

## **Transforming the Culture with OPM3 (Part 2 of 3): Harris Corporation Case Study**

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June 9, 2009

There is a reason why Harris Corporation's RF Communications Division (RFCD) is number one in the global tactical radio market. Harris delivers technology that makes battlefield communications reliable, secure, and simple. Harris's comprehensive line of software-defined radio products and systems supports critical missions around the world. The company is known for delivering reliable communications products, systems integration, and information technology to government and commercial customers. The need to bring these solutions to market fastest throws the importance of Project Management into sharp relief.

Process excellence is not just good business. It can make a difference in the delivery of solutions that impact lives. Being the best-in-class global provider of mission-critical systems and services to its customers, combining advanced technology and application knowledge, requires a commitment to excellence in the project management culture, its processes, and the project management delivery system.

The solutions that RFCD offers are the products of dedicated cross-functional project teams that translate process excellence into the culture. RFCD focuses on some of the most specialized areas of technological expertise. Project teams are comprised of highly-educated, skilled engineers and research scientists in electrical, mechanical, test, components, hardware, software, systems, and advanced materials. Processes apply these skills to communications and information technology applications. The building of capable Project Management processes used by RFCD project teams and the transformation of the Project Management culture that enables these processes go hand in hand. In today's troubled economy, project management is the competitive advantage.

As John Schlichter of OPM Experts LLC points out, the RFCD agenda for advanced project management capabilities is all about knowing excellence, assessing oneself rigorously, creating accountability, and distinguishing action.

### **Knowing Excellence**

RFCD's pursuit of product and process quality is viewed as a journey, not a destination. Since early 2000, RFCD has established, maintained, and implemented a continuous improvement roadmap for the pursuit of higher process and product development capabilities. The roadmap helps the RFCD community understand the historical, current and future state of process management and improvement.

RFCD's early implementation of process standards gave rise to self-optimizing teams in Engineering and among RFCD functional organizations and business groups. A by-product of

the earlier approaches was the creation of multiple product development engines each having its own unique set of project phases and project management processes.

As shown in Figure 1, Project management processes overlapped and were duplicated among the engines.

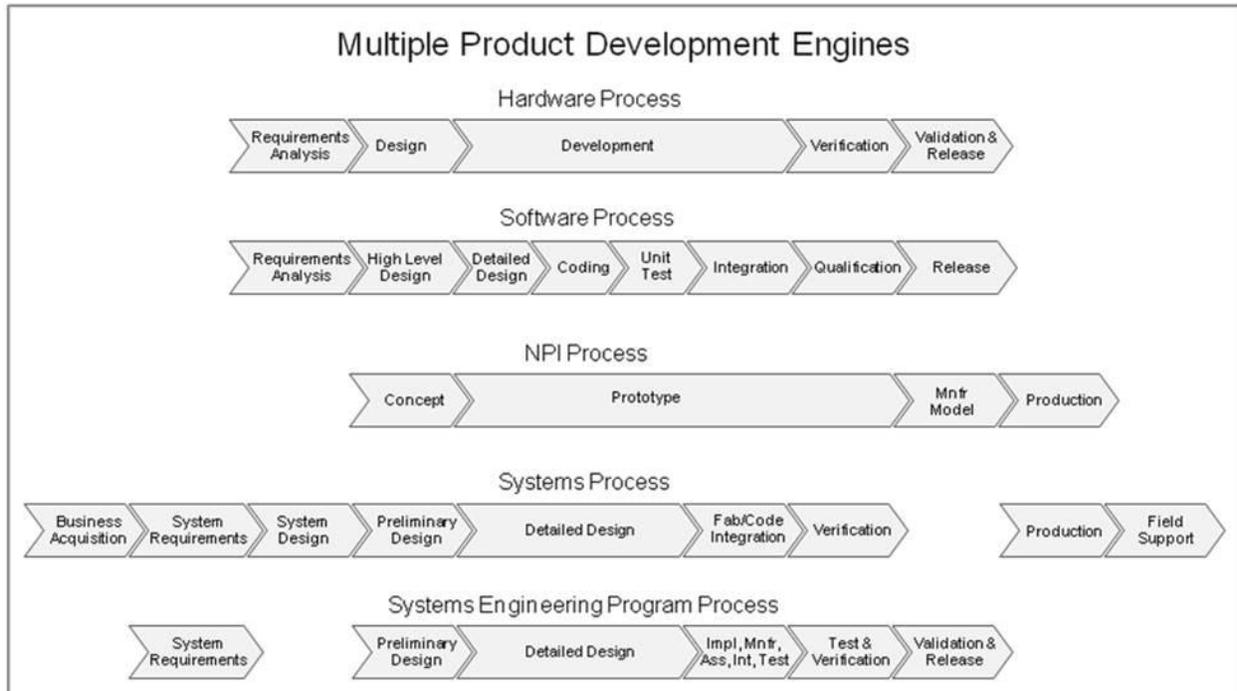


Figure 1: Multiple Product Development Engines

In 2007, Engineering launched a lean product development initiative to achieve greater efficiencies in functional and cross-functional process performance. This on-going effort has sought to eliminate waste and reduce subprocess cycle time within and among the development engines.

The introduction of OPM3® has its origins in the Lean Product Development initiative with intent to pilot the standard and later spread the standard throughout the Engineering community. RFCD's Divisional Process Group (DPG) initially used OPM3® to provide project management best practice support to improvement projects within the standard's project management domain. The DPG stewards and facilitates the achievement of Engineering process improvement goals and objectives. It is the operational arm of the Engineering Continuous Improvement Program and champions the program's creation and maintenance. This approach allowed the DPG time to develop OPM3® expertise and deployment competencies with help from the world's leading OPM3 specialists OPM Experts LLC, before a more widespread use of the standard within the organization.

Figure 2 shows the three phases of the lean product development initiative.

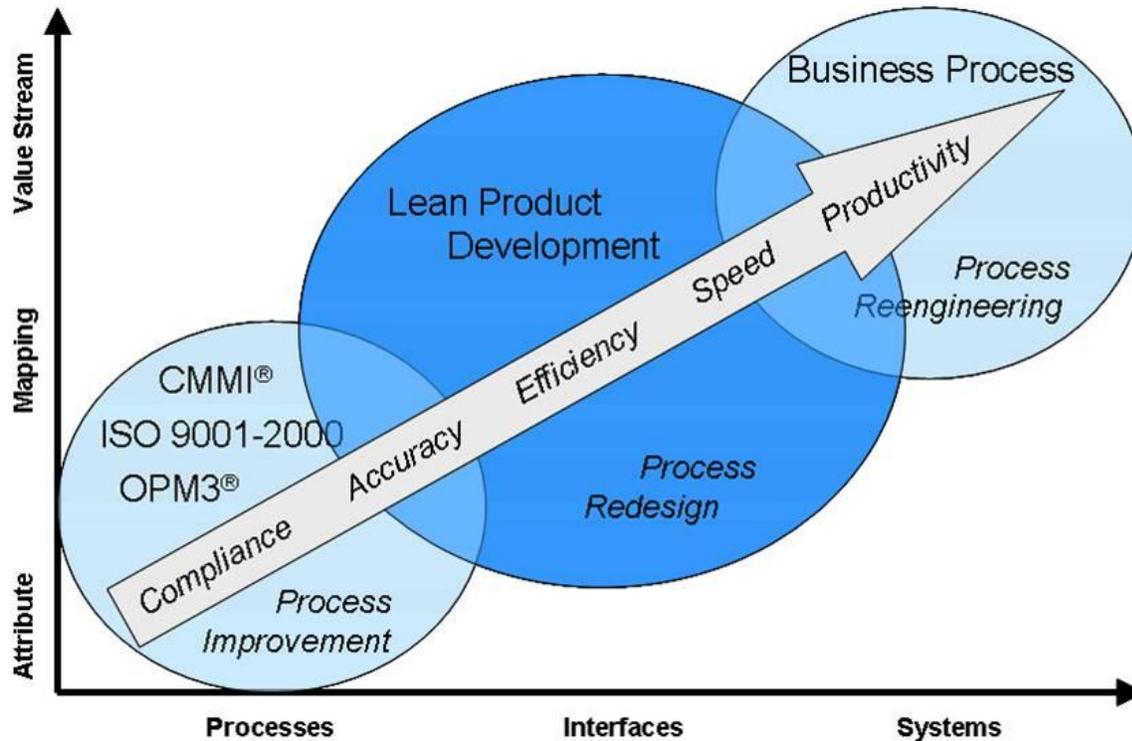


Figure 2: RFCD's Lean Product Development Initiative

Phase one is characterized by best practice introductions and demonstrated compliance to key process standards. Phase two shifts from process improvement to process performance, more specifically, process interfaces between Engineering disciplines and other RFCD functions. Process reengineering is the final phase. The product development capability is viewed as a key component of the overall business process system.

Each bubble contains a portfolio of improvement projects. The vertical axis shows the types of process notations used to characterize and measure RFCD processes. The horizontal axis identifies the focus of process-related evaluations. The center arrow identifies measures of interest. The large Lean Product Development bubble indicates the primary area of improvement emphasis. Improvement projects may overlap these phases depending on their scope. The DPG executes Improvement projects in accordance with OPM3® recommended guidelines.

Having achieved success with the pilot of OPM3® in Lean Product Development, the DPG made plans to extend the OPM3® methodology throughout Engineering. RFCD operates in a multi-standard, multi-model process improvement environment. The division has a Quality Management System (QMS) that includes best practice requirements associated with ISO9001:2000, CMMI®, and other process standards. The QMS embodies the core process

requirements of the organization.

As shown in Figure 3, practices from various process standards, like OPM3®, are mapped and evaluated for goodness of fit before being introduced into the QMS. Process requirements are the focus of change, not the standard.

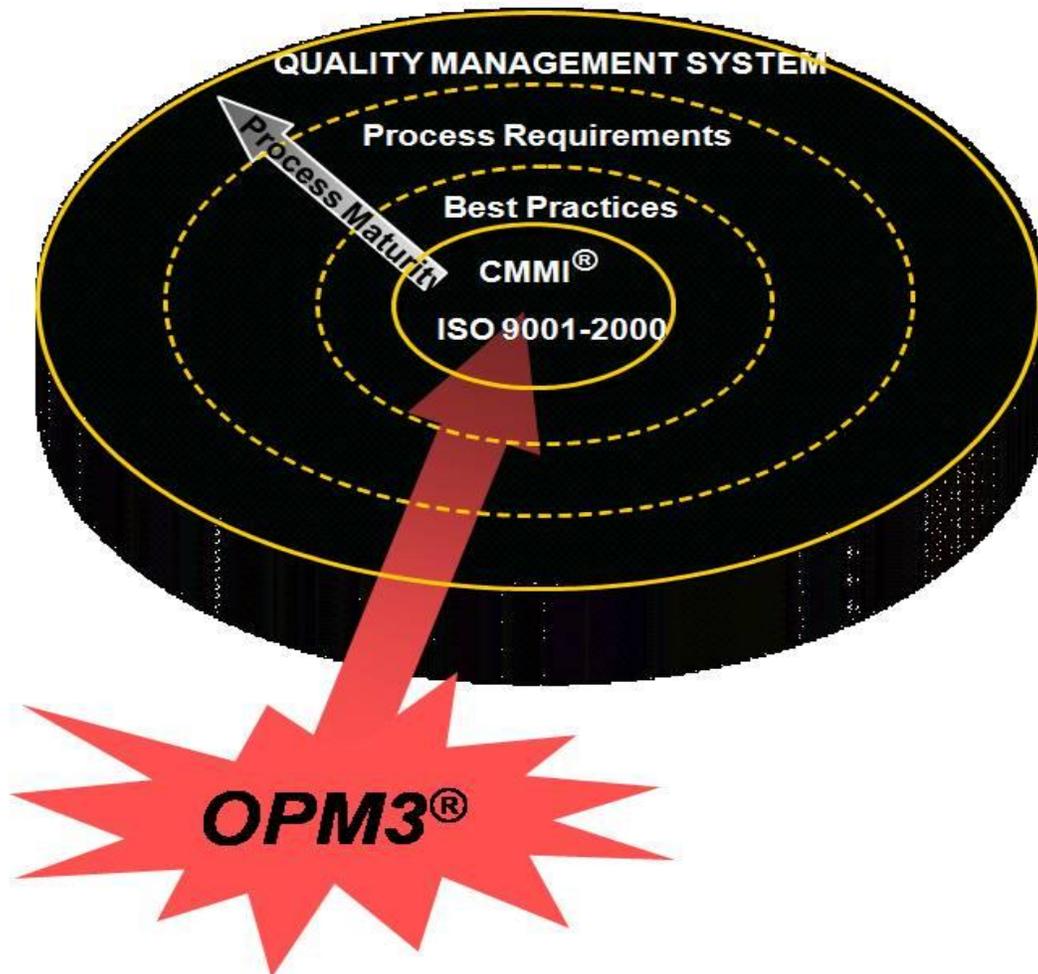


Figure 3: RFCD's Multi-Standard Quality Management System

The DPG codified OPM3®'s introduction into the QMS using Engineering's yearly process improvement plan. The plan included provisions for:

- Senior Management Sponsorship and Oversight
- Aligning OPM3® with the division's Strategic Growth Plan (SGP)
- Linking OPM3® to other process initiatives (e.g., Lean Product Development)

- Mapping OPM3® best practices into the QMS
- Establishing a Project Management Office
- Identifying and involving partner RFCD functions and projects

Special care was taken to bill OPM3® as a complementary standard and not a competing standard to other process standards and improvement initiatives. For RFCD Engineering, knowing excellence is all about knowing the current process context of the organization and how a new process standard can modify that context to successfully promote and advance a culture of excellence responsive to the strategic imperatives of the organization.

### **Assessing Rigorously**

Entry into the OPM3® via an assessment is an attractive feature of the model. While other standards may require process build-ups before appraising the organization, OPM3® begins with an assessment.

RFCD Engineering values assessments as a means to measure process maturity and to identify improvement opportunities. The division is registered as an ISO 9001-2000 company and its Systems and Software engineering groups have been successfully appraised to CMMI® Maturity Level Three.

Engineering supplemented its internal OPM3® pursuits by contracting OPM Experts LLC to perform a rigorous assessment and to mentor RFCD staff in the implementation of OPM3®. The third party rigorous assessment focused on project management capabilities associated with the Systems, Software, and Hardware engineering disciplines. Multiple project management policies and processes were embedded in these disciplines.

Although the multiple Engineering development lifecycles differ to some degree, OPM Experts LLC showed how, using OPM3, the project management processes can be the same, tailorable when appropriate, applicable to most projects most of the time, and developed over time as a highly capable strategic project delivery system.

The OPM3® with value-added insight from OPM Experts LLC inspired the DPG to seek greater maturity in product development by transforming multiple product development engines (Figure 1) into a single, unified product development framework. To support this concept, the DPG has sought to institutionalize a standard set of lean project management processes that Engineering project managers can use to deliver their solutions faster and cheaper through the framework.

The OPM3® rigorous assessment revealed how the various Project Management processes within Engineering could be consolidated, thus reducing the costs and complexity of maintaining multiple sets of project management processes for each product development engine. By establishing a unified set of lean project management procedures, process asset links among the engines could be reduced by more than 2 to 1. The DPG used the PMI PMBOK Guide to steer the reduction effort.

### **Creating Accountability**

The building of capable Project Management processes and the transformation of the Project

Management culture go hand in hand. For Engineering, these two concepts converge in two RFCD strategic imperatives: Time-to-Market (TTM) and cost reduction. For the kinds of applications that RFCD develops, only the best will do, and getting these solutions to market fastest can make a life saving difference.

The DPG uses OPM3® to continually improve the RFCD brand of lean project management processes and to establish a common lexicon in support of the unified product development approach. Such a process involves accountability, especially in the establishment and maintenance of key organizational enablers, such as a PMO, to help steer the development and institutionalization of processes supporting a unified product development system.

The DPG launched a PMO to advance the unified product development agenda by increasing RFCD Engineering capabilities in the OPM3® specified project, program and portfolio management domains. PMPs, Six Sigma Black Belts, and an PMI licensed OPM3® assessor staff the PMO.

The PMO has a three-fold mission:

- 1) To establish and maintain a standard set of lean project, program, and portfolio management processes;
- 2) To develop lean project, program, and portfolio management competencies; and,
- 3) To measure the benefits of increased project management maturity in both engineering product development and internal improvement projects.

The chief duty of the PMO is to oversee the creation and deployment of lean project, program and portfolio management processes that enable a lean project management culture responsive to RFCD strategic growth imperatives. It works hand-in-hand with the Engineering community to reduce duplication in project management processes, where appropriate, and to develop “vanilla” project management processes (i.e., processes that are not hardwired to a specific Engineering discipline).

Engineering has established tailoring guidelines to ensure that the right amount of process is applied to product development efforts. Lean project management processes are non-prescriptive and cover the full product development lifecycle. Smart process selection and tailoring empowers Engineering project managers to achieve their schedule, cost, and quality objectives.

### **Distinguishing Action**

OPM3® serves as a foil reinforcing the PMO’s accountability and fidelity toward its mission. Although the PMO is in its early stages of development, PMO activists have contributed to the establishment and maintenance of RFCD Engineering’s policies, procedures, tools, training, and performance management systems.

The PMO created a web-based project management process asset library for use by the Engineering project management community. It has a project scheduling function that provides scheduling expertise when requested to all RFCD project managers. The PMO is sponsoring a



*and Case Examples for Ensuring Success” by Mark Perry (J. Ross Publishing). For more information about OPM3, visit <http://opmexperts.com/> or join the free OPM3 SIG discussion group on LinkedIn at <http://www.linkedin.com/groups?gid=1312167>.*

For more on OPM3, head to [opmexperts.com](http://opmexperts.com) - [PMI Certified OPM3® Consultants and OPM3® Assessment Services](#).

*About the Author:*



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