Chairman’s Column

Technology for E-bikes. Help or Hurt Sales?
By Edward Benjamin
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For more than 20 years, I have worked as a consultant to electric bike and motor scooter / motor cycle companies. Or technology and component companies that serve them.

Most of these companies are managed by engineers.

That makes for some classic problems. The managers are good at making things, and maybe not so good at selling them. The managers often do not pay as much attention to the feedback from the sales force, the dealer, and the consumers as they pay to the factory, the engineers and scientists in the company.

Often, they have the idea that if the product is more beautiful, more efficient, uses more advanced technology, or is a demonstration of new technology - the product will sell.

I have seen that this is not normally a successful idea.

Yes, there are cases where a new technology or a very good execution of some technological advantage can create a successful business. Sometimes I am reminded that the iPhone is such a case.

But it actually is not. The iPhone was a superior execution of ideas and technologies that date back to the early 1990’s. As was the iPod. In the early days, the Newton and MP3 Players suffered from a lack of good software, and there was no clear and easy way to get music.

What differentiated and made the iPhone and iPod a big sales success was iTunes (where consumers could find their music very conveniently) and the App Store, (a place to buy useful software that was safe from viruses, and very convenient).

In the launch of every new product, the first questions that need to be asked are these:

1. What are the needs and wants of the consumer that will be satisfied by this new product?
2. Does the new product effectively meet those needs and wants?
3. Question #2 includes the price.
4. What access to distribution and marketing will the product have?

In the e-bike industry, the consumers’ needs and wants are pretty well known.
- To be safe
- To not have the bike stolen
- To be comfortable
- To be stored easily
- To be reliable
- To accomplish the journey, whether it be electric mountain bike riding, or commuting, or cruising the neighborhood comfortably.
- To look good
- To be reliable
- To save money on transportation

But there are many ebikes offered for sale that do not meet, and in some cases are acting against these basic needs and wants of consumers.

In some cases, the producers have built a bike that is very expensive, and seem to think that if people buy prestige cars at silly high prices, they will do the same for ebikes.

Experience indicates that a few such bikes can be sold, but it is not much of a business.

In some cases, the producers have built a bike that is clearly not safe. Again, some will be sold, but it is not a big business.

Uncomfortable ebikes are so common that it is almost not worth mentioning. Tiny leather seats on an electric two wheeler? The tiny leather seat was intended for a strong young athlete who does not want to sit on the muscles he / she is using to pedal. That is not really an advantage for an electric bike.

Some ebikes are easily stored.

Recently I saw and ebike that has no place a lock can be attached. (Really)

Many ebikes today are reliable. Even the inexpensive ones. This is one thing that the industry has done well. We can expect that from engineers. But not all. And warranties are mostly too short.

Many ebikes can accomplish the journey. Too many are equipped with small batteries to save cost and weight and cause the rider to be apprehensive about range.

Looking good is highly subjective. I have been at trade shows where Germans admire a bike that a few weeks later is scorned by Italians. And most Asian designs fail to resonate with Europeans.
Saving money on transportation is a basic function of an ebike. The electric bike can be very inexpensive to buy, very inexpensive to operate. No parking, no licensing, no insurance, and very cheap fuel. And fun.

Engineers are not normal people. They are fascinated by technology and design. And they will spend their money to own devices that have special technology. They understand the differences, and value them.

Often that special technology does not make any real difference in the user experience. But an Engineer will enjoy simply knowing that his battery or motor is special. And his friends are mostly other engineers who do understand the advanced technology and share his enthusiasm.

But this does not mean the consumer will understand or like, or pay for, the advanced technology. Often the consumer has no idea that there is a difference, and is more interested in the basics listed above.

In reality, there is no important difference between motors of similar power and efficiency - for the consumer. There is no important difference between energy storage systems, or frame materials - to the consumer.

In the manual bicycle world, there has been a long consensus on what makes a bicycle special. A carbon frame and expensive components can sell for 10 times or more the price of a more common bike. But the resulting expensive bike does not actually do the job any better than the more normal bike. So the consensus to pay the high price is something that was built by marketing and technical enthusiasm over decades. And is shared by a very small (and declining in numbers as they age) group.

The same exists for electric bikes.

Rather than building a bike that is an engineering and technical marvel, I recommend that any bike maker or designer consider the needs and wants of the consumer.

If a bike could keep consumers dry in the rain, or if a bike could be so much safer on the road than any other bike...that would be decisive in making it sell.

And getting the word out to the consumers is more important than having advanced technology. A marketing program that can communicate the advantages of a new bike to the distribution channel and the end users is rarely used in the ebike world.

The distribution channels of today are mostly though bicycle dealers, mass merchants, and the internet stores such as Amazon. In every case, there are barriers to entry and promotion that can stall the most advanced and attractive product.

So after asking what the consumers want, the next question should be: “What is the access to distribution?”
For a famous bicycle brand, the answer is the existing dealer network. That has been very powerful for the last 20 years. And bicycle dealers readily accept an ebike from their existing bike suppliers, while resisting ‘New’ ebikes from unknown brands. But...we can see that normal bicycle dealers face many challenges to their future. Will they be around in another decade?

Mass merchants seem like a very sturdy distribution channel. But I note that WalMart, the worlds largest such merchant, is closing almost 300 stores this coming year. The pressure from Amazon is to blame, I think. Access to the mass merchants is often complicated. And often impossible to make a profit.

The internet and the merchants that are based on the internet have strong advantages today. But they also have big problems selling ebikes. A key problem for them is safe test rides, and after sales service.

These factors require that a new product not only be built with the consumer in mind, but also with the distribution channel in mind. For example: If an ebike will be sold through the internet, then shipping considerations such as packaging and weight become very important. And the bike must be very easy to assemble by a consumer who knows nothing about such tasks.

A few decades ago, I watched a fun new sport emerge. It started as putting a sail on a surfboard, and it rapidly become an industry. And the builders and designers of wind surfers quickly became focused on high technology. Special materials, very light weight, and very costly wind surfers became the focus of the industry.

But the consumers were more interested in the reality that it was not easy to learn to use a wind surfer. And they wanted reasonably priced equipment.

Windsurfing as an industry has never developed like it should have. Consumers and dealers complained that the high technology was not what they wanted.

But the industry did not listen until it was too late.

The ebike industry is in some danger of doing the same thing.

Lets remind the engineers that the sales people and the consumers may be the ones they need to listen to BEFORE they design and build.

We all face a bright future in our industry.