

INTO THE RIDE #54

Jungle Tech to Nano Teck

by Randy Schlitter



Imagine a futuristic factory building thousands of recumbent bikes a day. This is more of a giant machine than a building. Inside the machine is the ability to fabricate just about anything. In fact, this place can build anything. At this point in time manufacturing has evolved into a process so refined we are on a molecular level. Nano tech is the rule of the day, and human handy-work is a thing of the past. Products of any kind can flow from this “product generator” and be delivered directly to customers, eliminating the need for stores, warehouses, and much of the shipping. We are still wanting and riding bikes, because as classic inventions go, it will never become obsolete. The bikes have taken an incredible leap forward though, with self-healing frames and components. In fact, the frame and components are actually one part, blending from frame to a brake back to frame. They weigh a mere 10% to 15% of what the lightest bikes of the 21st century weighed, and are just as strong, and in some cases have earth-friendly body amps for the 'in' commuters who are afraid to fly to work.

The costs of products in this world are very affordable, because the parts are actually grown in huge liquid-filled vats where pre-programmed nano-bots assemble and become the product. The rate of production is not instant, but really only limited by the ability to cool the vats and supply the raw materials. What reduces the cost of products in this fantasy is the automation, elimination of infrastructure, and a new twist on marketing and management. This fantasy factory is run by demand, and that demand is fed to it by its customers, directly. No product actually exists prior to being sold. Only the raw materials and machines are in place ready to serve. The customer goes online* and actually operates the factory via their orders to make the products of choice. They can even interact to customize or design the product using the Intelligent Assistant design service. In this world such factories exist in almost every city of any size so shipping cost and distance is less. In fact everything about this factory is about doing more with less, from material use, shipping, and even promotion and management. Smart cities will share the cost of operating the factory among the citizens, and create an economic loop. As a consumer you choose a particular brand based off the personal emotion they evoke, since the products are almost equal. Only slight nuances to the product entice the consumer to

which brand to choose. There are no overwhelming advantages to the product other than the level of accommodation to a particular consumer's taste. The factory works for all brands and all customers. It is actually neutral player in terms of product delivery.

* By this time "online" will be a much-outdated term.

OK that was the high-tech trip, now for what I call jungle tech, and the point of this fantasy. Making products affordable and packed with value should be part of the prime directive of any manufacturer worth a grain of salt. The reason this fantasy factory was conjured up was to illustrate how much things could and should change to help products reach a tipping point. In this specific case we are talking about recumbent or alternate bikes.

An assumption we like to make is this: if we could make it cheaper and still profit, we will sell more, and every one benefits. The price seems to always be a major bearing point if a product becomes mainstream. But what price is right for a tipping point to occur in something so niche' as recumbents? There is some indication that the average person in the street would not ride a bent even if given to them. That is most likely based off the fact that not everyone is riding them, but would be if cheap enough. Ah! The oxymoron of it all!

But maybe if you build it they will come. So what is the right price, or maybe a better question is, what price is possible?

In the many calculations we have done in costing our products we hit a wall. To drop below this wall means something has to give. Changing up the bike itself can bring some price relief, and this is the jungle tech part. A bike that is less of a rolling art piece but practical is cheaper to make. A bike with fewer parts made of heavier stuff is cheaper to make. And a bike that takes major poetic license when it comes to component selection is cheaper to make. This is where it gets exciting, with jungle tech approaches; price can truly take a leap south.

How the bike is vended also impacts the cost. Like in our future factory, marketing was very different from today; there was a no store, only a direct connection with the consumer. Perhaps in this hypothetical example the dealer existed virtually, something that is now common. So all the same functions are there, only the methods of transaction or conveyance are not as refined.

So what would our hypothetical jungle tech bike cost and look like? With ardent application of the low tech approach, someone could market a LWB or SWB looking fairly close to common current designs by any number of makers for \$500 or less. It could be made in the USA, from cro-moly steel. The brand name parts would be missing, and the frame itself would be designed around the idea of low-cost high-volume production. Yet the bike could still be sub 30 pounds and very lively to ride. The common and mistaken assumption is that a low-cost bike has to be entry level in performance and heavy. Instead, why not build a great performing ride that simply has less polish or brand name goodies, but still kicks it up in the performance department? Would not such a bike actually help seed the move toward mainstream acceptance more than some 40 pound plus crawler that made too many trade-offs?

We may never embark on venture into really low-cost bikes. Our company is not really well-equipped to produce such an article, but it is fun to analyze and day dream about the impact such a product could make. Many argue price is not the reason recumbents remain such a niche'; others claim it is only the price holding back the masses. I maintain the position that you never know until you try, and maybe someday, when we are even more polished in our process than now, and we are on a greater economy of scale, we will be able to bring forth just such a bike described here. I know one thing for sure, it would not hurt the market to have more for less, because becoming bigger and better almost

always happens with such endeavor. The only real sad news is Americans in general still view bikes as toys, and expect to pay prices in line with that perspective. Until that changes by either the collective efforts of all the bent makers, or the luck and wit of one manufacturer, we will continue to slowly and carefully build toward more for less. Until next month ride safe and stay into the ride!

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