for International Development, have used a Results Framework and companion Scorecard as management tools. The Results Framework is complementary and adaptable to a Theory of Change-based monitoring and evaluation system. The framework gives the appearance of being derived from a well-thought-out conceptual model, even if the conceptual model is lacking. The limitations of the Results Frameworks is that they do not show causal connections between conditions that need to change in order to meet the ultimate goals. The added value of Theory of Change lies in revealing the conceptual model, including the causal relationships between and among outcomes, the relationships of activities to outcomes, and of outcomes to indicators. Overall, having a Theory of Change helps make explicit the assumptions upon which the Results Framework is based.

Developments and Innovations

New Horizons of Theory of Change

There are two areas of work that, although not coordinated with Theory of Change, offer much to think about in making Theory of Change more focused and effective:

1. The Annie E. Casey Foundation proposes mapping an organization’s social change work along three criteria: Impact, Influence, Leverage.
 - The impact of your work is its program outcomes
 - Your influence is how much other actors change as a result of your work

- Your leverage is how much investment others put into your model.

To date, Theory of Change has not distinguished impact, influence, and leverage as types of outcomes, but it may be useful to do so as a way of focusing the Theory of Change on measurable achievements. Particularly, when using Theory of Change to guide monitoring and evaluation, the Casey rubric helps focus the group's attention on outcomes, which could, if achieved, be convincingly attributed to the group's work. Other than direct program-related outcomes (impact), the Theory would anticipate outcomes in influence and outcomes in leverage. This approach could thereby help to avoid mapping outcomes involving broad shifts in behavior and values among whole populations, which are easy to think about, but are very difficult to monitor and to attribute to any one program.

2. Another refinement, which directly addresses this problem of attribution, comes from Outcomes Mapping. This process distinguishes changes in state from changes in behavior, changes in "state" being just those broad shifts in economic conditions, policy, politics, institutional behavior, and so on, among whole populations (e.g., cities, regions, countries, industries, economic sectors, etc.). Measuring changes in state can exceed the capacity of any one actor's monitoring capabilities. Governments collect data on changes in state but, of course, the data may not be calibrated to measure the kinds of change anticipated in any one Theory of Change. Changes in state are also, as stated above, difficult to attribute to any one source.

In contrast, changes in behavior are much easier to monitor, and more easily related to a group's own work. The Outcomes Mapping focus on changes in behavior would tend to direct a Theory of Change toward outcomes like this, which are outcomes the change agent cares most about and which it can relatively easily monitor and evaluate. There would be proportionately less attention to outcomes such as "every child is within five minutes walk of a playground" or "residents are healthy". Such "changes in state" are more difficult to monitor and to attribute with certainty.

Theory of Change and 'Being Strategic'

Does Theory of Change frustrate or complement strategic thinking? This is an ongoing and important discussion, especially as there is an increasing emphasis on and demand for strategy as grounded, flexible, and opportunity-driven. Some perspectives understand To C as a fixed model that gets in the way of effective work and useful evaluation. However, Patrizi notes that ToC is only at odds with strategic behavior if an organization treats their To C like any other fixed plan. As Patrizi writes: "Once assumptions [in a theory of change] are laid out,

- 1) foundations don't actually test those assumptions, and
- 2) they don't see using the model as a continuous process. It is, like, 'Well, we did our To C and now we are done'.

If the change model is instead treated as something to adjust as organizations learn what works from experience in the field, then the theory should not be at odds with strategic behavior. If strategy is about seizing opportunities and trying out what works, the Theory of Change model serves as a guiding frame of reference. A list is not a model; a list does not push practitioners to consider the goals as part of a systematic model of change, or to think critically—strategically—about how best to attain the outcomes along the pathway.

Limitations and Function of a Linear Model

Given that that things don't happen in a straight-line sequence – as things impact each other in multiple, partly unpredictable ways, with all kinds of feedback loops that aren't modeled in a top-down diagramming format – an important question is: How adequate is the linear Theory of Change model as a description of what's going to happen? One answer to the question is that Theory of Change does not, in fact, model how things happen; rather, it models how we believe things will happen. Theory of Change is a forecast that shows what conditions we believe must exist for other conditions to come into being. Because it is forward looking and logical, Theory of Change reflects the way we think logically –that is, if a, then b—and chronologically—first this, then that. The linear format is therefore appropriate. It can be helpful to complement Theory of Change with a process model that shows how the Theory of Change fits into a larger, more cyclical scheme in which theory leads to action, which leads to

monitoring and evaluation, which leads to adjustment of the theory, which leads to the next action, more monitoring and evaluation, and so on. Such a process model depicts the linear theory as a conceptual driver of change, which must, to remain useful, be accompanied not only by taking action but also by evaluation and recalibration.

Getting ‘buy-in’ from Senior Leadership

It is important to remember that it is often a high-level person who has endorsed and initiated the Theory of Change process as something of value, so they have “bought in” at the beginning. The challenge that emerges is, therefore, how to sustain their support while letting others develop the theory. This is similar to many other issues that come up in matters of hierarchy and delegation: effective leaders delegate and trust their teams to carry out the work. There are many variations on the model but usually it involves good measures of delegation and, conversely, of reporting back to get the leader’s thinking as the work progresses. It is necessary to come to high-level people having laid out your best thinking: don’t go to them without something concrete to which they can respond, but don’t wait until everything is perfect, either.

Chapter 7

Structural Change

Economic structural change refers to a long-term shift in the fundamental structure of an economy, which is often linked to growth and economic development. For example, a subsistence economy may be transformed into a manufacturing economy, or a regulated mixed economy is liberalized. A current driver of structural change in the world economy is globalization. Structural change is possible because of the dynamic nature of the economic system. Economic development generally refers to the sustained, concerted actions of policy makers and communities that promote the standard of living and economic health of a specific area. Economic development can also be referred to as the quantitative and qualitative changes in the economy. Such actions can involve multiple areas including development of human capital, critical infrastructure, regional competitiveness, environmental sustainability, social inclusion, health, safety, literacy, and other initiatives. Economic development differs from economic growth. Whereas economic development is a policy intervention endeavor with aims of economic and social well-being of people, economic growth is a phenomenon of market productivity and rise in GDP. Consequently, as economist Amartya Sen points out: “economic growth is one aspect of the process of economic development

Patterns and changes in sectoral employment drive demand shifts through the income elasticity. Shifting demand for both locally sourced goods and for imported products is a fundamental part of development. The structural changes that move countries through the development process are often viewed in terms of shifts from primary, to secondary and finally, to tertiary production. Technical progress is seen as crucial in the process of structural change as it involves the obsolescence of skills, vocations, and permanent changes in spending and production resulting in structural unemployment. Structural unemployment is a form of unemployment where, at a given wage, the quantity of labor supplied exceeds the quantity of labor demanded, because there is a fundamental mismatch between the number of people who want to work and the number of jobs that are available. The unemployed workers may lack the skills needed for the jobs, or they may not live in the part of the country or world where the jobs are available. Structural unemployment is one of the five major categories of unemployment distinguished by economists. Structural

unemployment is generally considered to be one of the "permanent" types of unemployment, where improvement if possible, will only occur in the long run.

Example

Historically, structural change has not always been strictly for the better. The division of Korea and the separate paths of development taken by each state exemplify this. Korea under Japanese rule was relatively uniform in economic structure, but after World War II the two countries underwent drastically different structural changes due to drastically different political structures. Structural change can be initiated by policy decisions or permanent changes in resources, population or the society. The downfall of communism, for example, is a political change that has had far-reaching economic implications.

Change management (ITSM)

Change management is an IT service management discipline. The objective of change management in this context is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to control IT infrastructure, in order to minimize the number and impact of any related incidents upon service. Changes in the IT infrastructure may arise reactively in response to problems or externally imposed requirements, e.g. legislative changes, or proactively from seeking improved efficiency and effectiveness or to enable or reflect business initiatives, or from programs, projects or service improvement initiatives. Change Management can ensure standardized methods, processes and procedures which are used for all changes, facilitate efficient and prompt handling of all changes, and maintain the proper balance between the need for change and the potential detrimental impact of changes.

Change impact analysis

Change impact analysis (IA) is defined by Bohner and Arnold as "identifying the potential consequences of a change, or estimating what needs to be modified to accomplish a change", and they focus on IA in terms of scoping changes within the details of a design. In contrast, Pfleeger and Atlee focus on the risks associated with changes and state that IA is: "the evaluation of the many risks associated with the change, including estimates of the effects on resources, effort, and schedule". Both the design details and risks associated with modifications are critical to

performing IA within change management processes. A technical colloquial term is also mentioned sometimes in this context, dependency hell.

Types of Impact Analysis Techniques

IA techniques can be classified into three types:

- Traceability
- Dependency
- Experiential

Bohner and Arnold identify two classes of IA, traceability and dependency IA. In traceability IA, links between requirements, specifications, design elements, and tests are captured, and these relationships can be analysed to determine the scope of an initiating change. In dependency IA, linkages between parts, variables, logic, modules etc. are assessed to determine the consequences of an initiating change. Dependency IA occurs at a more detailed level than traceability IA. Within software design, static and dynamic algorithms can be run on code to perform dependency IA. Static methods focus on the program structure, while dynamic algorithms gather information about program behaviour at run-time. Static program analysis is the analysis of computer software that is performed without actually executing programs (analysis performed on executing programs is known as dynamic analysis). In most cases the analysis is performed on some version of the source code and in the other cases some form of the object code. The term is usually applied to the analysis performed by an automated tool, with human analysis being called program understanding, program comprehension or code review. Dynamic program analysis is the analysis of computer software that is performed by executing programs on a real or virtual processor. For dynamic program analysis to be effective, the target program must be executed with sufficient test inputs to produce interesting behavior. Use of software testing techniques such as code coverage helps ensure that an adequate slice of the program's set of possible behaviors has been observed. Also, care must be taken to minimize the effect that instrumentation has on the execution (including temporal properties) of the target program. Inadequate testing can lead to catastrophic failures similar to the maiden flight of the Ariane 5 rocket launcher where dynamic execution errors (run time error) resulted in the destruction of the vehicle.

Literature and engineering practice also suggest a third type of IA, experiential IA, in that the impact of changes is often determined using expert design knowledge. Review meeting protocols, informal team discussions, and individual engineering judgement can all be used to determine the consequences of a modification.

Package management and dependency IA

Software is often delivered in packages, which contain dependencies to other software packages necessary that the one deployed runs. Following these dependencies in reverse order is a convenient way to identify the impact of changing the contents of a software package. Examples for software helpful to do this:

- scripts like what requires for RPM, and debian package formats

Source code and dependency IA

Dependencies are also declared in source code. Amongst the tools supporting to show such dependencies are:

- Integrated development environment
- Find Bugs
- JRipples

There are as well tools applying full text search over source code stored in various repositories. If the source code is web-browsable, then classical search engines can be used. If the source is only available in the runtime environment, it gets more complicated and specialized tools may be of help.

Requirements and traceability to source code

Recent tools use often stable links to trace dependencies. This can be done on all levels, amongst them specification, blueprint, bugs, commits. Despite this, the use of backlink checkers known from search engine optimization is not common. Research in this area is done as well, just to name use case maps. Commercial tools in this area include Telelogic DOORS, and IBM Rational.

Change control

Change control within quality management systems (QMS) and information technology (IT) systems is a formal process used to ensure that changes to a product or system are introduced in a controlled and coordinated manner. It reduces the possibility that unnecessary changes will be introduced to a system without forethought, introducing faults into the system or undoing changes made by other users of software. The goals of a change control procedure usually include minimal disruption to services, reduction in back-out activities, and cost-effective utilization of resources involved in implementing change.

Change control is currently used in a wide variety of products and systems. For IT systems it is a major aspect of the broader discipline of change management. Typical examples from the computer and network environments are patches to software products, installation of new operating systems, upgrades to network routing tables, or changes to the electrical power systems supporting such infrastructure.

The process

There is considerable overlap and confusion between change management, configuration management and change control. The definition below is not yet integrated with definitions of the others.

Certain experts describe change control as a set of six steps

- Record / Classify
- Assess
- Plan
- Build / Test
- Implement
- Close / Gain Acceptance

Record/classify

The client initiates change by making a formal request for something to be changed. The change control team then records and categorizes that request. This categorization would include estimates of importance, impact, and complexity.

Assess

The impact assessor or assessors then make their risk analysis typically by answering a set of questions concerning risk, both to the business and to the process, and follow this by making a judgment on who should carry out the change. If the change requires more than one type of assessment, the head of the change control team will consolidate these. Everyone with a stake in the change then must meet to determine whether there is a business or technical justification for the change. The change is then sent to the delivery team for planning.

Plan

Management will assign the change to a specific delivery team, usually one with the specific role of carrying out this particular type of change. The team's first job is to plan the change in detail as well as construct a regression plan in case the change needs to be backed out.

Build/test

If all stakeholders agree with the plan, the delivery team will build the solution, which will then be tested. They will then seek approval and request a time and date to carry out the implementation phase.

Implement

All stakeholders must agree to a time, date and cost of implementation. Following implementation, it is usual to carry out a post-implementation review which would take place at another stakeholder meeting. Close/gain acceptance. When the client agrees that the change was implemented correctly, the change can be closed.

Chapter 8

Organization Development

Organization development (OD) is a deliberately planned, organization-wide effort to increase an organization's effectiveness and/or efficiency. OD theorists and practitioners define it in various ways. Its multiplicity of definition reflects the complexity of the discipline and is responsible for its lack of understanding. For example, Vasudevan has referred to OD being about promoting organizational readiness to meet change, and it has been said that OD is a systemic learning and development strategy intended to change the basics of beliefs, attitudes and relevance of values, and structure of the current organization to better absorb disruptive technologies, shrinking or exploding market opportunities and ensuing challenges and chaos. It is worth understanding what OD is not. It is not training, personal development, team development, HRD (human resource development), L&D (learning and development) or a part of HR although it is often mistakenly understood as some or all of these. OD interventions are about change so involve people - but OD also develops processes, systems and structures. The primary purpose of OD is to develop the organization, not to train or develop the staff.

Overview

Organization development is an ongoing, systematic process of implementing effective organizational change. OD is known as both a field of science focused on understanding and managing organizational change and as a field of scientific study and inquiry. It is interdisciplinary in nature and draws on sociology, psychology, and theories of motivation, learning, and personality. Although behavioral science has provided the basic foundation for the study and practice of OD, new and emerging fields of study have made their presence felt. Experts in systems thinking and organizational learning, structure of intuition in decision making, and coaching (to name a few) whose perspective is not steeped in just the behavioral sciences, but a much more multi-disciplinary and inter-disciplinary approach, have emerged as OD catalysts or tools. Organization development is a growing field that is responsive to many new approaches.

History

Kurt Lewin (1898–1947) is widely recognized as the founding father of OD, although he died before the concept became current in the mid-1950s. From Lewin came the ideas of group dynamics and action research which underpin the basic OD process as well as providing its collaborative consultant/client ethos. Institutionally, Lewin founded the "Research Center for Group Dynamics" (RCGD) at MIT, which moved to Michigan after his death. RCGD colleagues were among those who founded the National Training Laboratories (NTL), from which the T-groups and group-based OD emerged.

Kurt Lewin played a key role in the evolution of organization development as it is known today. As early as World War II, Lewin experimented with a collaborative change process (involving himself as consultant and a client group) based on a three-step process of planning, taking action, and measuring results. This was the forerunner of action research, an important element of OD, which will be discussed later. Lewin then participated in the beginnings of laboratory training, or T-groups, and, after his death in 1947, his close associates helped to develop survey-research methods at the University of Michigan. These procedures became important parts of OD as developments in this field continued at the National Training Laboratories and in growing numbers of universities and private consulting firms across the country. Two of the leading universities offering doctoral level degrees in OD are Benedictine University and the Fielding Graduate University.

Douglas McGregor and Richard Beckhard while "consulting together at General Mills in the 1950s, the two coined the term organization development (OD) to describe an innovative bottoms-up change effort that fit no traditional consulting categories" (Weisbord, 1987, p. 112).

The failure of off-site laboratory training to live up to its early promise was one of the important forces stimulating the development of OD. Laboratory training is learning from a person's "here and now" experience as a member of an ongoing training group. Such groups usually meet without a specific agenda. Their purpose is for the members to learn about themselves from their spontaneous "here and now" responses to an ambiguous hypothetical situation. Problems of leadership, structure, status, communication, and self-serving behavior typically arise in such a

group. The members have an opportunity to learn something about them and to practice such skills as listening, observing others, and functioning as effective group members.

As formerly practiced (and occasionally still practiced for special purposes), laboratory training was conducted in "stranger groups," or groups composed of individuals from different organizations, situations, and backgrounds. A major difficulty developed, however, in transferring knowledge gained from these "stranger labs" to the actual situation "back home". This required a transfer between two different cultures, the relatively safe and protected environment of the T-group (or training group) and the give-and-take of the organizational environment with its traditional values. This led the early pioneers in this type of learning to begin to apply it to "family groups" — that is, groups located within an organization. From this shift in the locale of the training site and the realization that culture was an important factor in influencing group members (along with some other developments in the behavioral sciences) emerged the concept of organization development.

Core Values

Underlying Organization Development are humanistic values. Margulies and Raia (1972) articulated the humanistic values of OD as follows:

- Providing opportunities for people to function as human beings rather than as resources in the productive process.
- Providing opportunities for each organization member, as well as for the organization itself, to develop to his full potential.
- Seeking to increase the effectiveness of the organization in terms of all of its goals.
- Attempting to create an environment in which it is possible to find exciting and challenging work.
- Providing opportunities for people in organizations to influence the way in which they relate to work, the organization, and the environment.
- Treating each human being as a person with a complex set of needs, all of which are important in his work and in his life.

Objective of OD: The objective of OD is

- To increase the level of inter-personal trust among employees.

- To increase employees' level of satisfaction and commitment.
- To confront problems instead of neglecting them.
- To effectively manage conflict.
- To increase cooperation among the employees.
- To increase the organization's problem solving.
- To put in place processes that will help improve the ongoing operation of the organization on a continuous basis.

As objectives of organizational development are framed keeping in view specific situations, they vary from one situation to another. In other words, these programs are tailored to meet the requirements of a particular situation. But broadly speaking, all organizational development programs try to achieve the following objectives:

- Making individuals in the organization aware of the vision of the organization. Organizational development helps in making employees align with the vision of the organization.
- Encouraging employees to solve problems instead of avoiding them.
- Strengthening inter-personnel trust, cooperation, and communication for the successful achievement of organizational goals.
- Encouraging every individual to participate in the process of planning, thus making them feel responsible for the implementation of the plan.
- Creating a work atmosphere in which employees are encouraged to work and participate enthusiastically.
- Replacing formal lines of authority with personal knowledge and skill.
- Creating an environment of trust so that employees willingly accept change.

According to organizational development thinking, organization development provides managers with a vehicle for introducing change systematically by applying a broad selection of management techniques. This, in turn, leads to greater personal, group, and organizational effectiveness.

Change agent

A change agent in the sense used here is not a technical expert skilled in such functional areas as accounting, production, or finance. The change agent is a behavioral scientist who knows how to get people in an organization involved in solving their own problems. A change agent's main strength is a comprehensive knowledge of human behavior, supported by a number of intervention techniques (to be discussed later). The change agent can be either external or internal to the organization. An internal change agent is usually a staff person who has expertise in the behavioral sciences and in the intervention technology of OD. Beckhard reports several cases in which line people have been trained in OD and have returned to their organizations to engage in successful change assignments. In the natural evolution of change mechanisms in organizations, this would seem to approach the ideal arrangement. Qualified change agents can be found on some university faculties, or they may be private consultants associated with such organizations as the National Training Laboratories Institute for Applied Behavioral Science (Washington, D.C.) University Associates (San Diego, California), the Human Systems Intervention graduate program in the Department of Applied Human Sciences (Concordia University, Montreal, Canada), Navitus (Pvt) Ltd (Pakistan), MaxFoster Global and similar organizations.

The change agent may be a staff or line member of the organization who is schooled in OD theory and technique. In such a case, the "contractual relationship" is an in-house agreement that should probably be explicit with respect to all of the conditions involved except the fee.

Sponsoring organization

The initiative for OD programs often comes from an organization that has a problem or anticipates facing a problem. This means that top management or someone authorized by top management is aware that a problem exists and has decided to seek help in solving it. There is a direct analogy here to the practice of psychotherapy: The client or patient must actively seek help in finding a solution to his problems. This indicates a willingness on the part of the client organization to accept help and assures the organization that management is actively concerned.

Applied behavioral science

One of the outstanding characteristics of OD that distinguishes it from most other improvement programs is that it is based on a "helping relationship." Some believe that the change agent is not a physician to the organization's ills; that s/he does not examine the "patient," make a diagnosis, and write a prescription. Nor does she try to teach organizational members a new inventory of knowledge which they then transfer to the job situation. Using theory and methods drawn from such behavioral sciences as industrial/organizational psychology, industrial sociology, communication, cultural anthropology, administrative theory, organizational behavior, economics, and political science, the change agent's main function is to help the organization define and solve its own problems. The basic method used is known as action research. This approach, which is described in detail later, consists of a preliminary diagnosis, collecting data, feedback of the data to the client, data exploration by the client group, action planning based on the data, and taking action.

Systems context

OD deals with a total system — the organization as a whole, including its relevant environment — or with a subsystem or systems — departments or work groups — in the context of the total system. Parts of systems, for example, individuals, cliques, structures, norms, values, and products are not considered in isolation; the principle of interdependency, that is, that change in one part of a system affects the other parts, is fully recognized. Thus, OD interventions focus on the total culture and cultural processes of organizations. The focus is also on groups, since the relevant behavior of individuals in organizations and groups is generally a product of group influences rather than personality.

Improved organizational performance

The objective of OD is to improve the organization's capacity to handle its internal and external functioning and relationships. This would include such things as improved interpersonal and group processes, more effective communication, enhanced ability to cope with organizational problems of all kinds, more effective decision processes, more appropriate leadership style, improved skill in dealing with destructive conflict, and higher levels of trust and cooperation among organizational members. These objectives stem from a value system based on an

optimistic view of the nature of man — that man in a supportive environment is capable of achieving higher levels of development and accomplishment. Essential to organization development and effectiveness is the scientific method — inquiry, a rigorous search for causes, experimental testing of hypotheses, and review of results.

Self-managing work groups allows the members of a work team to manage, control, and monitor all facets of their work, from recruiting, hiring, and new employees to deciding when to take rest breaks. An early analysis of the first-self-managing work groups yielded the following behavioral characteristics (Hackman, 1986):

- Employees assume personal responsibility and accountability for outcomes of their work.
- Employees monitor their own performance and seek feedback on how well they are accomplishing their goals.
- Employees manage their performance and take corrective action when necessary to improve their and the performance of other group members.
- Employees seek guidance, assistance, and resources from the organization when they do not have what they need to do the job.
- Employees help members of their work group and employees in other groups to improve job performance and raise productivity for the organization as a whole.

Chapter 9

Action Research

Action research is a research initiated to solve an immediate problem or a reflective process of progressive problem solving led by individuals working with others in teams or as part of a "community of practice" to improve the way they address issues and solve problems. There are two types of action research: participatory action research, and practical action research.

Action research involves the process of actively participating in an organization change situation whilst conducting research. Action research can also be undertaken by larger organizations or institutions, assisted or guided by professional researchers, with the aim of improving their strategies, practices and knowledge of the environments within which they practice. As designers and stakeholders, researchers work with others to propose a new course of action to help their community improve its work practices.

Kurt Lewin, then a professor at MIT, first coined the term "action research" in 1944. In his 1946 paper "Action Research and Minority Problems" he described action research as "a comparative research on the conditions and effects of various forms of social action and research leading to social action" that uses "a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action".

Overview

Action research is an interactive inquiry process that balances problem solving actions implemented in a collaborative context with data-driven collaborative analysis or research to understand underlying causes enabling future predictions about personal and organizational change (Reason & Bradbury, 2002)[citation needed]. After six decades of action research development, many methods have evolved that adjust the balance to focus more on the actions taken or more on the research that results from the reflective understanding of the actions. This tension exists between

- those who are more driven by the researcher's agenda and those more driven by participants;
- those who are motivated primarily by instrumental goal attainment and those motivated primarily by the aim of personal, organizational or societal transformation; and

- 1st-, to 2nd-, to 3rd-person research, that is, my research on my own action, aimed primarily at personal change; our research on our group (family/team), aimed primarily at improving the group; and ‘scholarly’ research aimed primarily at theoretical generalization and/or large scale change.

Action research challenges traditional social science by moving beyond reflective knowledge created by outside experts sampling variables, to an active moment-to-moment theorizing, data collecting and inquiry occurring in the midst of emergent structure. “Knowledge is always gained through action and for action. From this starting point, to question the validity of social knowledge is to question, not how to develop a reflective science about action, but how to develop genuinely well-informed action — how to conduct an action science” (Torbert 2002). In this sense, performing action research is the same as performing an experiment, thus it is an empirical process

Major theories

Chris Argyris' Action Science

Chris Argyris' Action Science begins with the study of how human beings design their actions in difficult situations. Humans design their actions to achieve intended consequences and are governed by a set of environment variables. How those governing variables are treated in designing actions are the key differences between single loop learning and double loop learning. When actions are designed to achieve the intended consequences and to suppress conflict about the governing variables, a single loop learning cycle usually ensues.

On the other hand, when actions are taken, not only to achieve the intended consequences, but also to openly inquire about conflict and to possibly transform the governing variables, both single loop and double loop learning cycles usually ensue. (Argyris applies single loop and double loop learning concepts not only to personal behaviors but also to organizational behaviors in his models.) This is different from experimental research in which environmental variables are controlled and researchers try to find out cause and effect in an isolated environment.

John Heron and Peter Reason's Cooperative Inquiry

Cooperative inquiry, also known as collaborative inquiry was first proposed by John Heron in 1971 and later expanded with Peter Reason and Demi Brown. The major idea of cooperative inquiry is to “research ‘with’ rather than ‘on’ people.” It emphasizes that all active participants are

fully involved in research decisions as co-researchers. Cooperative inquiry creates a research cycle among four different types of knowledge: propositional knowing (as in contemporary science), practical knowing (the knowledge that comes with actually doing what you propose), experiential knowing (the feedback we get in real time about our interaction with the larger world) and presentational knowing (the artistic rehearsal process through which we craft new practices). The research process includes these four stages at each cycle with deepening experience and knowledge of the initial proposition, or of new propositions, at every cycle.

Paulo Freire's Participatory Action Research (PAR)

Participatory action research has emerged in recent years as a significant methodology for intervention, development and change within communities and groups. It is now promoted and implemented by many international development agencies and university programs, as well as countless local community organizations around the world. PAR builds on the critical pedagogy put forward by Paulo Freire as a response to the traditional formal models of education where the “teacher” stands at the front and “imparts” information to the “students” who are passive recipients. This was further developed in “adult education” models throughout Latin America. Orlando Fals-Borda (1925–2008), Colombian sociologist and political activist, was one of principal promoters of “participatory action research” (IAP in Spanish) in Latin America. Published “double history of the coast”, book that compare the official “history” and the non official “story” of the north coast of Colombia.

William Torbert’s Developmental Action Inquiry

The Developmental Action Inquiry is a “way of simultaneously conducting action and inquiry as a disciplined leadership practice that increases the wider effectiveness of our actions. Such action helps individuals, teams, organizations become more capable of self-transformation and thus more creative, more aware, more just and more sustainable” (Torbert, 2004). Action Inquiry challenges our attention to span four different territories of experience (at the personal, group or organizational scales) in the midst of actions. This practice promotes timeliness – learning with moment to moment intentional awareness – among individuals and with regard to the outside world of nature and human institutions. It studies the “pre-constituted internalized and externalized universe in the present, both as it resonates with and departs from the past and as it resonates with and potentiates the future” (Torbert, 2001).

Professor William Barry's and Jack Whitehead's Living Theory approach to action research

In generating a Living theory, in Whitehead and McNiff (2006), and most recently defined by Dr. William Barry as an approach to research which focuses on creating ontological weight in Atkins and Wallace (2012), individuals generate explanations of their educational influences in their own learning, in the learning of others and in the learning of social formations. They generate the explanations from experiencing themselves existential beings experiencing living contradictions in enquiries of the kind 'How do I improve what I am doing?' The difference between Whitehead and Barry's approach to living theory is in essence ontological: Whitehead is an avowed atheist working at The University of Cumbria in England (www.cumbria.ac.uk) and Barry an existential Christian philosopher working as a professor in the School of Education and Leadership at Notre Dame de Namur University in Belmont, California, U.S.A.

They use action reflection cycles of expressing concerns (saying why you are concerned in relation to values), imagining possibilities in developing action plans, acting and gathering data, evaluating the influences of action, modifying concerns, ideas and action in the light of the evaluations. The explanations include life-affirming, energy-flowing values as explanatory principles.

Wendell L French and Cecil Bell defined organization development (OD) at one point as "organization improvement through action research". If one idea can be said to summarize OD's underlying philosophy, it would be action research as it was conceptualized by Kurt Lewin and later elaborated and expanded on by other behavioral scientists. Concerned with social change and, more particularly, with effective, permanent social change, Lewin believed that the motivation to change was strongly related to action: If people are active in decisions affecting them, they are more likely to adopt new ways. "Rational social management", he said, "proceeds in a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of action".

Lewin's description of the process of change involves three steps:

- "Unfreezing": Faced with a dilemma or disconfirmation, the individual or group becomes aware of a need to change.

- "Changing": The situation is diagnosed and new models of behavior are explored and tested.
- "Refreezing": Application of new behavior is evaluated, and if reinforcing, adopted.

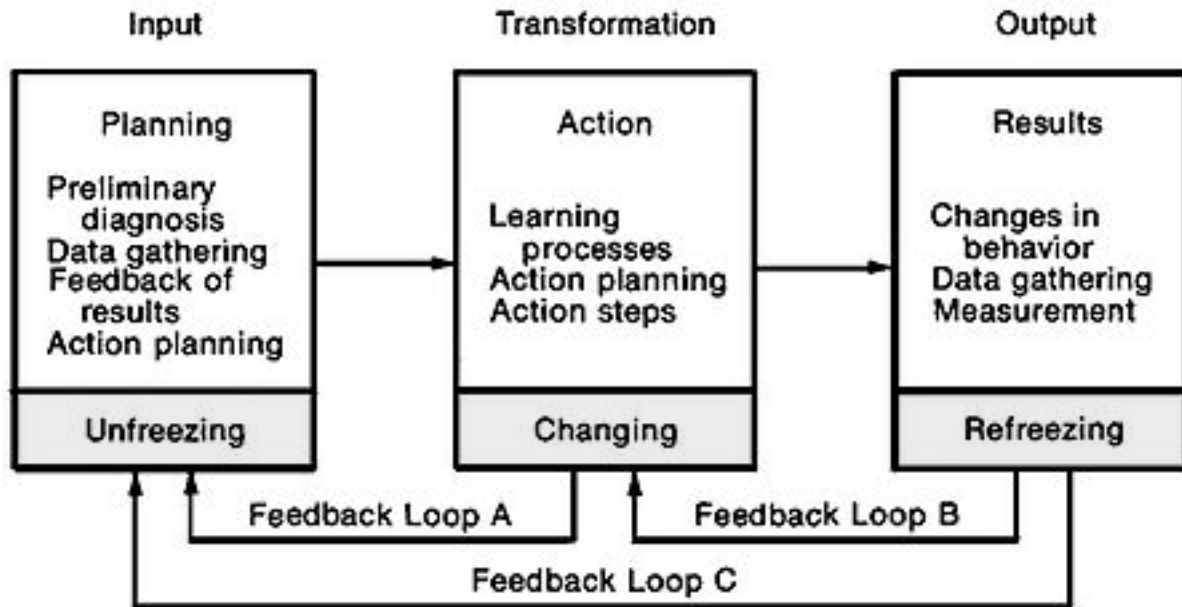


Figure 1 summarizes the steps and processes involved in planned change through action research. Action research is depicted as a cyclical process of change. The cycle begins with a series of planning actions initiated by the client and the change agent working together. The principal elements of this stage include a preliminary diagnosis, data gathering, feedback of results, and joint action planning. In the language of systems theory, this is the input phase, in which the client system becomes aware of problems as yet unidentified, realizes it may need outside help to effect changes, and shares with the consultant the process of problem diagnosis.

The second stage of action research is the action, or transformation, phase. This stage includes actions relating to learning processes (perhaps in the form of role analysis) and to planning and executing behavioral changes in the client organization. As shown in Figure 1, feedback at this stage would move via Feedback Loop A and would have the effect of altering previous planning to bring the learning activities of the client system into better alignment with change objectives. Included in this stage is action-planning activity carried out jointly by the consultant and members of the client system. Following the workshop or learning sessions, these action steps are carried out on the job as part of the transformation stage.

The third stage of action research is the output, or results, phase. This stage includes actual changes in behavior (if any) resulting from corrective action steps taken following the second stage. Data are again gathered from the client system so that progress can be determined and necessary adjustments in learning activities can be made. Minor adjustments of this nature can be made in learning activities via Feedback Loop B. Major adjustments and reevaluations would return the OD project to the first, or planning, stage for basic changes in the program. The action-research model shown in Figure 1 closely follows Lewin's repetitive cycle of planning, action, and measuring results. It also illustrates other aspects of Lewin's general model of change. As indicated in the diagram, the planning stage is a period of unfreezing, or problem awareness. The action stage is a period of changing that is, trying out new forms of behavior in an effort to understand and cope with the system's problems. (There is inevitable overlap between the stages, since the boundaries are not clear-cut and cannot be in a continuous process). The results stage is a period of refreezing, in which new behaviors are tried out on the job and, if successful and reinforcing, become a part of the system's repertoire of problem-solving behavior.

Action research is problem centered, client centered, and action oriented. It involves the client system in a diagnostic, active-learning, problem-finding, and problem-solving process. Data are not simply returned in the form of a written report but instead are fed back in open joint sessions, and the client and the change agent collaborate in identifying and ranking specific problems, in devising methods for finding their real causes, and in developing plans for coping with them realistically and practically. Scientific method in the form of data gathering, forming hypotheses, testing hypotheses, and measuring results, although not pursued as rigorously as in the laboratory, is nevertheless an integral part of the process. Action research also sets in motion a long-range, cyclical, self-correcting mechanism for maintaining and enhancing the effectiveness of the client's system by leaving the system with practical and useful tools for self-analysis and self-renewal.

Chapter 10

OD Interventions

"Interventions" are principal learning processes in the "action" stage of organization development. Interventions are structured activities used individually or in combination by the members of a client system to improve their social or task performance. They may be introduced by a change agent as part of an improvement program, or they may be used by the client following a program to check on the state of the organization's health, or to effect necessary changes in its own behavior. "Structured activities" mean such diverse procedures as experiential exercises, questionnaires, attitude surveys, interviews, relevant group discussions, and even lunchtime meetings between the change agent and a member of the client organization. Every action that influences an organization's improvement program in a change agent-client system relationship can be said to be an intervention.

There are many possible intervention strategies from which to choose. Several assumptions about the nature and functioning of organizations are made in the choice of a particular strategy. Beckhard lists six such assumptions:

1. The basic building blocks of an organization are groups (teams). Therefore, the basic units of change are groups, not individuals.
2. An always relevant change goal is the reduction of inappropriate competition between parts of the organization and the development of a more collaborative condition.
3. Decision making in a healthy organization is located where the information sources are, rather than in a particular role or level of hierarchy.
4. Organizations, subunits of organizations, and individuals continuously manage their affairs against goals. Controls are interim measurements, not the basis of managerial strategy.
5. One goal of a healthy organization is to develop generally open communication, mutual trust, and confidence between and across levels.
6. People support what they help create. People affected by a change must be allowed active participation and a sense of ownership in the planning and conduct of the change.

Interventions range from those designed to improve the effectiveness of individuals through those designed to deal with teams and groups, intergroup relations, and the total organization. There are

interventions that focus on task issues (what people do), and those that focus on process issues (how people go about doing it). Finally, interventions may be roughly classified according to which change mechanism they tend to emphasize: for example, feedback, awareness of changing cultural norms, interaction and communication, conflict, and education through either new knowledge or skill practice.

One of the most difficult tasks confronting the change agent is to help create in the client system a safe climate for learning and change. In a favorable climate, human learning builds on itself and continues indefinitely during man's lifetime. Out of new behavior, new dilemmas and problems emerge as the spiral continues upward to new levels. In an unfavorable climate, in contrast, learning is far less certain, and in an atmosphere of psychological threat, it often stops altogether. Unfreezing old ways can be inhibited in organizations because the climate makes employees feel that it is inappropriate to reveal true feelings, even though such revelations could be constructive. In an inhibited atmosphere, therefore, necessary feedback is not available. Also, trying out new ways may be viewed as risky because it violates established norms. Such an organization may also be constrained because of the law of systems: If one part changes, other parts will become involved. Hence, it is easier to maintain the status quo. Hierarchical authority, specialization, span of control, and other characteristics of formal systems also discourage experimentation.

The change agent must address himself to all of these hazards and obstacles. Some of the things which will help him are:

- A real need in the client system to change
- Genuine support from management
- Setting a personal example: listening, supporting behavior
- A sound background in the behavioral sciences
- A working knowledge of systems theory
- A belief in man as a rational, self-educating being fully capable of learning better ways to do things.

A few examples of interventions include team building, coaching, Large Group Interventions, mentoring, performance appraisal, downsizing, TQM, and leadership development.

Kotters 8 steps for implementing strategy

John Kotter's (1995) framework, currently the most widely used framework for managing change, replicates almost all that has been said in applied management fora on this subject. 'Over the past decade,' Kotter claimed, 'I have watched over 100 companies try to remake themselves.' Kotter concluded that 'the most general lesson to be learned' from his observations of the 'more successful cases', was that 'the change process goes through a series of phases (or) steps

Kotter's eight step change model can be summarised as

1. Increase urgency - inspire people to move, make objectives real and relevant.
2. Build the guiding team - get the right people in place with the right emotional commitment, and the right mix of skills and levels.
3. Get the vision right - get the team to establish a simple vision and strategy, focus on emotional and creative aspects necessary to drive service and efficiency.
4. Communicate for buy-in - Involve as many people as possible, communicate the essentials, simply, and to appeal and respond to people's needs. De-clutter communications - make technology work for you rather than against.
5. Empower action - Remove obstacles, enable constructive feedback and lots of support from leaders - reward and recognise progress and achievements.
6. Create short-term wins - Set aims that are easy to achieve - in bite-size chunks. Manageable numbers of initiatives. Finish current stages before starting new ones.
7. Don't let up - Foster and encourage determination and persistence - ongoing change - encourage ongoing progress reporting - highlight achieved and future milestones.

8. Make change stick - Reinforce the value of successful change via recruitment, promotion, new change leaders. Weave change into culture.

Change request

A change request is a document containing a call for an adjustment of a system; it is of great importance in the change management process.

A change request is declarative, i.e. it states what needs to be accomplished, but leaves out how the change should be carried out. Important elements of a change request are an ID, the customer (ID), the deadline (if applicable), an indication whether the change is required or optional, the change type (often chosen from a domain-specific ontology) and a change abstract, which is a piece of narrative (Keller, 2005).

Change requests typically originate from one of five sources:

- (i) problem reports that identify bugs that must be fixed, which forms the most common source.
- (ii) system enhancement requests from users.
- (iii) events in the development of other systems
- (iv) changes in underlying structure and or standards (e.g. in software development this could be a new operating system)
- (v) demands from senior management (Dennis, Wixom & Tegarden, 2002). Additionally, in Project Management, change requests may also originate from an unclear understanding of the goals and the objectives of the project.

Organizational self-renewal

The ultimate aim of OD practitioners is to "work themselves out of a job" by leaving the client organization with a set of tools, behaviors, attitudes, and an action plan with which to monitor its own state of health and to take corrective steps toward its own renewal and development. This is consistent with the systems concept of feedback as a regulatory and corrective mechanism.

Understanding organizations

Weisbord presents a six-box model for understanding organization:

- Purposes: The organization members are clear about the organization's mission and purpose and goal agreements, whether people support the organization's purpose.
- Structure: How is the organization's work divided up? The question is whether there is an adequate fit between the purpose and the internal structure.
- Relationship: Between individuals, between units or departments that perform different tasks, and between the people and requirements of their jobs.
- Rewards: The consultant should diagnose the similarities between what the organization formally rewarded or punished members for.
- Leadership: Is to watch for blips among the other boxes and maintain balance among them.
- Helpful mechanism: Is a helpful organization that must attend to in order to survive which as planning, control, budgeting, and other information systems that help organization member accomplish.

Modern development

In recent years, serious questioning has emerged about the relevance of OD to managing change in modern organizations. The need for "reinventing" the field has become a topic that even some of its "founding fathers" are discussing critically.

With this call for reinvention and change, scholars have begun to examine organization development from an emotion-based standpoint. For example, deKlerk (2007) writes about how emotional trauma can negatively affect performance. Due to downsizing, outsourcing, mergers, restructuring, continual changes, invasions of privacy, harassment, and abuses of power, many employees experience the emotions of aggression, anxiety, apprehension, cynicism, and fear, which can lead to performance decreases. deKlerk (2007) suggests that in order to heal the trauma and increase performance, O.D. practitioners must acknowledge the existence of the trauma, provide a safe place for employees to discuss their feelings, symbolize the trauma and put it into perspective, and then allow for and deal with the emotional responses. One method of achieving this is by having employees draw pictures of what they feel about the situation, and then having

them explain their drawings with each other. Drawing pictures is beneficial because it allows employees to express emotions they normally would not be able to put into words. Also, drawings often prompt active participation in the activity, as everyone is required to draw a picture and then discuss its meaning.

The use of new technologies combined with globalization has also shifted the field of organization development. Roland Sullivan (2005) defined Organization Development with participants at the 1st Organization Development Conference for Asia in Dubai-2005 as "Organization Development is a transformative leap to a desired vision where strategies and systems align, in the light of local culture with an innovative and authentic leadership style using the support of high tech tools.

Chapter 11

Management Consulting

Management consulting is the practice of helping organizations to improve their performance, primarily through the analysis of existing organizational problems and development of plans for improvement. Organizations may draw upon the services of management consultants for a number of reasons, including gaining external (and presumably objective) advice and access to the consultants' specialised expertise.

As a result of their exposure to and relationships with numerous organizations, consulting firms are also said to be aware of industry "best practices", although the transferability of such practices from one organization to another may be limited by the specific nature of situation under consideration.

Consultancies may also provide organizational change management assistance, development of coaching skills, process analysis, technology implementation, strategy development, or operational improvement services. Management consultants often bring their own proprietary methodologies or frameworks to guide the identification of problems, and to serve as the basis for recommendations for more effective or efficient ways of performing work tasks.

History

Management consulting grew with the rise of management as a unique field of study. The first management consulting firm was Arthur D. Little Inc., founded in 1886 as a partnership, and later incorporated in 1909. Though Arthur D. Little later became a general management consultancy, it originally specialised in technical research. Booz Allen Hamilton was founded by Edwin G. Booz, a graduate of the Kellogg School of Management at Northwestern University, in 1914 as a management consultancy and the first to serve both industry and government clients. In 1926, James O. McKinsey, professor of Managerial Accounting at the University of Chicago Booth School of Business, founded McKinsey.

The first wave of growth in the consulting industry was triggered by the Glass-Steagall Banking Act in the 1930s, and was driven by demand for advice on finance, strategy, and organization. From the 1950s onwards consultancies not only expanded their activities considerably in the

United States but also opened offices in Europe and later in Asia and South America. After World War II, a number of new management consulting firms formed, bringing a rigorous analytical approach to the study of management and strategy. Work carried out at McKinsey, Boston Consulting Group, AT Kearney, Booz Allen Hamilton, and the Harvard Business School during the 1960s and 1970s developed the tools and approaches that would define the new field of strategic management, setting the groundwork for many consulting firms to follow. In 1983, Harvard Business School's influence on the industry continued with the founding of the now defunct Monitor Group by six professors.

The industry experienced significant growth in the 1980s and 1990s, gaining considerable importance in relation to national gross domestic product. In 1980 there were only five consulting firms with more than 1,000 consultants worldwide, whereas by the 1990s there were more than thirty firms of this size.

An earlier wave of growth in the early 1980s was driven by demand for strategy and organization consultancies. The wave of growth in the 1990s was driven by both strategy and information technology advice. In the second half of the 1980s the big accounting firms entered the IT consulting segment. The then Big Eight, now Big Four, accounting firms (PricewaterhouseCoopers; KPMG; Ernst & Young; Deloitte Touche Tohmatsu) had always offered advice in addition to their traditional services, but from the late 1980s onwards these activities became increasingly important in relation to the maturing market of accounting and auditing. By the mid-1990s these firms had outgrown those service providers focusing on corporate strategy and organization. While three of the Big Four legally divided the different service lines after the Enron scandals and the ensuing breakdown of Arthur Andersen, they are now back in the consulting business.

The industry stagnated in 2001 before recovering after 2003, with a current trend towards a clearer segmentation of management consulting firms. In recent years, management consulting firms actively recruit top graduates from Ivy League universities, Rhodes Scholars, and students from top MBA programs.

Function

The functions of consulting services are commonly broken down into eight task categories. Consultants can function as bridges for information and knowledge, and that external consultants can provide these bridging services more economically than client firms themselves.

Marvin Bower, McKinsey's long-term director, has mentioned the benefits of a consultant's externality, that they have varied experience outside the client company.

Consultants have specialised skills on tasks that would involve high internal coordination costs for clients, such as organization-wide changes or the implementation of information technology. In addition, because of economies of scale, their focus and experience in gathering information worldwide and across industries renders their information search less costly than for clients.

Approaches

In general various approaches to consulting can be thought of as lying somewhere along a continuum, with an 'expert' or prescriptive approach at one end, and a facilitative approach at the other. In the expert approach, the consultant takes the role of expert, and provides expert advice or assistance to the client, with, compared to the facilitative approach, less input from, and fewer collaborations with the client(s). With a facilitative approach, the consultant focuses less on specific or technical expert knowledge, and more on the process of consultation itself. Because of this focus on process, a facilitative approach is also often referred to as 'process consulting,' with Edgar Schein being considered the best-known practitioner. The consulting firms listed above are closer toward the expert approach of this continuum.

Many consulting firms are organized in a structured matrix, where one 'axis' describes a business function or type of consulting: for example, strategy, operations, technology, executive leadership, process improvement, talent management, sales, etc. The second axis is an industry focus: for example, oil and gas, retail, automotive. Together, these form a matrix, with consultants occupying one or more 'cells' in the matrix. For example, one consultant may specialize in operations for the retail industry, and another may focus on process improvement in the downstream oil and gas industry.

Specialization

Management consulting refers generally to the provision of business services, but there are numerous specialties, such as information technology consulting, human resource consulting, virtual management consulting and others, many of which overlap, and most of which are offered by the larger diversified consultancies. So-called "boutique" consultancies, however, are smaller organizations focusing upon a few of such specialties.

The 1990s saw an increase in what has been termed a 'future-based' approach. This emphasised language and alignment of people within an organization to a common vision of the future of the organization, as set out in the book "Three Laws of Performance". The essential concept here was that the way people perform is seen to correlate to the way that world occurs for them, and that future-based language could alter the way the future actually occurs for them. These principles were increasingly employed in organizations that had experienced a market transition or a merger requiring the blending of two corporate cultures. However, towards the end of the 1990s the approach declined due to a perception that the concept outlined in this book did not in practice offer added value to organizations.

Current state of the industry

Management consulting has grown quickly, with growth rates of the industry exceeding 20% in the 1980s and 1990s. As a business service, consulting remains highly cyclical and linked to overall economic conditions. The consulting industry shrank during the 2001-2003 period, but grew steadily until the recent economic downturn in 2009. Since then the market has stabilised.

Currently, there are three main types of consulting firms. Large, diversified organizations, Medium-sized management consultancies and boutique firms that have focused areas of consulting expertise in specific industries, functional areas, technologies, or regions of the world.

Revenue model

Traditionally, the consulting industry charged on a time and materials basis, billing for staff consultants based upon the hours worked plus out-of-pocket expenses such as travel costs. During

the late 1990s and early 2000s, there was a shift to more results-based pricing, either with fixed bids for defined deliverables or some form of results-based pricing in which the firm would be paid a fraction of the value delivered. The current trend seems to favor a hybrid with components of fixed pricing and risk-sharing by both the consulting firm and client

Trends

The use of management consultancy is becoming more prevalent in non-business fields including the public sector; as the need for professional and specialist support grows, other industries such as government, quasi-government and not-for-profit agencies are turning to the same managerial principles which have helped the private sector for years.

An industry structural trend which arose in the early part of the 21st century was the spin-off or separation of the consulting and accounting units of the large diversified professional advisory firms most notably Deloitte, Ernst & Young, PwC and KPMG. For these firms, which began operation as accounting and audit firms, management consulting was a new extension to their organization. But after a number of highly publicised scandals over accounting practices, such as the Enron scandal, these firms began divestiture of their management-consulting units, to more easily comply with the tighter regulatory scrutiny that followed. In some parts of the world this trend is now being reversed where the firms are rapidly rebuilding their management consulting arms as their corporate websites clearly demonstrate.

Rise of internal corporate consulting groups

Added to these approaches are corporations that set up their own internal consulting groups, hiring internal management consultants either from within the corporation or from external firms' employees. Many corporations have internal groups of as many as 25 to 30 full-time consultants.

Internal consulting groups are often formed around a number of practice areas, commonly including: organizational development, process management, information technology, design services, training, and development.

Advantages

There are several potential benefits to employing internal consultants:

- If properly managed and empowered, internal consulting groups evaluate engagement on projects in light of the corporation's strategic and tactical objectives.
- Often, the internal consultant requires less ramp up time on a project due to familiarity with the corporation, and is able to guide a project through to implementation — a step that would often be too costly if an external consultant were used.
- Internal relationship provides opportunities to keep certain corporate information private.
- It is likely that the time and materials cost of internal consultants is significantly less than external consultants operating in the same capacity.
- Internal consulting positions can be used to recruit and develop potential senior managers of the organization.

Internal consultants may be specifically suited to either:

- Lead external consulting project teams, or
- Act as organizational subject matter experts 'embedded' with external consulting teams under the direction of organizational management.
- A group of internal consultants can closely monitor and work with external consulting firms. This would ensure better delivery, quality, and overall operating relationships.
- External firms providing consulting services have a dichotomy in priority. The health of the external firm is in aggregate more important than that of their client (though of course the health of their client can have a direct impact on their own health).

Disadvantages

- The internal consultant may not bring the objectivity to the consulting relationship that an external firm can.
- An internal consultant also may not bring to the table best practices from other corporations. A way to mitigate this issue is to recruit experience into the group and/or proactively provide diverse training to internal consultants.
- Internal consultants may face corporate politics just as any group in an organization.
- Where the consulting industry is strong and consulting compensation high, it can be difficult to recruit candidates.

- It is often difficult to accurately measure the true costs and benefits of an internal consulting group.
- When financial times get tough, internal consulting groups that have not effectively demonstrated economic value (costs vs. benefits) are likely to face size reductions or reassignment.

Government consultants

The use of management consulting in governments is widespread in many countries but can be subject to misunderstandings and resultant controversy.

United States

In the US, Computer Sciences Corporation's Federal Consulting Practice, Booz Allen Hamilton, and Deloitte Consulting LLP, amongst others, have established a profile for consulting within government organizations and functions.

United Kingdom

In the UK, the use of external management consultants within government has sometimes been contentious due to perceptions of variable value for money. From 1997 to 2006, for instance, the UK government reportedly spent £20 billion on management consultants, raising questions in the House of Commons as to the returns upon such investment.

The UK has also experimented with providing longer-term use of management consultancy techniques provided internally, particularly to the high-demand consultancy arenas of local government and the National Health Service; the Local Government Association's Improvement and Development Agency and the public health National Support Teams; both generated positive feedback at cost levels considered a fraction of what external commercial consultancy input would have incurred.

India

In India, NABARD Consultancy Services (NABCONS) provides consultancy services in the field of agriculture, rural development and management. It is the wholly owned subsidiary of National Bank for Agriculture and Rural Development (NABARD) which is the apex bank of the country

with regard to agriculture and rural development. NABARD is owned by Government of India and Reserve Bank of India. Agriculture Finance Corporation Limited provides consultancy mainly to governments and related institutions.

Criticism

Despite consistently growing revenues, management consultancy also consistently attracts a significant amount of criticism, both from clients as well as from management scholars.

Management consultants are sometimes criticized for overuse of buzzwords, reliance on and propagation of management fads, and a failure to develop plans that are executable by the client. A number of critical books about management consulting argue that the mismatch between management consulting advice and the ability of executives to actually create the change suggested results in substantial damages to existing businesses. In his book *Flawed Advice and the Management Trap*, Chris Argyris believes that much of the advice given today has real merit. However, a close examination shows that most advice given today contains gaps and inconsistencies that may prevent positive outcomes in the future.

More disreputable consulting firms are sometimes accused of delivering empty promises, despite high fees, and charged with "stating the obvious" or lacking the experience upon which to base their advice. These consultants bring few innovations, instead offering generic and "prepackaged" strategies and plans that are irrelevant to the client's particular issue. They may fail to prioritise their responsibilities, placing their own firm's interests before those of the clients.

Another concern is the promise of consulting firms to deliver on the sustainability of results. At the end of an engagement between the client and consulting firms, there is often an expectation that the consultants will audit the project results for a period of time to ensure that their efforts are sustainable. Although sustainability is promoted by some consulting firms, it is difficult to implement because of the disconnect between the client and consulting firms after the project closes.

Further criticisms include: disassembly of the business (by firing employees) in a drive to cut costs, only providing analysis reports, junior consultants charging senior rates, reselling similar reports to multiple clients as "custom work", lack of innovation, overbilling for days not worked, speed at the cost of quality, unresponsive large firms and lack of (small) client focus, lack of clarity of deliverables in contracts, not customizing specific research report criteria and secrecy.

Chapter 12

Business Agility

Business agility is the ability of a business to adapt rapidly and cost efficiently in response to changes in the business environment. Business agility can be maintained by maintaining and adapting goods and services to meet customer demands, adjusting to the changes in a business environment and taking advantage of human resources.

Agility is a concept that incorporates the ideas of flexibility, balance, adaptability, and coordination under one umbrella. In a business context, agility typically refers to the ability of an organization to rapidly adapt to market and environmental changes in productive and cost-effective ways. The agile enterprise is an extension of this concept, referring to an organization that utilizes key principles of complex adaptive systems and complexity science to achieve success. Complex adaptive systems are special cases of complex systems, often defined as a 'complex macroscopic collection' of relatively 'similar and partially connected micro-structures' – formed in order to adapt to the changing environment, and increase its survivability as a macro-structure. They are complex in that they are dynamic networks of interactions, and their relationships are not aggregations of the individual static entities. They are adaptive; in that the individual and collective behavior mutate and self-organize corresponding to the change-initiating micro-event or collection of events. Complex systems present problems both in mathematical modelling and philosophical foundations. The study of complex systems represents a new approach to science that investigates how relationships between parts give rise to the collective behaviors of a system and how the system interacts and forms relationships with its environment.

One can say that business agility is the outcome of Organizational intelligence. Organizational Intelligence (OI) is the capability of an organization to comprehend and conclude knowledge relevant to its business purpose.

- an ability to make sense of complex situations and act effectively
- an ability to interpret and act upon relevant events and signals in the environment
- ability to develop, share and use knowledge relevant to its business purpose

- ability to reflect and learn from experience

OI embraces both knowledge management (KM) and organizational learning, as it is the application of KM concepts to a business environment, additionally including learning mechanisms, comprehension models and business value network models, such as the balanced scorecard concept.

OI's focus includes the creation, fostering and management of organizational competencies (OCs).

Organizational intelligence has been defined as "the capacity to sense, make sense, and act in flexible, creative, adaptive ways", as "collaborative problem-solving between people and technical artifacts within and beyond complex enterprises" and as "how well people put their heads together in a group, team, organization, or community".

Overview

The agile enterprise strives to make change a routine part of organizational life to reduce or eliminate the organizational trauma that paralyzes many businesses attempting to adapt to new markets and environments. Because change is perpetual, the agile enterprise is able to nimbly adjust to and take advantage of emerging opportunities. The agile enterprise views itself as an integral component of a larger system whose activities produce a ripple effect of change both within the enterprise itself and the broader system.

One type of enterprise architecture that supports agility is a non-hierarchical organization without a single point of control. Individuals function autonomously, constantly interacting with each other to define the vision and aims, maintain a common understanding of requirements and monitor the work that needs to be done. Roles and responsibilities are not predetermined but rather emerge from individuals' self-organizing activities and are constantly in flux. Similarly, projects are generated everywhere in the enterprise, sometimes even from outside affiliates. Key decisions are made collaboratively, on the spot, and on the fly. Because of this, knowledge, power, and intelligence are spread through the enterprise, making it uniquely capable of quickly recovering and adapting to the loss of any key enterprise component.

In business, projects can be complex with uncertain outcomes and goals that can change over time. Traditionally these issues were dealt with by planning experts that would attempt to pre-determine every possible detail prior to implementation; however, in many situations, even the most carefully thought out projects will be impossibly difficult to manage. Agile techniques, originating from the software development community, represent an alternative approach to the classic prescriptive planning approaches to management. The main focus of agile methods is to address the issues of complexity, uncertainty, and dynamic goals, by making planning and execution work in parallel rather than in sequence to eliminate unnecessary planning activity, and the resulting unnecessary work.

Agile methods integrate planning with execution allowing an organization to "search" for an optimal ordering of work tasks and to adjust to changing requirements. The major causes of chaos on a project include incomplete understanding of project components, incomplete understanding of component interactions and changing requirements. Sometimes requirements change as a greater understanding of the project components unfolds over time. Requirements also change due to changing needs and wants of the stakeholders. The agile approach allows a team or organization of collective trust, competence and motivation to implement successful projects quickly by only focusing on a small set of details in any change iteration. This is in contrast to non-agile in which all the details necessary for completion are generally taken to be foreseeable and have equal priority inside of one large iteration.

History

The concept of "agility" as an attribute of business organizations arose in response to the requirements of the modern business to operate in predictable ways even in the face of extreme complexity. In particular, software development organizations have developed a specific set of techniques known as Agile Methods to address the problems of changing requirements, uncertain outcomes due to technological complexity, and uncertain system dynamics due to overall system complexity. Some of the ideas that have shaped thinking in the agile community arose from the studies of Complexity science and the notion of complex adaptive systems (CAS).

As with complex adaptive systems, the outcomes or products of agile organizations such as software teams are inherently unpredictable yet will eventually form an identifiable pattern. Despite their unpredictability, agile enterprises are thought to be best positioned to take advantage of hypercompetitive external environments.

Agile enterprises exist in corporate, non-profit, community and even terrorist environments.

Key topics in agile enterprise studies

Comparing agile enterprises to complex systems

Interactions, self-organizing, co-evolution, and the edge of chaos are concepts borrowed from complexity science that can help define some of the processes that take place within an agile enterprise.

Interactions are exchanges among individuals etc. holding a common vision and possessing the necessary resources, behaviors, competence and experience in aggregate. They are an important driving force for agile enterprises, because new ideas, products, services, and solutions emerge from the multiple exchanges happening over time. The interactions themselves, rather than individuals or the external environment, are significant drivers of innovation and change in an agile enterprise.

Self-organizing describes the spontaneous, unchoreographed, feedback-driven exchanges that are often found within agile enterprises. Vital initiatives within the agile enterprise are not always managed by one single person—rather all parties involved collectively make decisions without guidance or management from an outside source. The creativity and innovation that arises from this self-organizing process gives the agile enterprise an edge in developing (and redeveloping) products, services, and solutions for a hypercompetitive marketplace.

Co-evolution is a key process through which the enterprise learns from experience and adapts. The agile enterprise is constantly evolving in concert with (and in reaction to) external environmental factors. Products and services are in a constant state of change, because, once launched, they encounter competitors' products, regulators, suppliers, and customer responses that force adaptations. In one sense, nothing is ever completely "finished," although this does not mean that nothing is ever made, produced, or launched. The edge of chaos is a borderline region

that lies between complete anarchy or randomness and a state of punctuated equilibrium. The agile enterprise ideally operates in this region, needing the tension between constant change and the constraints that weaken change efforts to keep the organization perturbed enough for innovation and success. In other words, the edge of chaos is the space in which self-organizing and co-evolution flourish.

Agile enterprise versus bureaucracy

There are several key distinctions between the agile enterprise and the traditional bureaucratic organization.

The most notable is the agile enterprise's use of fluid role definitions that allow for dynamic decision making structures. Unlike the rigid hierarchies characterizing traditional bureaucracies, organizational structures within agile enterprises are more likely to fluidly adapt to changing business conditions into structures that support the current direction and any emergent competitive advantage.

Similarly, agile enterprises do not adhere to the concept of sustained competitive advantage that typifies the bureaucratic organization. Operating in hypercompetitive, continuously changing markets, agile enterprises pursue a series of temporary competitive advantages—capitalizing for a time on the strength of an idea, product, or service then readily discarding it when no longer tenable.

Lastly, the agile enterprise is populated with individuals pursuing serial incompetence—they work hard to obtain a certain level of proficiency in one area but are driven to move on to the next “new” area to develop expertise. There are no “subject-matter experts” specializing for years in one topical area, as found typically in a traditional bureaucracy.

Operating at the edge of chaos

Although agile enterprises by definition include numerous, constantly co-evolving and moving parts, they do require some structure.

The enterprise must develop specific structures (also called system constraints) to serve as a counterbalance to randomness and anarchy, keeping the enterprise optimally functioning on the

edge of chaos. These structures—including a shared purpose or vision, resource management aids, reward systems, and shared operating platforms—often emerge from three key organizational processes: strategizing, organizing, and mobilizing.

Strategizing is an experimental process for the agile enterprise, in which individuals repeatedly generate ideas (exploration), identify ways to capitalize on ideas (exploitation), nimbly respond to environmental feedback (adaptation), and move on to the next idea .

Organizing is an ongoing activity to develop structures and communication methods that promote serial execution. It often includes defining a shared vision, as well as systems and platforms, that ground the enterprise.

Mobilizing involves managing resources, ensuring the fluid movement of people between projects, and finding ways to enhance internal and external interactions. Typically, enterprise values, personal accountability, and motivational and reward systems are a key output of this process.

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