In late 2003, one of Steve’s largest projects was going to end in a month. His company, MAYA Viz, was small and a major project ending without followup work would put a strain on the whole organization.

Prior to that time, Steve and his team at MAYA Viz had spent five years, on their own and in the DARPA Command Post of the Future (CPOF) program, building a research prototype of a distributed workspace called CoMotion. This prototype enabled people to share information, understand each other’s views, and establish a common ground. One month before CPOF’s scheduled end, the team demonstrated a prototype to several senior US Army commanders in a series of wargaming exercises. The results were astounding—the prototype demonstrated a huge decrease in the time users spent on gathering data, freeing time to do analysis, decision-making, and sharing information throughout the team. One of the commanders saw a technology that could help transform how he commanded his organization. He successfully argued to the army leadership that they should fund an experiment where the CPOF software would be fielded to his new command, scheduled for deployment to Baghdad in early 2004.

Steve and his small team now had a tight budget and only five months to transform their laboratory prototype to a functional product that could work with real users on tactical military networks. It was a stressful time. They had to transform not only themselves—not a trivial task—but also refocus the company from research and development to building production-quality software. The stakes were high—mistakes could cost soldiers’ lives.

Finally, with the support of the team of CPOF companies, they did it. The system is being used 24/7 by a number of large military units in combat. Moreover, this digital workspace system is revolutionizing military command and control. Now, soldiers in different locations can collaborate simultaneously without the risk of traveling through dangerous environments in order to be physically together.

All of Steve’s achievements were the result of his fundamental belief in the unique value of people in the decision-making process. To him, computers existed to empower human decision-making, rather than replace it. Steve, a dreamer and visionary, started his career as a graduate student in cognitive psychology. Upon graduating, he continued to research the use of computers in the learning process. He then moved to the Robotics Institute at Carnegie Mellon University (CMU). His project System for Automated Graphics and Explanation (SAGE), developed at CMU, allowed complex data to be represented visually in such a way that humans could better see, use, and manipulate it. SAGE was later commissioned by the US Defense Advanced Research Projects Agency to help the military better manage their logistical operations on the battlefield.

Convinced that their software and methods could drastically change the way humans interact with computers, Steve and his colleague, Jake Kolojejchick, launched MAYA Viz to “change the world, have fun doing it, and make money (in that order).”

The alignment of the stars that brought the CPOF concept into reality was never lost on Steve and Jake. The path from laboratory exercise of a research prototype to the adoption by the army was a treacherous one. Only by having firsthand perspective on problems and opportunities would they be able to keep from making a critical misstep that might keep the software from being adopted. Both Steve and Jake went to Iraq to support the fielding of the software, understand how it was being used, and to expand the users’ concepts of what they could do with the system.

Steve cherished diversity and the gestalt that came from many different points of view. He enjoyed sharing his vision and giving his team the freedom to expand it from their own perspective. That a varied crew of designers, engineers (even a PhD in rhetoric) who had joined a research company volunteered to go into a war zone to ensure the successful fielding of the system they created was a constant amazement to him. Steve instant messaged the team at all hours of the day and night trying to short-circuit misunderstandings and draw attention to potential problems—all to facilitate the delicate transition from research to deployment.

Steve believed that the potential applications of the CoMotion technology were in no way limited to the military. His vision was that future customers would primarily be from the private sector. But, despite his success in fielding a working application, Steve dreamed that one day he would go back to research. He relished the challenge of the design problem. He relentlessly pursued architectural purity and user interface consistency, always with a loving disregard for the practical difficulties of implementing the ideal on time and under budget. He refused to accept that it could not be done. He knew that...
compromises could become entrenched and would erode the purity that made the work unique. Steve patiently and eloquently described his vision to everyone who worked with him and inspired them to think, dream, and change the world along with him.

Nahum Gershon
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Jake Kolojejchick
General Dynamics | Viz (formerly MAYA Viz)