

LAUNCHING RTD TEAMS

The Organization

Since its founding in 1958, NASA has pushed the boundaries of human exploration, put footprints on the moon and tire tracks on Mars. Along the way, NASA has pioneered new technologies that have improved people's lives. NASA's Training Academy is a learning organization that serves project practitioners by providing products and services that manage risk, maximize human capital, develop high performance teams and promote mission success.

The Need

For NASA to implement a new technology into a spacecraft, it must have a Technology Ready Level (TRL) of 8 or higher. NASA came to Palatine Group to help them reach a goal of advancing eight seminal level human support technologies to a level 6 by the end of a five-year funding period. The challenge was to use RTD teams (rapid technology development) to reach their goal, advancing hardware, software and procedures to a technology ready level of 6 for testing in flight conditions. It would take highly integrated teamwork to accomplish the task within the tight schedule window.

The Customized Solution

NASA challenged Palatine Group to train individual engineers, project managers and project leaders from 12 separate organizations into one integrated RTD team. NASA needed a solution that would integrate this "virtual" team had its own requirements and agenda, for example, the private sector companies needed to make a profit, the universities needed to conduct research, and NASA's teams needed results. NASA needed a

solution that would integrate this “virtual” team and have them collaborate successfully. The project was customized by Palatine Group to address the needs of NASA and to develop an multi-team, multi-project solution. Palatine Group conducted a series of interviews with both NASA’s management team and with the selected participants around the country. The interview process revealed that RTD Teams are often cooperative teaming arrangements between NASA and private sector technology development specialists. But this particular project was of a much larger scale and had a much faster speed to launch schedule. The other constraint was the size, geographical dispersion and multi-organizational structure of the team. Palatine concluded that the key to success was a shared vision of all potential team members and customer. Palatine designed a 3-day solution called “Project Launch,” which included a simulation that reflected a multidisciplinary RTD model with various (and competing) RTD project objectives and a tight project schedule. The workshop featured both Palatine-led and NASA-led lectures and discussions, NASA and participant presentations, and feedback and follow-up post workshop activities. With the computer simulation, teams of five participants planned and managed a RTI project for 5 years, set long-term objectives for the organization, defined mission strategy, and determined how to achieve the objectives. The simulation provided a realistic environment covering operations, vendors (with varying price, quality, and timeliness), personnel (with varying personalities, skills, and experience), and the challenges of working on a team with disparate objectives and goals high-risk environment. Teams implemented improvement projects while dealing with crises and made sound decisions in a team environment over the course of several days while planning and managing the simulated project. The project provided a laboratory to practice and improve interpersonal and team behaviors in cross-functional teams.

Impact

The workshop was held at NASA’s Johnson Space Center with 30 key participants from the original 12 designated organizations. For some, it

was their first meeting as a team. There were obstacles to overcome at the start of the project: competing objectives, competing egos, and overall resistance to working in a group (from individuals who were accustomed to working alone on their research). The guided process and the real-world simulation facilitated the group coming together as a collaborative team and ensured the eventual success of the simulated project. The real teams are well into managing their project and achieving the necessary readiness level goals.

About Palatine Group

Founded in 1976, Palatine Group is a leader in Project Leadership and Project Management simulations and technology-based learning solutions. For 30 years, Palatine has helped its clients accelerate their organization's performance, providing measurable results, along with increased profits. Palatine has trained over 50,000 managers, and is the first private company to launch computer-based business and project management simulations