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## Exploring New Depths: How DOER Marine Leveraged AI to Reimagine Its Brand

## Introduction

Founded by renowned oceanographer Sylvia Earle in 1992, DOER Marine is a pioneering company based in Alameda, California, specializing in the design, manufacturing, and operation of submersibles and marine technologies. Initially focused on creating manipulator arms for exploration vehicles, the company has since expanded its offerings to include remotely operated vehicles, thruster systems, scientific modules, and human operated submersible vehicles. DOER has established a reputation for pushing the boundaries of underwater exploration, empowering scientists, researchers, and organizations to access the depths of the world's oceans with unparalleled precision. In 2024 the company received the *Manufacturer of the Year* 

award from the AMBayArea and implemented the UN's recently established sustainability guidelines.

#### Context & Background

Despite its commitment to technological expertise and innovation, DOER operates in a specialized and niche market, presenting significant marketing challenges. With such specialized products, the company needed to effectively communicate not only the value of its offerings but also the importance of ocean exploration and its impact on the world.

With a smaller target audience DOER had to craft a marketing strategy that highlighted the technical superiority of its products while raising awareness of the critical role submersibles play in ocean conservation, research, and industry. Compounding this challenge, the company's limited marketing budget made it difficult to capture high-quality images of their products in action at depth. Thus, a comprehensive revamp of their corporate brand and marketing strategy became imperative.

Marketing and advertising campaigns are inherently complex. Each company has unique goals to ensure maximum return on investment, balancing brand awareness, interest generation, and client engagement. Larger enterprises typically allocate 8-10% of their revenue to marketing, while smaller companies often spend only 2-5% due to limited revenue streams.

DOER Marine faced a comparatively lower budget for the creation of marketing assets, which prompted the company to think creatively about maximizing its limited resources for an effective marketing and advertising campaign.

Defining the New Vision

#### Setting the Goals

Before the redesign, DOER's marketing assets featured low-resolution renderings of their submersible vehicles, failing to convey the high-performance capabilities and technical sophistication of its products. The imagery on its website and marketing materials appeared tired, lacking the modern standards necessary to represent DOER's pioneering status in marine exploration technology. At the same time partnering companies, like Tiburon Subsea, showcased dynamic visuals that made DOER's marketing feel out of place.

The goal of the project was clear: DOER Marine aimed to highlight the versatility of its submersible vehicles and products to gain traction as the leading firm in



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underwater research and exploration. This was when DOER Marine began seeking solutions to its marketing and visualization challenges.

### Cost of Traditional Photography

Creating high-quality visual content traditionally requires hiring scuba divers, underwater photographers, lighting specialists, and other technical experts, leading to significant costs. An underwater photoshoot can cost up to \$50,000 per day, escalating further with permits, boat rentals, and post-production editing. For a full campaign requiring multiple scenes, these costs



can quickly run into hundreds of thousands of dollars.

Given these challenges, DOER Marine sought alternative solutions for high-quality product images. After discussions with many different solutions providers, DOER Marine found Cascaid. Conversations between both teams led DOER to explore generative AI to address its marketing issues, aiming to save time and resources.

Image source: The Underwater Club

### The Strategy: Developing the New Brand Imagery

Cascaid began their collaboration with DOER. The Cascaid team immediately understood the project's significance and initiated discovery sessions to align on the brand's vision, values, and goals. These sessions focused on understanding DOER's needs for visualizing their conceptual submersibles, which had only been represented in 3D renderings. The primary challenge was to depict these submersibles in realistic, deep underwater environments that resonated with potential clients, especially given that the previously rendered images of their often gave off an "unfinished" feel, as shown below.



Two renderings by DOER rendered into an aquatic environment

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#### Ideation

The key objective for DOER's marketing was to create realistic, high-quality imagery of its submersibles in believable scenarios, enhancing marketability and revenue potential. The partnership with Cascaid enabled DOER to achieve significant cost and time savings, reducing the need for lengthy client interactions and low-quality visuals.

By leveraging DOER's 3D stills and 360-degree video renders, Cascaid developed a cohesive visual narrative. The teams collaborated closely to explain the submersibles' uses, focusing on realistic representations based on publicly available data regarding underwater environments. This approach allowed DOER to accelerate marketing efforts and create campaigns that showcased the functionality of their submersibles without extensive design cycles.

Cascaid was provided with various 3D renderings of DOER's submersibles, which were enhanced with publicly available data. The results were customized AI-generated imagery, providing a cost-effective and time-efficient solution.

#### Execution

Cascaid's innovative approach utilized a multi-model AI framework to create impactful images. The team fine-tuned an advanced text-to-image model to generate highly realistic visuals for DOER's submersibles and underwater environments. Using the Low-Rank Adaptation (LoRA) technique, they first trained a model with a dataset of 25 images of DOER's submersibles, achieving detailed alignment with its intricate features.

Simultaneously, Cascaid fine-tuned another LoRA model with a diverse set of underwater photographs, enabling the generation of adaptable underwater scenes. The two models were combined to create new images by stacking them with a reference image of the desired underwater background. Through carefully crafted prompts and optimized settings, the team achieved complex, high-fidelity visuals. The final visuals are showcased below.



To ensure aesthetic and technical standards were met, advanced tools such as dynamic thresholding and color grading were applied. The final images were refined and upscaled using specialized AI models, producing high-quality visuals for various applications.

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## Results

The collaboration resulted in significant praise from the DOER team. The company saved time, money, and resources, allowing it to showcase the innovation of its submersibles operating at depth.

"While one job of a submersible is to collect subsea images, it is often challenging to capture images of the submersibles themselves. Cascaid's work helped people to visualize the submersibles in situ; sparking imagination and curiosity about ocean exploration." - Liz Taylor, CEO & President DOER Marine



### Marketing Implications

The DOER Marine team decided to roll out the new AI-generated images across its digital and LinkedIn platforms, targeting industry professionals and enhancing engagement. The high-quality visuals would not only improve DOER's website but also drive engagement and shorten sales cycles. Additionally, DOER Marine is exploring other advertising channels to promote its unique services.

## Conclusion

The engagement with Cascaid was extremely successful, enabling DOER Marine to revamp its corporate image while leveraging AI modeling software to generate and test impactful visuals. This collaboration offered more than just cost savings; it provided flexibility, allowing DOER Marine to quickly produce a variety of visuals and iterate on designs.

This case underscores Cascaid's role in helping DOER Marine leverage generative AI to create effective marketing campaigns quickly and efficiently, demonstrating the immense potential of AI in enhancing operational efficiency while delivering successful outcomes that improve brand awareness.