2.3 QRPD's Oxymoron Wisdoms – Doing What "Doesn't Make Sense," But Actually Does

Reading Contents

Abstract

As competition increases, cost pressures rise, —sometimes budgets are cut and people are laid-off— how can we still keep projects on schedule and do "more with less?" By being even more disciplined about adhering to the seeming contradictions of the 4 oxymorons of QRPD. These oxymorons yield several eye-opening "aha's" on how to look at our projects.

This reading discusses the 4 QRPD oxymorons in detail.

2.3.1 Introduction

When improvement is needed, the biggest gains can come from a new way of thinking and a conscious examination of "old wisdoms." Is the accepted way of thinking serving us well? Sometimes conventional wisdom can be turned on its head to yield new insights and ultimately great increases in project performance.

The four oxymorons of QRPD provide such insight, pointing to key leverage points for our projects.

2.3.2 Oxymoron #1: Do Less Sooner

Focus on your company's *main* priorities. Understand each project's potential return to the company, and use your resources in a focused, conscious manner. Concentrate on getting a smaller number of projects to the market—more quickly than they'll get there if you dilute your resources across many projects. For a given project limit your scope by reducing features and innovations to only the most necessary and justified ones.

A client in the home audio business was able to complete a project in record time, only 7 months versus an expected 18 months. When we first got involved with them, they had 100 people and 10 engineers, yet 10 new product development projects going on simultaneously! Using QRPD's Late-Cost-Per-Week (LCPW) tool, executives decided to either finish or kill half those projects within a month and focus resources on the "Intellipad". Using the QRPD Vision and trade-off techniques, the Intellipad team then justified innovations and limited the product's scope. That allowed them to then forge ahead on the most crucial features for providing outstanding customer benefit, rather than pursuing the "all possible bells and whistles" requirements specification they had started with. The result was an award-winning new product that beat its projected sales forecasts by 300% for each of the next three years. As a result the company doubled in size.

As another example, the members of a project team for an IT department's critical data warehouse initiative was 6 months into a 9 month timeline—and still mired in gathering customer requirements. Everyone felt the heat on this important project, that would deliver performance insights to the division's business analysts and enable millions of dollars in cost savings and additional revenue from better pricing decisions. But the project was stalled due to its broad set of customers and a huge number of possible features that could have filled a project twice as long.

The team cut through their requirements chaos using the QRPD Project Vision process and reached a short-list of business-critical features to implement. By changing their emphasis from detailed "data, features, and requirements" to the customer-and-benefit driven language of the QRPD Vision, the team narrowed in on the 5 Key Success Factors the business users most needed more insight on. Then they identified the key data warehouse design elements needed to deliver those insights. Overnight, the project scope became doable. In the end the team delivered on this limited, but powerful vision within 2 weeks of the original schedule.

2.3.3 Oxymoron #2: Slow down to speed up.

Spend more time up front to flush out risks and issues that could become negative, project-delaying surprises later.

A large company making semiconductor equipment was under an executive mandate to make their $1 million product work, or close down the division. Even with their world about to end in 60 days, they stepped back and took 15 days, or QRPD's recommended 25% of a project timeline, to assess the situation fully and identify and try some new things, rather than to continue firefighting as they had done for months. The 60-person project "Dustbuster" organization also all went through a 2-day training on QRPD so they could all work smarter, and the leaders took additional skills classes. Then they underwent a painful visioning process to bring everyone into alignment and clearly define achievable and measurable objectives. Finally they re-planned their remaining allotted time and made crucial changes to resource assignments and which tests to run that had the best chance of solving the nasty problem of wafer contamination whose solution had eluded them for a long time. With their fresh perspective and plan, and with risks and contingency plans clearly identified they were able to hone in on and correct several elusive root-cause problems. Even more importantly as a result they satisfied and kept two major customers. Overall in a relatively short period of time and by slowing down to speed up the team met 85% of the objectives they had promised their executives and all got very handsome bonuses.

2.3.4 Oxymoron #3: Blow up early and often.

Don't be afraid to make mistakes. Just be sure to find your "mines" and mistakes as early as possible in the project.

This wisdom applies even to the seemingly simplest of projects. When re-painting the exterior of my cedar wood "Lindall" home, I luckily found out after painting all 3 coats on only one small wall that the paint didn't match the rest of the house. Puzzled, I brought in professional painters that taught me how to properly sand the wood, select the paint, and brush on the thick $50 per gallon luxurious "Cetol" translucent. Result: by catching my mistake in the beginning I only lost a few hundred dollars and in only four weeks the whole house looked like a freshly painted, beautiful castle.

Adhering to the wisdom of finding mistakes in the early going makes even more sense for a complex project. On the data warehouse project discussed earlier, the team needed to make use of the QRPD concept of "Chicken Tests". The team was undertaking several technical innovations, including bringing in a totally new software package as one element of their system, and had been planning to simply integrate the new software when the time came. Instead, based on QRPD, they devised early tests to determine if the software could deliver on key performance promises within their design. These Chicken Tests uncovered some unexpected issues that the team was able to work with the vendor and fix early on, rather than finding the issues during full integration and "blowing up" too late to recover.

2.3.5 Oxymoron #4: Spend now to save later.

The more eyes and tools you have looking at what might go wrong from every perspective, the greater the chance you'll arrive safely. Keep the time-based paradigm in mind: the more money you invest—in tools, risk mitigation, etc.—the more likely you'll be to reach completion as planned.

A very talented, overly confident—borderline arrogant—project manager assured his 700-person company in the fiber-optic field in the United States that a Japanese vendor would deliver a revolutionary new custom-designed $500,000 machine that would allow our client to manufacture their lasers much more accurately and efficiently. Only very reluctantly and at our recommendation did the project manager and his managing executive agree to invest $250,000 on a back-up plan on this project. That made perfect sense as marketing had calculated a LCPW or Late-Cost-Per-Week for the project of about that amount. They hired consultants to design a less innovative machine as a second source vendor. This design would require two machines instead of one, albeit at the same total cost, and would be sufficient to meet their production requirements.

That ended up saving the day: after months of negotiating the original vendor never even gave our client a written quote with a promised delivery date, let alone had any plans of ever delivering the machine. It turned out that the Japanese supplier was closely aligned with our client's competitor and all along had been just stringing them along! Making a gutsy, gut-wrenching, seemingly unnecessary backup plan investment that cost a lot of money allowed our client to meet their aggressive schedule and avert an even more costly disaster.

2.3.6 Conclusion

Use discipline to make difficult but wise decisions and to follow the principles outlined in these four oxymorons. They do make perfect sense to follow, especially in challenging times, but really all the time!

About the Co-Author

Cinda Voegtli, BSEE/CS, is a consulting partner with Global Brain, Inc. and co-author of this guidebook. She is founder and President of ProjectConnections.com, an online resource created to educate and support project managers just-in-time as they do their jobs. Cinda has over 20 years experience in hardware and software development, engineering and project management, and product development process improvement. Her experience spans a wide variety of industries such as data and telecommunications systems, medical devices, biotech, industrial automation, energy-related construction and chemical process development, computer systems, software and information systems, and virtual reality and game products.

Cinda has held director-level positions at high-technology companies in Dallas, Los Angeles, and Silicon Valley. Most recently she served as Vice-President of Knowledge Products at Vite' Corporation, a company specializing in advanced simulation software for project and portfolio management. She has also held management positions with E-Systems, Cygnus Computer Corporation, Timeplex Inc. and Unisys, and over her career has managed projects in start-up, high-growth, and established large corporate environments. Since 1992 she has provided clients such as Mobil Oil, Hewlett Packard, NASA, Nellcor, and Schlumberger with product development expertise focused on improving time-to-market. Cinda has led workshops at companies across the country and taught QRPD at UC Berkeley Extension. She is a frequent speaker at project and engineering management conferences around the world.

Cinda served as President of the worldwide Institute of Electrical and Electronics Engineers' Engineering Management Society for 2 years. She was the society's guest editor for special issues of the *IEEE Engineering Management Review* on project management, and author of a project management and leadership program for use by volunteers around the world.

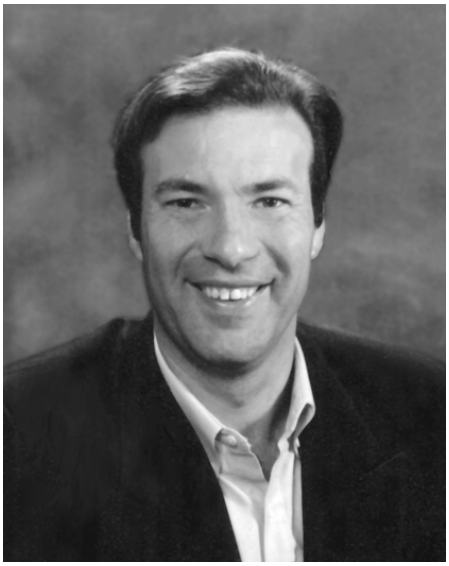
Cinda resides in Los Altos, California, and enjoys camping, hiking, attending her daughter's gymnastics meets, and collecting antique maps.

About the Author

Orion ("Ori") Kopelman, author of this guidebook, is President of Global Brain, Inc., the founder of QRPD, and one of America's leading product development experts. He has helped many technology-driven companies world-wide to significantly accelerate their projects and deliver products in record time. Previously, Ori was Vice-President of Engineering and division co-founder at Mountain Computer, a company which grew from 50 to 500 people between 1984-1990, with 32 consecutively profitable quarters.

An inventor and experienced project leader, Kopelman's enthusiasm for quality and solid command of the product development cycle have made him a much sought after lecturer. He served for three years as Chairman of IEEE's Engineering Management Society in Silicon Valley, and teaches QRPD at UC Berkeley Extension and at project management conferences throughout the United States. He earned his BSEE with distinction from Stanford University.

He has been honored as an Outstanding Young Man of America, Who's Who in America, and has published numerous papers and articles on rapid product development. In 1997 he won a Small Press Book Award for *The 2nd Ten Commandments: Your Guide to Success In the Consciousness Age,* a book on how to live a happier, healthier, less stressful, and more balanced life in this highly technological age.



Ori was 1980 Michigan high school tennis doubles state champion, and had a brief stint in college as a stand-up comedian. He loves personal growth, scuba diving, hiking, and travel; speaks Hebrew, German, and some French; and makes his home in Maui, Hawaii.