TOOLBOX

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FROM EVENT THINKING TO SYSTEMS THINKING

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Your division has been plagued by late launches in its last five new products, and now management has charged you with "getting to the bottom of the problem." You schedule a series of management team meetings with the goal of uncovering the source of the delays and redesigning the launch process to create on-time product releases.

The first meeting begins with a "post-mortem" on the latest launch crisis. The team members tackle the issue with enthusiasm, jumping in with their own perspectives of what went wrong and why. At first the meeting seems to be going well, since everyone is obviously engaged in solving the problem. But as the meeting progresses, you start to feel like the group is spinning its wheels. The stories begin to resemble a jumble of personal anecdotes that share no common elements: "Well, on project X, we tried doing something new, and this is what happened..." or "This reminds me of the time when we implemented process Y and we were carrying spare parts in brown paper bags..." Lots of interesting stories are being exchanged, but they do not seem to be leading to a common understanding of the root causes.

The Storytelling Trap

Stories can be a powerful tool for engaging a group's interest in a problem or issue. The specific details about people and events make it easy for most people to relate to stories, and they often provide a firm grounding in the day-to-day reality of the situation. But storytelling's strength is also its Achilles heel: when we remain at event-level storytelling, it is difficult to generalize the insights to other situations, and so the solutions are often situation-specific. Without a deeper understanding of why something happened, the most we can do is find ways to react faster to similar events in the future.

Storytelling at Multiple Levels

One way that managers can move beyond event-level storytelling to a deeper understanding of an issue is to use a modified version of the Vision Deployment Matrix (see "Vision Deployment Matrix: A Framework for Large-Scale Change," February 1995). In particular, applying the first two columns of the matrix ("current reality" and "desired future reality") to a particular problem can provide a framework for both analyzing the current situation and designing an effective, long-term solution (see "From Events to Vision: Structured Problem-Solving").

The matrix distinguishes between different levels of seeing and understanding a situation. The "Events" level captures stories about specific incidents or events that indicate a problem. The next level, "Patterns," expands the time horizon. At this stage, the team might ask, "Are these individual events or stories part of a larger pattern that has been unfolding over time?" Next, the "Systemic Structures" level looks at the structures that might be producing the observed pattern of behavior. Since those systemic structures are usually physical manifestations of deeply held mental models in the organization, the "Mental Models" level prompts the team to surface them. Finally, at the "Vision" level, the group considers how the vision of what the organization is creating might be

FROM EVENTS TO VISION: STRUCTURED PROBLEM-SOLVING

Increasing Leverage

Level of Perspective	Current Reality	Desired Future Reality
Vision	*What is the current vision-in-use?*	*What is the espoused vision of the future?*
Mental Models	*What are the prevailing assumptions, beliefs and values that sustain the systemic structures?*	*What assumptions, beliefs, and values are needed to realize the vision?*
Systemic Structures	*Which systemic structures are producing the most dominant pattern of behavior in the current system?*	*What kinds of systemic structures (either invented or redesigned) are required to operationalize the new mental models and achieve the vision?*
Patterns	*What is the behavior over time of key indicators in the current system?*	*What is the current vision-in-use?*
Events	*What are some specific events that characterize the current reality?*	*What are some specific events that illustrate how the vision is operating on a day-to-day basis?*

By using a modified version of the "Vision Deployment Matrix," a team can look at a particular problem under study from different perspectives. The "Current Reality" and "Desired Future Reality" columns allow you to differentiate between diagnosis of the current situation and proposed solutions for the future.

influencing those mental models.

Analyzing a problem or situation from multiple levels can be useful in several ways. First, it forces us to go beyond event-level storytelling, where our ability to affect the future is low, to a perspective that offers greater leverage for creating systemic change. Second, the matrix provides a way to distinguish between different ideas and experiences (e.g., "Does this story illustrate a problem situation or a prevalent mental model?"). Finally, when the conversation does jump from events to specific systems to assumptions and so on, the matrix can provide a coherent framework for mapping everyone's contribution in real time.

Using the Matrix

By filling in the matrix around a particular problem or issue, the team members can work together to raise their understanding from the level of events to patterns, systemic structures, mental models, and vision. For example, in the product launch situation, the team started with stories of a particular launch failure. After some discussion, the team discovered that the proper tests for verification were never conducted. But instead of going further into the details of why that process was neglected, the team can ask questions designed to draw the stories up to the patterns level, such as, "Was this indicative of a pattern that happens on all products?" Additional stories can then be used to establish whether that is indeed a pattern.

The next step is to identify the underlying structures that may currently be responsible for such behavior. In this example, the test and verification efforts all relied on a central group of people who were chronically overused by all the products under development, hence verifications were rarely done to the level specified. When the group tried to understand how engineers could justify skipping such an important step, they revealed an implicit mental model: "not knowing there is a problem and moving forward is better than knowing there is a problem and moving forward." In short, the division had been operating according to an "ignorance is bliss" strategy.

To understand where this assumption came from, the group asked, "What is the implicit vision driving the process?" The most common answer was "to minimize unwanted senior management attention." In other words, no one in product development wanted to have problems surface on their "watch."

Although this team focused on the "Current Reality" column, they could also fill out the "Desired Future Reality" column by asking what kinds of new structures might be needed to prevent these problems from happening in the future.

Guiding Questions

The following set of questions can be used to guide conversations as a team moves among the different levels of perspective. In looking at current reality, it may be easier to start at the level of events (since that is where stories usually begin) and work your way up the levels. When mapping out the desired future reality, however, it may be better to begin at the level of vision and go down to the other levels so that your desired future reality is not limited by the current reality. Having said that, it is likely that in actual meetings the conversation will bounce all over the place. The main point is to use the matrix to capture the conversation in a coherent framework.

Current Reality

- What are some specific events that characterize the current reality?
- Are those specific events indicative of a pattern over time? Do other stories corroborate this repeated pattern?
- Are there systemic structures in place that are responsible for the pattern? Which specific structures are producing the most dominant pattern of behavior behind the current results?
- What mental models do we hold that led us to put such structures in place? What are the prevailing assumptions, beliefs, and values that sustain those structures?
- What kind of vision are we operating out of that explains the mental models we hold? What is the current vision-in-use?

Desired Future Reality

- What is the espoused vision of the future?
- What sets of assumptions, beliefs, and values will help realize the vision?
- What kinds of systemic structures are required (either invented or redesigned) to operationalize the new mental models and achieve that vision?
- What would be the behavior over time of key indicators if the desired vision became a reality?
- What specific events would illustrate how the vision is operating on a day-to-day basis?

By elevating the conversation from events to systems structure and beyond, this simple tool can help managers make clearer sense of their own experiences, and use those experiences to formulate more effective solutions to the problems at hand. ◘

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