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Abstract—**Effective organizational change is crucial to the implementation of popular management approaches such as Quality Management, Six-Sigma, and Business Excellence. However, managers often find that creating change is extremely difficult and, as a result, many times organizational improvement initiatives fail to fulfill their promise. A "Theory of Action" perspective, developed by Chris Argyris and Donald Schön, assumes that managers craft their actions to achieve intended results. However, they are often unaware of the unintended consequences of these results. This paper describes common dynamics that occur during change initiatives and how managers may reduce unintended consequences using "Model II" behavior.**

Index terms – change management, Action Science, Model II behavior, knowledge management, TQM, Six Sigma.

INTRODUCTION

The circumstances that exist when organizational change is implemented (uncertain upheavals to the status quo, increased attention to performance, and ambiguous situations) are precisely those that call for an increased ability to learn. Unfortunately, they also tend to create defensive, anti-learning behaviors. The Theory of Action approach developed by Chris Argyris and Donald Schön [1] provides insight into the dynamics that produce these outcomes and how they might be avoided.

THEORIES

A theory, in its most general sense, is a description of a causal linkage between variables. Theories can range from the everyday ("when I let go of the apple it will fall") to the esoteric ("a group's level of constructive controversy will be positively correlated to group performance"). Some theories have received intense attention and have been rigorously validated, for example, those used in the practice of engineering (which relate to physical phenomena) or those

investigated within the academic study of management. One category of theories, however, that has not received as much attention, has to do with the causal relationships people perceive between their own individual actions and the reactions of others. These are referred to as "Theories of Action" [1]. Individuals use these theories to craft practical social action. While theories underlying engineering practice are eminently practical, they are applied to the physical, rather than the social world, and involve rigorously defined terminology (e.g., kilogram, meter, watt, etc.). Academic theories of management, on the other hand, do deal with social action, but are often too context-specific, complex, or abstract for managers to practically use in the midst of their everyday action. (For example, it is likely difficult for managers involved in a complicated budgeting decision to accurately evaluate and adjust the group's level of constructive controversy in order to improve the quality of the final decision.)

THEORIES OF ACTION

Just as engineering or management theories describe a perceived causal linkage between variables in a particular context, individual theories of action describe the relationships an individual perceives between his or her actions in a specific context and the outcomes that are expected to result from those actions. So, for example, an executive might decide that, given the history of a particular company, the most effective way to introduce an organizational change would be to have a small group of managers carefully plan a transition strategy and then announce the plan at a plant-wide meeting accompanied by snacks, banners, and testimonials from other organizations where a similar initiative was deemed successful. Individual theories of action can be presented in the form, "In circumstances X, to achieve goal Y, one should do Z." Generally the accuracy of an individual's theory of action receives only cursory validation. This is due to many factors, including time pressures, defensive reasoning, the fact that

many times they involve types of decisions made only rarely or situations where the theory of action has been invoked enough times that the action has become skilled to the point of being automatic and unconscious.

The potential for skilled, unconscious, action implies that in some cases managers will be engaged in action of which they are not fully conscious. It also implies that, at times, managers will espouse a particular course of action while actually engaging in another course of action, even one that contradicts the espoused action. For this reason, Argyris differentiates between an "espoused theory" (that is, what people say they do) and a "theory-in-use" (what they actually do) [2]. Using the example of the introduction of an organizational change mentioned in the previous paragraph; the executive planning the change process might advocate a broadly participative approach to creating change, but only involve a small group of managers in planning the transition strategy. In this case the executive's espoused theory advocated broad participation to achieve buy-in while the executive's theory-in-use limited participation in the planning process to a small number of managers.

MODEL I AND MODEL II

Argyris [3] defined two models of theories-in-use. The first, which characterizes the broad majority of individuals' theories-in-use, is called "Model I". When individuals create action based on this model of theory-in-use, they follow four governing values. They are:

1) Attempt to be in unilateral control over others.
2) Strive to win and minimize losing.
3) Suppress negative feelings.
4) Act rationally (that is, in ways that minimizes the possibility of being held responsible for making others defensive).

While Model I behavior does not limit the ability to detect and correct routine errors (single-loop learning), it does inhibit learning which involves questioning extant action strategies and values (double-loop learning). Using the previous example of an executive planning a change process, the use of a small group of managers to plan the change process might reflect an attempt to be in unilateral control. The hoopla surrounding the announcement of the change plan could be an attempt to win by "selling" the change initiative (as defined by the manager) to the organization rather than by seeking a clear and open discussion of the benefits and drawbacks of the plan. Finally, it is doubtful that the executive, planning team, or organizational members will publicly state doubts or concerns with the plan or take any similar actions that would potentially make others defensive. The use of Model I behavior in this case does not reduce the impact of the organization to detect and correct routine errors – for example, making sure that enough food is on hand,

scheduling the room for the event, etc. However, it does inhibit the ability to question action strategies and underlying values. So, for example, the decision to use a small team of managers to plan the change initiative would likely not be questioned. Similarly, the decision to expend resources on a kickoff party would likely not be open for question. If individuals have concerns or misgivings during the course of the change initiative and are following Model I values, their concerns would only rarely be stated explicitly, and even then most likely in a roundabout, indirect manner.

It is the objective of change initiatives like Lean Transformation, Quality Management, Six Sigma, etc., to produce lasting, fundamental change in organizations that embrace the initiative. Yet Model I behavior inhibits this by reducing the ability to question existing values and action strategies used to put the change into practice. To overcome this problem, Argyris advocates adopting an alternative model of behavior, called "Model II".

Model II behavior is not the opposite of Model I [4]. If it were, it would be governed by the values:

1) Everyone is in control.
2) Everyone wins.
3) Feelings are expressed.
4) Rationality is downplayed.

Model II is an alternative to Model I that is designed to facilitate double-loop learning; the kind of learning that involves questioning the status quo. This is precisely the type of learning that is needed to produce fundamental, effective change. Model II behavior is a theory-in-use whose governing values are [4]:

1) Producing valid information.
2) Informed choice.
3) Vigilant monitoring of the effectiveness of the implemented actions.

Enacting these values in an organization does not lead to "feel-good", "polite" dialogue, since it requires exemplary levels of honesty and openness from all levels. Not only are many individuals uncomfortable with acting in accordance with Model II values, they are generally not capable of acting in a manner consistent with these values. Model II requires that individuals state their misgivings, concerns, and criticisms of change initiatives honestly and openly, and to link them to specific individuals, actions, or events. Several Model I reactions to attempts at Model II behavior can be expected. In some cases making privately held concerns public will be punished, either overtly or covertly. Defensive reactions are also a common occurrence, such as denying that observed contradictions exist, or shifting positions in the face of inquiry. Reactions may even take the form of accusations or attempts to hold others responsible for defensive reactions. Because of the potential for negative (even punitive) reactions, it is recommended that Model II skill development begin at the upper levels of the hierarchy.

MODEL II DIALOGUE

Model II behavior includes some basic patterns of dialogue [5]. Probably the most common pattern mentioned in the literature is "Advocate – Illustrate – Inquire", which is rooted in the value of producing valid information [6]. In this pattern, individuals openly advocate their position or reaction to a particular event, action, or plan. Then they illustrate their advocacy by linking it to specific, observable data. Finally, they inquire into disconfirming or alternative perspectives. A look back at the example of the executive planning the change initiative will serve to illustrate this process.

While the executive advocated a broadly participative plan, his directions called for a small group of managers to create that plan. Any of the management team called on to develop the plan could have surfaced their reactions to this apparent contradiction and inquired into others' reactions by saying something like the following to him: "I'm concerned because I think the employees might not perceive themselves as having any ownership of this change initiative. This perceived lack of ownership could lead to resistance. You have told us that you want to have a broadly participative plan to implement this initiative, but you are limiting the planning to a small group of managers, with no employee representation at all. I'd like to check with you and others and get your reaction to this apparent contradiction. Is there something that I'm missing that led you to structure the planning team this way?"

Alternatively, the executive could have said something like the following to the planning team, "Everything that I have learned about implementing this change initiative emphasizes the importance of broad participation as a key to success. I have given you instructions that I am expecting will lead to as much employee participation as possible. If you see any roadblocks to creating such a plan I want you to let me know, particularly if I have said or done anything that could be construed as inconsistent with my stated objectives. Does anybody see anything like that at this point?"

In general, Model II behavior exhibits far greater levels of illustration and inquiry than the typical dialogue that occurs in organizations. Ordinary conversations typically involve rather high levels of abstraction, and a great deal of advocacy, with remarkably little inquiry into others' reasoning. Model II behavior acts to improve understanding by surfacing the observable data that led to a conclusion and then tracing peoples' reasoning from that observable data to the higher level, abstract conclusions that resulted from it. This not only helps participants in a conversation understand one another's reasoning, it also ensures that they have established a common basis for understanding by referring to the same observable data.

LEARNING MODEL II BEHAVIOR

The ability to actively create Model II behaviors in the midst of everyday action is something that can be learned. As with many new skills, however, it can be difficult to learn without assistance. This is especially true because Model II skills involve interrupting behaviors that are so skilled they have become automatic. The ability to examine taken-for-granted assumptions underlying theories of action can also be difficult without an experienced observer (e.g., [5]). While reading about the approach can help to a certain extent, many individuals choose to participate in workshops or training designed to help them understand and practice these skills. A search on the Web can help locate groups or individuals that provide these services.

MODEL II AND CHANGE INITIATIVES

Advocates of Quality Management, Six Sigma, Lean Transformation, and other change initiatives emphasize that changing the fundamental nature of the organization is required for these initiatives to be successful. This requires that members of the organization have the ability to question the status quo. The theory of action described by Model II skills facilitates this ability and fosters double-loop learning. The ability to surface negative reactions and discuss difficult issues is enhanced by an environment and culture that encourages free and open discussion while reducing the fear of retribution or punishment. (For example, the fear aroused by the implicit threat embedded in the statement, "We encourage you to innovate and try out new things. Just be careful that your performance doesn't drop too much as a result.") In this respect, Model II behavior is in agreement with advice given by Quality Management gurus, such as Deming, who told management to "Drive out fear" [7].

An important aspect of changing the fundamental nature of the organization is effectively changing its culture. As an example, an organization's culture has been shown to be a critical factor in the success of implementing advanced manufacturing technology [8]. Lean Manufacturing, Six Sigma, and Quality Management initiatives emphasize the need to develop a culture that values improvement, performance, and participation. While culture is reflected in the norms, values, and beliefs held by the members of an organization, it is created by the actions of those members. Model II behavior provides an avenue to look at specific actions and engage in a dialogue about the effects of those actions on organizational culture.

Each approach to change in organization has its own list of criteria or points that are advocated in order to attain the desired outcomes. For example, the UK's "Business Excellence" [9] program list of "enablers" includes the following:

1) Leaders reinforce a culture of excellence with organization's people.

2) People are involved and empowered.

These criteria, like any criterion separated from a specific context, are stated at a high level of abstraction. It does not specify the exact actions that will be taken to "reinforce a culture of excellence" or "involve and empower" people, nor does it state how the reactions to those actions will be received and evaluated by others. (Do people feel "involved and empowered"? How would one evaluate the validity of an answer to this question?) It is easy, as an organizational leader, to say that you want employees to be involved and empowered. The difficulty arises in the actual accomplishment of these outcomes. (Can employees be involved and empowered by diktat?) Model II behavior provides guidelines that help the organization publicly reflect on the specific actions and plans that are to be enacted in the organization. These include questions like, "Is this something that we really want to do and, if it is, what would prevent us from doing it. If we say we are doing it, are we really? Or are organization members just compliantly "saluting the flag" until the program du jour fades away, without the kind of deep commitment needed to make the change persist? Using a Model I theory-in-use, these questions will be difficult to address, since individuals will be committed to "winning", reluctant to surface negative feelings, etc. A Model II theory-in-use, on the other hand, will raise these questions in the pursuit of valid information about the effectiveness of the change initiative as proposed, and as a way to modify the change strategy in order to make it more effective.

CONCLUSIONS

The Theory of Action perspective on organizational change provides a viewpoint that can help organizations plan change and implement it effectively. An understanding of Model I behavior grants insight into the underlying reasons behind the failure of many organizational change initiatives. Model II behavior also provides a behaviorally defined set of guidelines for an effective approach to questioning and revising the organizational status quo. While learning to practice Model II behavior can be challenging, it can be a valuable tool in helping achieve the difficult task of effectively transforming an organization.

REFERENCES

[1] Chris Argyris and Donald Schön, *Organizational Learning: A Theory of Action Perspective*, Addison-Wesley, Menlo Park, CA, p. 10, 1978.
[2] Chris Argyris, Robert Putnam and Diana McLain-Smith, *Action Science*, Jossey-Bass, San Francisco, CA, 1990.
[3] Chris Argyris, *Reasoning, Learning, and Action*, Jossey-Bass, San Francisco, CA, 1989.
[4] Chris Argyris, *Reasons and Rationalizations*, Oxford University Press, Oxford, p. 10, 2004.
[5] R. W. Putnam, "Recipes and reflective learning: 'What would prevent you from saying it that way?'".in *The reflective turn: Case studies in and on educational practice*, D. A. Schon (Ed.) (Teachers College Press, New York, NY, 1991)
[6] Dalmar Fisher, David Rooke, and Bill Torbort, *Personal and Organizational Transformations*. Edge/Work Press, Boston, 2000.
[7] W.E. Deming, *Out of the Crisis*, MIT Press, Cambridge, MA, 1982.
[8] RF Zammuto and EJ O'Connor. 1992. Gaining advanced manufacturing technologies' benefits. *Academy of Management Review*. Vol. 17 No. 4, pp. 701-729.
[9] World Wide Web page http://www.quality-foundation.co.uk, accessed July, 2005.