



Bring on the innovation!

It has been more than 100 years since the head of the U.S. Patent Office said that everything that can be invented, has been invented. We have seen automotive design stabilize to the point where one can mistake Jaguar for a Ford Taurus.

I was an aircraft design engineer for 15 years, and even I have a difficulty distinguishing a Boeing from an Airbus. Boat design has not been immune to this sea of sameness, and margins have eroded as boats are becoming more of a commodity.

At the New York Boat Show this January, I asked a boat exhibitor about what makes his boat better than others, and he said their bolts that hold the hull together are vertical instead of angled. Other dealers boasted of better cleats and fuel caps.

I have boated my whole life, but I admit that I am fairly new to the marine industry. I am curious why the marine industry changes so slowly, when there seems like there is so much that can be improved to make boating more fun, and less of a hassle.

I entered the marine industry in the mid 1990s when I invented a high-speed, remote controlled hydraulic boat lift for my lake house. I was frustrated that I was not boating nearly enough, and I wanted to find a way to use my boat like my car.

Since that invention in 1996, Sunstream has become one of the fastest growing companies in the marine industry, despite these soft economic conditions. This makes me believe that there is still room in the marine industry for vast improvements.

I see the big opportunities in the marine industry are well beyond bolts and cleats. I see big strides can be made in marine propulsion technology, boat style, and by driving the hassle out of boating.

In many industries, innovation is driven by advances in propulsion technology. Wing and fuselage design quickly followed advances in aircraft engine improvements until speeds of commercial aircraft neared the sound barrier. Eclipse Aviation raised a record quarter billion dollars in equity funding when they thought they had a new low-cost, light-weight 85-pound jet engine. With this new engine, they designed a new configuration low-cost personal jet, and have taken over 2000 orders. (Unfortunately, Eclipse recently announced the engine did not work out, so it is presently a very expensive glider).

Automotive configuration has been driven largely by optimizing internal configuration with external aero-

dynamics to balance comfort, fuel economy and safety. We will see new hybrid engines drive radical changes in the automotive industry over the next decade.

The four-stroke outboard engine is a great improvement in fuel economy and noise, but it did not seem to drive innovation beyond the transom. We need to watch for new propulsion technologies in the marine industry that will boost innovation in design, and create more demand for new boats. Traditionally, the marine industry has lagged behind the automotive and aircraft industry. Does this mean that we can anticipate hybrid engines or low-cost turbines?

Over the last few years, we have seen the automotive industry begin to break-away from the Taurus clones and offer a wide variety of styles ranging from a Mini to an H2.

Can the marine industry offer boats as fashionable and personal as these cars?

One simple area for opportunity is in making boating more fun. Instead of asking our customers what they like about other boats, maybe we should be asking what they don't like about boating? It is a good thing that boaters (like myself) are so married to the sport that they put up with the multitude of hassles.

Unlike developing a new propulsion system, small companies can innovate in this space and provide easy solutions that the market loves. Carolyn Mahoney of Deck-to-Dock won an innovation award at MAATS for a lightweight boarding ramp. Mark Baluha of Tide-Slide is doing well with his cleat that slides on a pole.

Boaters' free time has been decreasing, but their expendable income has been increasing. The result is a market that is hungry for innovations that will improve the boating experience.

The bottom line is that I believe that there is plenty of room for innovation in all facets of the marine industry, large and small businesses alike. We need to focus on our customers, not on our competitors, to drive these improvements.

It is tempting to weather the storm, and wait for better economic times to invest in new product ideas. However, we need to ask ourselves how we can use our ingenuity now to help our companies, propel growth and prosperity in the industry, and make boating a better sport for the future. 🚣

Editors Note: Ken Hey is a recognized inventor and entrepreneur. He has won Boeing's top patent of the year, twice, as well as an innovation award from Thomas Alva Edison Foundation. He is the 2001 winner of Ernst and Young's Entrepreneur of the Year for the Northwest. This year, Sunstream Boat Lifts was listed on the Inc 500 list for being one of the fastest growing companies in America.