

Vention Lends Expertise to Product Architecture & Business Model Analysis



CUSTOMER SITUATION

One of the world's largest medical device companies tasked a team from its surgical products division with evaluating feasibility of a low-cost architecture for its 3 leading product platforms for laparoscopic procedures. The "reposable" model under consideration would combine reusable device components with single-use components. (One device was a single-use product, one was partly reusable, and one was mostly reusable.) The goal was to identify a single product architecture that would allow the greatest amount of reusability at the lowest per-procedure cost.

These complex, highly successful product families had competing requirements that would make converting to a common reposable architecture design very challenging.



VENTION SOLUTION

Vention had worked with this customer several years earlier on concepting and developing a functional prototype for a reposable surgical device.

The customer engaged Vention because of its deep understanding of the customer's products, clinical application, and sales/service model. The customer also valued the independent outside perspective of a contract product development provider.

Vention held a series of meetings to brainstorm product architecture concepts and key product features, and evaluate business model implications. The sessions included:

- *Research: customer background, competitive landscape analysis*
- *Brainstorming: inspiration brainstorming, several rounds of targeted concept generation, and several rounds of organizing "idea fragments" into discrete product concepts*
- *Evaluation: developing and refining evaluation criteria and evaluating concepts against the criteria*



OUTCOME

The Vention team developed a detailed, system-level landscape analysis and product architecture direction for the customer. The details of the report demonstrated that the reposable solutions presented would have an impact beyond engineering to sales, marketing, and service—requiring a change in business model. Armed with Vention's expert analysis and detailed map of business model implications, the director of R&D was able to assess the value of pursuing this route.