The role of organizational culture and its link to strategy in mineral exploration management

Corresponding author: Eric Seedorff, Lowell Institute for Mineral Resources, Department of Geosciences, University of Arizona, seedorff@email.arizona.edu

This contribution is an overview of the role of organizational culture in mineral exploration and its importance in fulfilling strategy, placed in a context of the role of culture in organizations outside of the minerals industry. The culture of an organization is the collective behavior of its employees, including its practices and the meanings that people in it attach to their actions. Organizational culture is transmitted across generations and is difficult to shift. Senior management has the most influence in changing it, yet organizational culture is underappreciated and undermanaged or mismanaged. Strategy is an overarching plan, method, and series of grand maneuvers that employ large-scale and long-range planning and development with the express purpose of reaching specific goals by a certain time, whereas tactics are the operational use and deployment of resources, especially to achieve short-term objectives.

The historical record of strategy and culture in mining and exploration is sparse, but many successes and failures of companies are attributed to managerial and technical capabilities, yet organizational culture may have had a more commanding influence. One reason for the difficulty in managing organizational culture is that it is a non-linear, self-organizing, emergent system. In emergent systems, numerous elements interact to produce a new element, the pattern of interaction (e.g., organizational culture), which is greater than the sum of the parts. The new element that emerges then exerts top-down influence on the behavior of the constituent elements (e.g., employees and stakeholders). Many organizational managers focus on understanding and managing problems through reductive reasoning, reducing a problem to its component parts, i.e., the supposed root causes and bottom-up drivers. In emergent systems, however, specific elements statistically may have no impact on the outcome, so emergent systems cannot be influenced effectively by focusing on specific interventions. Instead, emergent systems respond best to simultaneous, internally consistent, across-the-board initiatives that can have cascading, reinforcing influences because emergent systems simultaneously operate top-down and bottom-up.

A successful exploration culture supports a sound strategy for the exploration group, which, in major companies, is linked to the strategy of the larger corporation. As long as a strategy is viable, the success of the organization may depend more on the effectiveness in implementing the strategy than on the components of the strategy. In a culture of successful exploration, geologists contribute to refinement of the strategy, understand the strategy, and embrace it. The tactics employed, the organizational structure, and the types of people hired support the strategy. Critical attributes of a successful exploration culture include a transparent, fact-based culture of decision-making that manages for breakthrough performance (discovering economic deposits), a practice of strategic hiring, and promotion of individual and organizational learning. A successful exploration culture places an emphasis on geology and a sense of urgency, with pinches of introspection and humility. A culture that is viewed positively by employees, shareholders, and other stakeholders can become
a long-term competitive advantage. Successful organizations have an appropriate strategy for managing and protecting the culture, using broad, concurrent efforts that send consistent messages.