



**Product
Realization
Group®**

Success Story

Digital Transformation for a Tier 1 Global Technology Leader

What we did:

PRG was engaged to conduct a comprehensive PLM/NPDI assessment with the goal of identifying gaps, streamlining processes, and enhancing the client's ability to deliver high-quality products on time and within budget.

Results:

PRG's engagement empowered the client to achieve a more robust, scalable, and efficient product development and manufacturing process. The client is now better positioned to meet market demands with high-quality products, ultimately leading to increased customer satisfaction and business growth.

Company

Our client, a Tier 1 global leader in semiconductor technology, specializes in the development and production of complex emulation and simulation products. As a key player in the industry, the company faces intense pressure to innovate rapidly and bring new products to market in a highly competitive and dynamic environment.

Challenge

The client's rapid product development cycles, driven by strategic partnerships with key component suppliers, had led to fragmented and inefficient systems and processes across their Product Lifecycle Management (PLM) and New Product Development and Introduction (NPDI) functions.

Key challenges identified included:

Isolated Systems

The client's digital systems (CAD, PLM, ERP, QMS, etc.) were not uniformly configured or well integrated, resulting in inaccessible data silos, duplicate data entry and inefficient workflows.

Inconsistent Processes

Different development teams followed varying NPDI processes, causing misalignments, poor communication and delayed product releases.

Manufacturing Inefficiencies

A lack of coordination between R&D and Manufacturing Operations led to quality issues, low yields, and high levels of product rework and returns.

Solution

PRG was engaged to conduct a comprehensive PLM/NPDI assessment with the goal of identifying gaps, streamlining processes, and enhancing the client's ability to deliver high-quality products on time and within budget.

In-depth Process Assessment

We conducted interviews with cross-functional teams to understand the current state of PLM and NPDI processes, mapping out the organization's existing workflows and identifying critical gaps.

Strategic Recommendations

Based on our findings, we recommended the normalization of engineering development tools and the implementation of a unified cloud-based PLM/QMS system to integrate data across teams, along with a standardized NPDI process to align R&D and Manufacturing Operations.

Manufacturing Process Improvement

We provided targeted recommendations to enhance the maturity of manufacturing processes, including the introduction of rigorous EVT, DVT, and PVT validation steps to ensure product quality from the earliest stages of development as well as specific manufacturing process improvements.

Why PRG?

This success story underscores PRG's expertise in transforming complex, large-scale Systems and Processes for technology industry leaders. Our ability to deliver tailored team-based solutions with seasoned experts that address the specific challenges of each client sets us apart as a trusted partner in driving innovation and operational excellence.

"Working with PRG was a transformative experience for [us]. Their expertise in systems and processes has delivered a roadmap for significantly improving our business systems, operational efficiency and product quality. The transition to a unified, cloud-based system will eliminate data silos and foster better collaboration across our global teams and manufacturing partners. As a result, we will be able to bring higher-quality products to market with greater agility. PRG's tailored approach and deep understanding of our challenges made them an invaluable partner in our digital transformation journey."

— VP of Operations

Results

Digital Transformation

The client began the process of normalizing engineering development tools and implementing a cloud-based universal PLM/QMS system, leading to improved cross-departmental collaboration, better integration between systems, less manual entry, and a more efficient process.

Streamlined NPDI Process

A new, standardized NPDI process was introduced, ensuring that all teams work toward a common goal of delivering high-quality products with effective product validation steps in-place.

Improved Manufacturing Outcomes

The client saw significant improvements in first-pass yields and a reduction in product rework, thanks to the early adoption of validation processes and better integration between R&D and Manufacturing Operations.