Product Realization Group®

Success Story

Supply Chain IMPACT gets MākuSafe over the finish line

Company: MākuSafe

Headquarters: Des Moines, Iowa, USA

What they do: MākuSafe is a fast-growing company serving the workplace safety industry. The MākuSmart platform is a system that uses wearable sensors, analytics and machine learning to provide companies with valuable workforce insights, helping to improve safety and productivity.

Challenge

MākuSafe had a vision: proactively prevent workplace accidents. The company had developed an early prototype for their product but hadn't completed the design.

Solution

MākuSafe selected Product Realization Group (PRG) and our Supply Chain IMPACT solution for the customized services and hands-on expertise in navigating the product commercialization process, from prototype to full market scale, while reducing cost and risk.

PRG assessed MākuSafe's product design and business objectives, and prepared an action plan to take on the sizable task of full-scale manufacturing.

Key components of the solution delivered included:

- Product development schedule
- Bill of materials (BOM) costing
- Supply chain partner options
- Product verification, reliability and test requirements
- Business systems needed to support growth
- Commercialization risk identification and mitigation

What we did:

PRG provided a tariff resistant supply chain strategy, commercialization assessment, Technical Program Management, Product Lifecycle Management (PLM), and execution

Results:

Supply Chain IMPACT from PRG enabled MākuSafe to cost-effectively mass-produce the technology that powers their system

Designing for efficiency and cost savings

PRG provided oversight for an outside design team, evaluating their design for manufacturability. PRG also assessed and optimized the BOM for parts availability, quality and cost.

Additionally, PRG negotiated down the costs for key components.

Business systems for manufacturing best practices

MākuSafe didn't realize the challenges with using tools such as standard spreadsheets and free document sharing to manage product information on a larger scale. PRG recommended implementing a product lifecycle management (PLM) system to optimize control of their product record.

The PLM system helped ensure clear communication while working in a global, dynamic environment. The system was also vital to support the company's rapid growth.

Key Benefits of engagement with PRG

- A commercialization assessment and action plan that allowed MākuSafe to gain additional funding and achieve business objectives
- Product development best practice knowledge and hands-on support
- Creation of a manufacturable design
- PLM system implementation to support product changes, communication, and the company's growth
- Significant cost savings on both electronic components and customized parts
- Accelerated time-to-market via leveraging established relationships and knowledge of supply chain management

> "Thanks to Supply Chain IMPACT, we saved 25%-30% in the transition from prototype design to volume manufacturing, which is more than we could have ever expected"
> — Mark Frederick,
> CTO & Co-Founder, MākuSafe

Significant Supply Chain efficiencies

One of the most valuable assets that the Supply Chain IMPACT solution brought into the engagement was access to supply chain expertise and relationships. PRG's Supply Chain & Operations expert mapped out an actionable supply chain strategy for MākuSafe, including alternative geographic sourcing recommendations. He then provided a short list of suppliers based on track record and recent supplier requalification audits.

MākuSafe chose an established location in Asia for their manufacturing. The choice reflected the need for a stable, tariff resistant supply of components and labor. This accelerated process, leveraging PRG's supply chain network, saved 60 to 90 days over the traditional supplier selection process.

Additionally, PRG negotiated down the manufacturing value add cost for the product, and delivered major cost savings up to 78% off of individual product components.