

Client Profile

Client: *The Small Equipment Division of Construction Equipment Manufacturer (OEM)*

Product Lines: *Small construction equipment lines*

Headquarters: *United States*

Revenue:
*Product Line >\$600 Million USD
Parent Company, >\$50 Billion USD,*

Participating Client Functions

- *Corporate Executive Office*
- *Product Line Management*
- *Product Development*
- *Marketing*

Expertise Used in Project

- *Modular Product Design*
- *Product Management*
- *Product Cost Management*
- *Marketing Strategy*

HA helps a product manager segment his product line and re-focus product requirements. Modular strategy helps the product grow \$44 million annually.



Challenge

Randy owned a product line that was one of the highest volume products in his company. His product was a small industrial tractor that could be used in combination with over two hundred front-end implements to accomplish thousands of use cases for Randy's customers. His product sat at the high end of his market with a commensurate price tag, but in the lower end of the market, Randy had very nimble competitors with good brands. He would often receive phone calls from a colleague or group vice president asking him how his product was doing versus competitors in a small and specific segment of his product's market.

However, Randy could not afford to focus on every use case and segment of the market. He knew, intuitively, that the investment, inventory carrying cost, and complexity would destroy his financial goals. Randy's marketing counterpart could only provide Randy basic segment information on Randy's product. Randy needed to answer the following questions:

1. **Segmentation** – how should Randy's customers be segmented?
2. **Requirements** – how could he define each segment's product requirements in a consistent way that would allow him to understand where to focus development?
3. **Modularity** – could Randy use product and supply chain modularity to meet more customer use cases in the most lucrative segments, while still reducing complexity?

Discovery and Solution

Hiller Associates and a consulting partner, an expert on product modularity, were engaged to help accomplish these goals. HA was able to work quantitatively with the client's marketing team to extract more data on the product's usage than was originally thought to exist. However, this alone was not enough, so HA worked with product development and sales to understand the market qualitatively. By combining the marketing data with latent tribal knowledge from the customer, HA was able to construct a much clearer segmentation for Randy.

HA's partner led the client through a series of in Depth activities based on a modified version of Quality Functional Deployment (QFD). This work changed the client's focus from "hardware" (i.e. individual parts) to a focus on the functionality

“A lot of the problem with dealing with complexity is just knowing where to start. HA cleared away the noise and gave us the tools to start down a better path.”

RANDY, PRODUCT LINE OWNER

About Hiller Associates

Hiller Associates is a business performance consultancy that specializes in Product Cost Management (PCM), helping discrete manufacturing companies reduce product cost, whether the product is before or after launch.

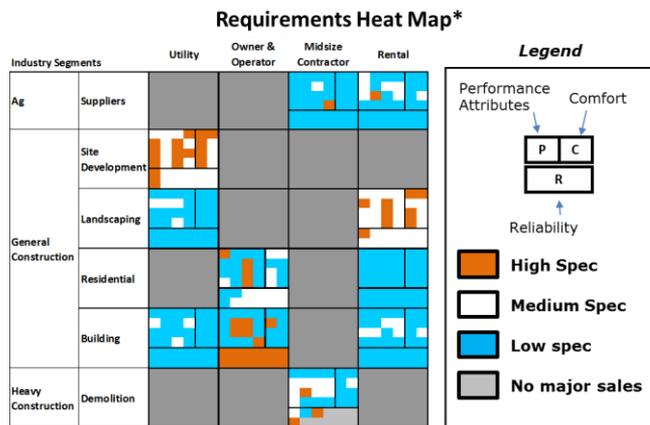
Our practice sits in the nexus between design engineering, finance, purchasing, and manufacturing. HA has helped Fortune 1000 clients save tens of millions of dollars through our Product Cost Management engagements. If you have a challenge with Product Cost Management in culture, process, roles, or tools we would like to help.

that the hardware provided and the interfaces that held the parts together.

Using the new, deeper segmentation and the modular requirements, HA and its partner were able to advise the client, both tactically and strategically. Tactically, HA was able to consolidate the client’s end customers’ needs into three primary requirements: comfort, performance, and reliability. Each of these was the sum of eight to twenty sub-requirements. To present this in a simple way to the group vice-presidents to which Randy reported, HA developed a Modular Requirement Heat Map. This map showed the vice presidents visually where the product line’s requirements were “hot,” (required high performance), or “cool,” (required minimum performance) to meet the end customers’ real needs. This was then evaluated versus

the current state of these requirements for Randy’s product line-up.

Strategically, HA was able to provide Randy and his group vice-president a new way to understand product lines, to reduce complexity, and to get the most profit out of modularity.



* Actual requirements evaluation changed to protect client confidentiality

Results and Impact

The project results showed that on a part level, the client was already standardized, but on an architectural level, it was not. By realigning the client’s designs with its end customers’ requirements in the most important segments, there was great opportunity.

On the four most common product models alone, this would result in \$44 million of added annual revenue (7.3% increase) and \$4.6 million of increased profit.

