

SUCCESS STORY | SAATCHI & SAATCHI

# REAL-TIME INTERACTIVE FEEDBACK FACILITATES COLLABORATION AND CREATIVITY

NVIDIA® Quadro® VCA delivers real-time feedback that allows dynamic collaboration among 3D artists and creative directors at Saatchi & Saatchi.



# Real-time feedback with increasing realism over time allows Saatchi & Saatchi to quickly and easily create industry-leading products.

## AT A GLANCE

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### CUSTOMER PROFILE

**Company:** Saatchi & Saatchi

**Industry:** Communications and advertising

**Location:** Over 140 global offices

**Size:** Over 6,500 employees

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### SUMMARY

- > Global communications and advertising agency with extensive 3D workflows
  - > Slow CPU-based rendering impeded creativity and collaboration
  - > Implemented NVIDIA Quadro VCA to accelerate test renders
  - > Projects are much more creative and collaborative than previously possible
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**We need the ability to make the same spontaneous decisions in 3D that we would during a photo shoot. Adjustments get finer and finer as we approach the final render, and the need to see finished-looking results becomes more and more important. Gimmicky real-time preview renders don't cut it. We need real-time renders that are just as accurate as the final production renders.**

Michael Wilken  
Director of 3D  
Saatchi & Saatchi

Saatchi & Saatchi is a global communications and advertising agency network with more than 6,500 employees in over 140 offices around the globe who specialize in making sustainability, citizenship, and corporate social responsibility irresistible. They believe in smart thinking and powerful storytelling to propel innovation, create organizational change, inspire and engage employees, and enhance customer loyalty. Saatchi & Saatchi helps shape many of the world's largest corporations and most recognized brands by helping them realize long-term business and organizational value.

## CHALLENGE

"Properly used 3D asset generation can open entirely new opportunities for advertising compared to traditional film and photography," explained Michael Wilken, Director of 3D at Saatchi & Saatchi. "We are able to generate thousands of variations for product configurators or targeted marketing. If done properly, it can also be very cost-effective without compromising photoreal quality; however, we still found ourselves dealing with lingering process trade-offs compared to traditional photography days."

"Photography gives us instant 3-dimensional feedback, while 3D forced us to render each take individually—a process that could take hours because of massive datasets and our traditional CPU-based render farms. This lag time limited our ability to collaborate because our creatives were forced to wait for new rounds every time we made a render adjustment."

"For example, lighting plays an incredibly important role in advertising, Wilken continued. "The final 10% of quality and realism that separates a good asset from a great asset is where we do 90% of our work. We need the ability to make the same spontaneous decisions in 3D that we would during a photo shoot. Adjustments get finer and finer as we approach the final render, and the need to see finished-looking results becomes more and more important. Gimmicky real-time preview renders don't cut it. We need real-time renders that are just as accurate as the final production renders."



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#### 4 REASONS FOR NVIDIA QUADRO VCA

- 1 Accelerate design and VFX workflows to deliver photograph-quality images faster than ever before.
  - 2 A network attached appliance allowing every 3D artist in the company to have access to multi-GPU rendering.
  - 3 Enjoy the high quality interactive rendering performance of a multi-GPU workstation from a lightweight mobile computer.
  - 4 Designed for datacenters, VCA offers flexibility and reliability.
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**We did our homework and realized that the VCA is the only turnkey solution that fits seamlessly into our existing pipeline. The single biggest benefit is that our employees can get real-time, interactive feedback from the GPUs that is just not possible with CPUs. This is not a question of realism; we've had physically correct renderings for a long time. It is a question of real, interactive results without the constant wait-and-see or compromising the automation efficiencies of our existing pipeline.**

Michael Wilken  
Director of 3D  
Saatchi & Saatchi

#### SOLUTION

Saatchi & Saatchi experimented with various CPU acceleration and real-time applications to reduce overhead and speed up the process; however, the acceleration required surrendering some control over the lighting process and visualization results, making it unusable for production work. Meanwhile, they were becoming increasingly aware of the speed and power of GPU-based rendering in personal workstations and laptops, making the benefits of adding a network attached device with eight high-end Quadro GPUs self-evident. The agency knew that the NVIDIA Quadro VCA is used in entertainment and contacted reseller Global Pipeline Technologies (GPL) to try it.

“NVIDIA Quadro VCA seemed like a natural fit for us because the ready availability of powerful GPUs gives us real-time feedback compared to CPU-based solutions,” said Wilken. “We did our homework and realized that the VCA is the only turnkey solution that fits seamlessly into our existing pipeline. The single biggest benefit is that our employees can get real-time, interactive feedback from the GPUs that is just not possible with CPUs. This is not a question of realism; we’ve had physically correct renderings for a long time. It is a question of real, interactive results without the constant wait-and-see or compromising the automation efficiencies of our existing pipeline.”

Initial research consisted of reaching out to GPL and NVIDIA to confirm that the NVIDIA Quadro VCA would work with large client datasets provided at the desired resolutions while maintaining compatibility with their existing 3D applications. Verifying that the real-time V-ray shaders would support all needed functions for both CPU and GPU-based renders was also key. Integration was as simple as connecting the device to the network and conducting tests with the 3D artists and directors in conjunction with the art and creative directors.

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The VCA gives us immediate, instinctive feedback. Our overall workflow hasn't changed, but our interactions with creatives have become much more collaborative and efficient. We can spend a lot more of our time innovating and refining instead of waiting for test renders, which means that we can pack more quality decisions into shorter timeframes with better results. Our creative team likes the process better and we can take better advantage of their time and intuitive insights. Our clients are happier and the risk of cost or time overruns is reduced.

Michael Wilken  
Director of 3D  
Saatchi & Saatchi

## RESULTS

Integrating the NVIDIA Quadro VCA has allowed Saatchi & Saatchi to maintain their existing 3D workflow while greatly enhancing creativity and serendipity through much faster iterations. Unlike traditional "square by square" rendering, the Quadro GPUs begin providing whole-scene feedback almost immediately, with realism increasing over time.

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Inspired by this great initial success, Saatchi & Saatchi is exploring ways to further integrate the NVIDIA Quadro VCA into their workflows, such as by switching to GPUs for final renderings. They are also exploring virtual reality for a number of applications using NVIDIA GPUs, as well as integrating NVIDIA technologies such as MDL into their workflows.

To learn more about NVIDIA Quadro VCA, visit: [www.nvidia.com/vca](http://www.nvidia.com/vca)

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