HEXAGONS: FROM IDEAS TO VARIABLES

BY DAVID KREUTZER

Systems thinking tools, such as causal loop diagrams, foster high-quality thinking, communication, and decision-making in teams. But plunging into the realm of complex, dynamic systems can be challenging. Because people don't naturally talk in term of variables, stocks and flows, and cause-and-effect relationships, causal loop and flow diagrams aren't always the best place to start a conversation with a team. On the other hand, basic graphical facilitation tools are great for initiating a conversation, but managers may get frustrated after a while and ask, "Okay, so where do we go from here?" We need some way to jump from the ideas surfaced in conversation to key variables that we can use in causal loop diagrams and computer simulation models.

By following a systems thinking-based graphical facilitation process using hexagons, we can surface and focus on the issues that are most important in our organizations. This process can help shorten the amount of time it takes teams to move from ideas to action steps and can give us a more systemic view of the issues our organizations face.

The Hexagon Technique

The hexagon technique for brainstorming was created by Tony Hodgson and Gary Chicoine-Piper, British creativity and organizational development consultants. Unlike other brainstorming techniques, which focus on generating ideas, hexagons can also help us surface underlying assumptions. By writing people's thoughts and ideas on hexagons and posting them in front of the entire team, we make those thoughts visible and separate the idea from the person. Because of their unique shape, hexagons can easily be grouped in a honeycomb structure; we can then move the hexagons into various configurations and combine ideas in different ways.

The following steps describe a brainstorming process using hexagons.

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Step One: Identifying Issues

Hexagon maps capture the event level—the world of who, what, when, where, and why. You want to start here, because you first have to connect with people's understanding of their world. So begin by talking in everyday language. Surface team members' concerns and mental models by asking questions such as: "What is really important to you?" "What issues do you feel are absolutely critical for success?" "What are your strongest opinions?" "What do you feel is holding us back?"

Summarize each response in three to six words and write it on a hexagon. Place the hexagons on the board in sequence, with one point at the top; don't attempt to arrange the ideas at first. Number the hexagons sequentially for easy/reference. You can use color-coded hexagons (see "Color-Coding Hexagons"); for example, if you or someone else has a strong opinion, put it on a red hexagon.

But because your goal is to build a shared understanding, you have to go beyond simple brainstorming. You want to explore the reasoning—and the emotions—behind people's statements. So, if someone says, "We need to raise prices," you would ask, "Can you tell me more about that?" And they may respond, "If we don't raise prices, this company is going to go under, because we won't have enough revenues to support R&D!" The challenge is to capture of each person's position in just a few words, so that the hexagon can serve as a vivid reminder for the entire group of that individual's perspective. Separating an idea from the person who articulated it and creating a symbol for the idea that can be understood by the whole group is an important step in the process.

Step Two: Identifying Clusters

From this divergent step, move to convergence. Zero in on the key issues by asking, "Which hexagons seem to go together?" Find the hexagons that seem related, and then move them the same general area on the

COLOR-CODING HEXAGONS

Gray:	Problems, uncertainties
Orange:	Variables
White:	Questions, lessons
Yellow:	Opportunities
Brown:	Practical judgments
Red:	Opinions
Green:	Ideas, key choices, possible action steps
Violet:	Decisions, what you really want
Light Blue:	Neutral
Black:	Facts

board. Once you have reviewed the positioning with the team, draw a circle around each grouping and give each cluster a name (see "Identifying Clusters").

You may start by writing one title, and someone might say, "Let's change it; that's not quite right." Remember, it's an organic process through which the team starts to develop a common language. The titles of the most important clusters become the emergent agenda; these are the hot spots, according to the group.

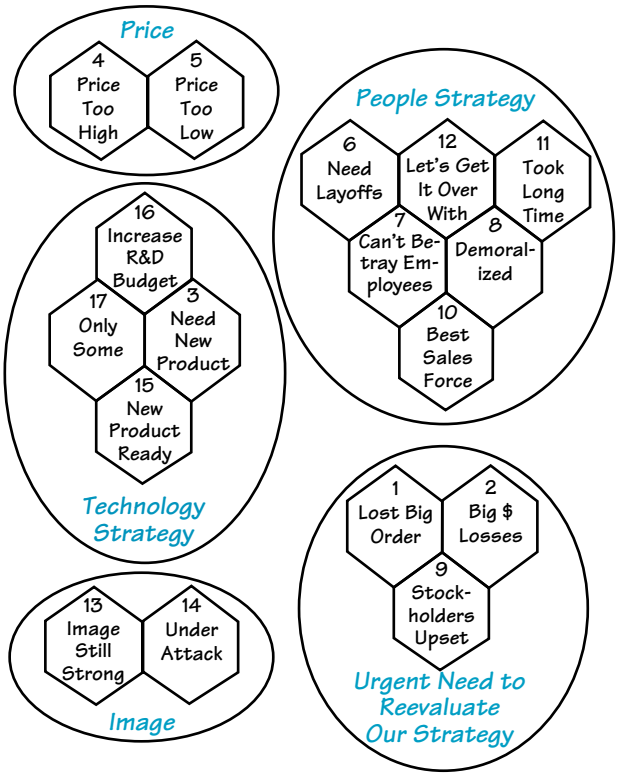
Step Three: Identifying Variables

In this step, you begin to distinguish the most important trends and patterns of behavior over time within your organization. When you look for key variables, you're really asking, "Can you tell me how something in this system might change over time?" Surface the key variables by asking a set of transition questions about the most important clusters on the board: "What do you really want?" "How would you know if you got it?" "Who are the key players?" "What do they want?" "How would they know if they got it?" "What are the key uncertainties?" You're trying to shift to the systems point of view, and it takes some skill to navigate into that domain.

A variable is something that can increase or decrease over time. So, if you were concerned about the economy, you might say, "We might have a depression!" A depression, however, is not a variable; a variable is something that can go up or down, something you can measure. However, once you define a depression as eight consecutive quarters of declining GNP, you've found your variable. GNP is something that can go up or down. You can also identify "soft" variables—"morale" or "quality" can go up or down over time.

When identifying variables, choose brief, one- to two-word descriptions for each. Try not to use adverbs or lengthy adjectives. Write the variables on orange hexagons for easy identification.

IDENTIFYING CLUSTERS



After writing the issues on hexagons and numbering the hexagons sequentially for easy reference, cluster related issues. Draw a circle around each grouping and give each cluster a name. Then, surface the key variables by asking a set of transition questions about the most important clusters.

Next Steps

Once you've identified the trends and the variables, you'll be amazed at how quickly you can move to a causal loop diagram by arranging the key variables. But for real breakthroughs, the maps must focus on the group's most important problems and objectives. Otherwise, they can easily degenerate into meaningless "spaghetti" diagrams, or pictures of things that are connected but don't necessarily have a cause-and-effect relationship. The steps outlined above should help your team make the transition from ideas to key variables.

Be sure to document your learning process for future reference. Take photographs of your hexagon maps, clusters, variables, and causal loops.

Beyond Hexagons

Using hexagons for brainstorming can be an engaging, dynamic way to move a group toward taking a systemic perspective. By allowing you to capture various viewpoints, hexagons provide a spring board for creative brainstorming and can help you elicit mental models. Finally, by helping you identify key issues, the hexagon technique enables teams to move from ideas to variables, and then on to causal loop and flow diagrams. ◘

David Kreutzer is founder and president of GKA Incorporated, an international management consulting firm. The process described in this article is based on the initial steps of FASTBreak™, a systems thinking–based facilitation methodology for moving from ideas to action designed by GKA Incorporated.

