Last time, we discussed how today’s rapidly changing business environment is changing how we measure project success (see PM File: Redefining Project Success, EM December 2015, p. 28). We are moving from measuring project success in terms of the triple constraints of budget, schedule, and scope to measuring project success in terms of the business value the project creates. This is an important shift that requires environmental, health, and safety (EH&S) project managers to think beyond the technical aspects of the project, being ready to change direction as factors that drive the business value of the project change.

As EH&S professionals, we are “knowledge workers,” relying on our science, engineering, and information technology backgrounds to address project requirements. For more than four decades, we have achieved significant progress in the environmental area by relying on the depth of our technical knowledge and by operating within a framework that defines project value in terms of budget, schedule, and scope.
To recognize and respond to the factors that shape the business value of the project, we must understand more than our technical expertise. We must understand the other technical and nontechnical disciplines required by the project, we must appreciate and understand the business models that govern the project, and we must be able to relate to and communicate effectively with the full range of people we are likely to encounter on the project. While technical expertise will always be respected, those project managers who maintain a technical skill set, develop a broad knowledge base, and cultivate the interpersonal skills that are associated with emotional intelligence will enjoy career growth.

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**T versus I**

In 1991, David Guest introduced the concept of a “T-shaped” person with respect to solving the emerging challenges in information technology (IT). According to the concept, the vertical axis of the T represents the depth of the technical skill set of the IT professional. The horizontal axis represents a breadth of knowledge that includes other disciplines, allowing the IT professional to understand project requirements that extend beyond the technical requirements of the project. Accordingly, a T-shaped person has significant depth and expertise in a particular technical discipline, yet also possesses diverse interests, a broad understanding of other disciplines, the ability to interact effectively with others, and perhaps most important, the ability to tap these skills to provide an integrated response to the needs of the project.

Removing the horizontal axis from the “T” leaves an “I.” An “I-shaped” person, therefore, possesses deep technical skills, but has limited breadth of knowledge in other areas. While these individuals may be technically solid, their inability to recognize and constructively address other perspectives can limit the quality of their work, particularly when we view project quality in terms of fitness for use, a property that changes as business value changes. In short, an I-shaped person may deliver the perfect solution in terms of budget, schedule, and scope requirements, yet deliver a project that yields limited business value.

Interestingly, the success of the popular Technology, Entertainment, and Design (TED) conference series reflects a T-shaped approach. In an article in *Intelligent Life*, Samantha Weinberg quotes Chris Anderson, curator of TED, to illustrate the value of understanding other subjects beyond those for which we are technical experts:

“Normally, you go to a conference to learn about your industry. Here, you were learning about things that were from different fields…What I realized is that we don’t spend time in the space where things connect—we go deep into our own thing. But that space of connectedness between different subjects is catalytic. That’s how ideas come out, from unexpected connections. All of knowledge is somehow connected and one of the problems of the real world is that we’re not talking to each other.”

T-shaped persons have the ability to see the connections and the communication skills to leverage those connections.
Developing T-Shaped Skills

As EH&S professionals, we’ve been recognized and rewarded for developing technical expertise and the associated I-shaped personality traits. If we are content to spend the balance of our careers providing the information that others want, we don’t need to do anything more than focus on the technical and regulatory issues that are directly related to our projects. Someone else will determine if our effort offers business value. If, on the other hand, we want to use our technical expertise to drive business value, we’ll have to cultivate the skill set that supports a T-shaped approach. Fortunately, we can make significant advances by developing skills in the following five areas:

Cultivate emotional intelligence. Emotionally intelligent people are in tune to the feelings of others. They approach a dialog or problem by first attempting to understand the needs and concerns of the person they are working with. Undoubtedly, they understand their own needs, but they give careful thought to the needs of others when developing a solution to a problem. Although Daniel Goleman¹ may be best recognized for his work with emotional intelligence, a simple Google search will turn up the work of many who have contributed to this body of knowledge.

Improve communication skills. Effective communications are essential to the success of the T-shaped project manager. T-shaped persons communicate clearly, concisely, and empathetically using communication modes and channels that are appropriate. Effective communication skills derive from emotional intelligence.

Develop business management and analytical skills. If we are to deliver projects that yield business value, we must understand various business management models and the metrics associated with them. Fortunately, business management and analytical skills can be learned the same way we learned our technical skills. The challenge that EH&S project managers face is framing technical projects within the context of the business model that applies to the problem or project. A technical solution that is out of line with business realities simply won’t be adopted.

Expand our knowledge base. If we are going to be able to communicate more effectively with others and better understand the business implications of technical approaches, we are going to have to broaden our knowledge base. This means not only developing business management and analytical skills, but also learning about subjects that may be tangential to our project work but essential to the project.

Advance technical expertise. The shift to a T-shaped project management approach does not mean that we acquire new skills and knowledge by resting on our acquired knowledge in our chosen field of expertise. We must constantly build technical skills. The T-shaped project management model requires that we deploy those technical skills within the context of a broader view of project needs.

Business value will continue to shape our approach to EH&S project management. The project managers who are best able to recognize and advance business value will be those who bring more than technical expertise to the project. The T-shape concept provides the framework that allows a project manager to continue to develop the technical skills that he or she enjoys, while acquiring other skills and knowledge that support business value-based project management. em

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References