

What's Ahead for Project Management: A Roundtable Discussion with the Project Management Institute

BY MATTHEW KOHUT

Matthew Kohut of *ASK the Academy* met with Project Management Institute (PMI) CEO Greg Balestrero, PMI Board Member Yanping Chen, Academy Director Dr. Ed Hoffman, and *ASK Magazine* Managing Editor Don Cohen for a wide-ranging survey of the project management landscape today.

KOHUT: What big trends are dominating the field of project management globally?

BALESTRERO: I'd say that globalization has changed the face of project management. It's difficult to think of a company or organization that doesn't feel the pressures and implications of globalization.

The Airbus A-380 is one example of the effects of globalization on the organization, and the challenge of having a common framework and understanding—as simple as a lexicon, as complicated as a common process—for project and program management. In the case of the A-380—1,500 suppliers, 24,000 projects cutting across thirty countries that have a variety of currencies—it's crucial to have a common understanding of what project deadlines mean to the project, what project scheduling is, and things like risk management.

Managing a project with the scale and scope of the International Space Station, where you have contractors, mission specialists, and control specialists all over the world, requires a sincere and deliberate effort to concentrate on a common standard, common practice, and a common approach. In something as highly visible as the space station, where the project's so costly and the accountability is great, communication becomes a crucial issue. Project communication is one of the nine knowledge areas in the PMBOK Guide™ (PMI's Project Management Book of Knowledge). The need to emphasize skilled communication is compounded when you go across geographic boundaries.

COHEN: Talking about communication, I'm concerned about how the knowledge needed to do the project successfully is,

first of all, communicated among the parties of the project and, second, how things learned during the project are passed on for future project uses. What's the role of the project manager in making sure that happens, and do you know of approaches that solve that big knowledge problem?



On the International Space Station, the U.S. built Unity node (top) and the Russian built Zarya or FGB module (with the solar array panels deployed) were joined during a December 1998 mission. International collaboration has helped further space exploration and science.

Image Credit: NASA

BALESTRERO: As far as turning each project into a learning activity so that results can be passed on, one of the key processes is project closure. Project closure includes a learning exercise: what went right, what went wrong, and how do you transfer that information or distribute it so that the next person or project team will know what's going on.

With regard to knowledge, success starts with a clear definition of the scope of the project and what the expected outcomes are. That's not easy to do. I was reading a case study of the Atlanta aquarium. One of the criteria was a comprehensive study of all the animals and what their habitats had to include. As they made team decisions on meeting the deadline—on a \$290 million, forty-four-month project—they'd sit down periodically and audit against the habitat. Were they creating the habitat that would allow these animals to survive? They had that from the very beginning of the project.

CHEN: There's the question of how to share program/project knowledge internally and also how to pass it from generation to generation. NASA and all the space agencies document knowledge and encourage sharing documents internally, but not across boundaries. That concerns me. NASA has been called to take the lead in human exploration of space. That's not a mission that one country can accomplish. It has to involve many nations, but it's difficult for the space agencies to share knowledge outside. There is also a kind of a spirit, an inspiration, that is often lost in the translation across the generations. So how can you capture that part?

HOFFMAN: One of the great things about NASA is that most of our missions are international partnerships. They go beyond international space agency partnerships—much of the work is done by industry, a large part is academic. You basically have an activity that pulls the whole world community together. The challenges are to find out what needs to be done and then find ways and formats for people to work together.

When international activities work well, you see examples of person-to-person relationships. I'm not a big fan of the database approach because I don't usually see that working; I believe people need to see each other and talk together. When you go to a different country, it's important to find out what that country is proud of, and what are some of the things that are important there, because it's the relationship that ultimately leads to the success of the mission. When you look at something like the International Space Station, it's natural to see the problems, the cost, and the technological breakthroughs. Look at what was accomplished in terms of the international community coming together. We went from the Apollo era when the Soviet Union was the enemy, to the Russians having a key part in the space station. That to me is the hope for space—it's something that can pull the community together.

COHEN: Greg, you talked earlier today about various kinds of diversity in these large projects—intellectual diversity and cultural diversity. Have you seen things people do to balance getting the diversity with keeping that common ground they need to work together?

BALESTRERO: There's work being done today in many aspects of developing leadership skills that looks at diversity in personality tendencies or in aspects of emotional and social intelligence to help solve problems in a disciplined way. For example, there are tools that are spinoffs of the Myers-Briggs personality-type indicators for decision making. Let's say you put people in a room to brainstorm that are unaccustomed to it. You will not achieve the results you expect. In the movie *Apollo 13*, I love that scene where they throw a whole bunch of miscellaneous materials down and say, "Start brainstorming." You can immediately see that some people were uncomfortable with that and others bought into it completely right away.

Great project team leaders try to seek and embrace diversity, encourage conceptual diversity, and encourage feedback. Today's world demands a project manager or program manager who can be sensitive to and encourage diversity of all kinds—especially conceptual diversity when it comes to problem solving—and yet be able to manage that diversity to give you the desired output. It is not only cultural and emotional diversity but intellectual diversity. You don't want constant conflict or brainstorming with no output.

HOFFMAN: I like your definition of diversity because it goes toward diversity of ideas, of different ways to approach something, of discipline backgrounds, of nations. Managing that diversity well gives you solutions and new approaches. From what I've seen, folks love working on NASA's international missions. It's partly about seeing the world through different eyes, and it's partly about finding new solutions through diverse ideas.

KOHUT: The Atlanta aquarium example you cited brings up the question of systems engineering. Could you say a little about the relationship between project management and systems engineering?

BALESTRERO: The aquarium is a classic case of looking at an entire system and how the elements of that system are going to interrelate. What project management does in a big way with systems engineering is focus on managing the interfaces. The systems engineer manages the interfaces among the subsystems. The project manager develops a full project plan that can be managed from start to finish. Both are absolutely essential in making the project successful. As you know, systems engineering as a discipline developed in the 1960s as part of the emerging

