

Quadro Consulting Ltd.

Designer packs tiny speaker into CD cases with CATIA V5



Overview

■ Challenge

Acclaimed design consultancy Quadro sought a design tool with superior surfacing capabilities and the ability to demonstrate new product best practices to its clients.

■ Solution

Quadro chose CATIA V5 and its advanced surfacing capabilities.

■ Benefits

CATIA V5 helps Quadro demonstrate the power of optimised processes to clients and mitigates risks by identifying and resolving conflicts early in the design cycle.



Optimizing design processes with CATIA V5

UK-based Quadro Consulting Limited does not just design new products for its clients. Instead, Quadro uses each project to teach clients how to optimize their product development processes.

“What we offer is a ‘learning by doing’ consultancy,” says Phil Gray, Managing Director for the award-winning company. “We take our clients on a journey. We define the starting point, draw a map of where to go and lead them in the right direction. We hold the client’s hand as he follows our example and leave him with the legacy of an optimised process.”

Quadro’s most valuable tool in helping clients make this journey – in addition to the company’s own intellectual capital – is CATIA V5, Dassault

Systèmes’s V5 PLM (Product Lifecycle Management) solution for collaborative 3D product development.

“Our view is that CATIA V5 is not a design tool,” Gray says. “It’s a business tool. It gives you much more of an opportunity to do effective risk management by providing the ability to visualize and iterate at the early concept stage and discover the ramifications of each option. This brings a real competitive advantage.”

Superior modelling for award-winning products

In 2006, Quadro co-founder Morag Hutcheon was named Female Inventor of the Year and her design for pre.vu was named Product Development of the Year. Both awards were presented by the British Female Inventor & Innovator of the Year Forum.



“Our view is that CATIA V5 is not a design tool. It’s a business tool, and the benefits really need to be explained at the CEO level.”

Phil Gray, Managing Director, Quadro Consulting Ltd.



The product offers CD buyers a 60-second preview of new releases through a speaker built into the CD case. The idea was developed using CATIA V5, which enabled Hutcheon to virtually simulate the product's look and to fine-tune its technology.

CATIA V5 played a key role in pre.vu's development, Gray says. "CATIA V5 is the world's best surfacing tool," he states unequivocally. "It has a level of integrity which lets us conceive our ideas on screen and take them seamlessly through to manufacture."

CATIA V5 allows Quadro to quickly and cost-effectively produce 3D models with sufficient detail for clients to experience what it will be like to use a finished product. For example, Quadro recently modelled a new cordless phone for AT&T in CATIA V5 that was designed to deliver on the brand's three core values: pleasure in use, classical style and high perceived quality.

"At the product design level, it is the subtlety of shape and form that is our real passion," Gray says. "We need really advanced surfacing capabilities and CATIA V5 is just fantastic. The latest modules, like Functional Molded Part (FM1) and Imagine and Shape

(IMA), can be seen as creativity accelerators."

Early iterations with advanced detail

Using CATIA V5, Quadro was able to quickly produce an early physical representation of the phone that gave AT&T executives a feel for its size and shape. The form, developed for initial signoff, was so complete it even included the fillets and draft angles of the final phone.

A detailed mockup was manufactured from this early data to create a model that could be focus-group tested. It was so advanced that a leading retailer placed advance orders based on its experience with the early-stage model. The phone generated \$50 million in revenues for AT&T.

"In our view, CATIA V5 is the ideal PLM platform for consumer electronic packaging and household appliances, which need to be very functional but also very well styled and easy to manufacture," Gray says. "We know that CATIA V5 has everything we need for our projects. It is all there, from advanced surfacing tools to full PLM capabilities."



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Morag Hutcheon, co-founder, Quadro Consulting Ltd.



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