

# Three Waste Reducing Methods for Design



## Shift your perception.

We are no longer living with the illusion that raw materials are an infinite resource. Therefore, the seemingly infinite array of products available to consumers has been exposed as a falsehood. A way to help this is looking to system changes to solve problems or use existing manufactured goods in multiple ways.

Let's look at an example:

Average car ownership time:  
**57 months\*.**

I own a Chevy Astro. When purchased in 2003 for \$13k, it had 29k miles on it. 11 years later, it has 79k miles. The van is going to probably last to 200k with proper maintenance. At that rate, it will take another 24 years to put that total mileage on! And it gets more amazing...



## Let's look at the money.

If an entry level car costs \$13k and you're getting a new car every 6 years from the age of 20 to the age of 80, that's 10 cars or \$130k! If just the US was consuming at this level, that's 214,000,000 drivers on the road. If we were to spend at that level, that's \$27.8 TRILLION dollars spent on cars\*!

Maybe it's time to think differently.

**\$13k entry level car X 10 cars over 60 years.**



## Use nature.



Nature offers us plenty of options for creating natural alternatives to many currently process-heavy synthetic materials.

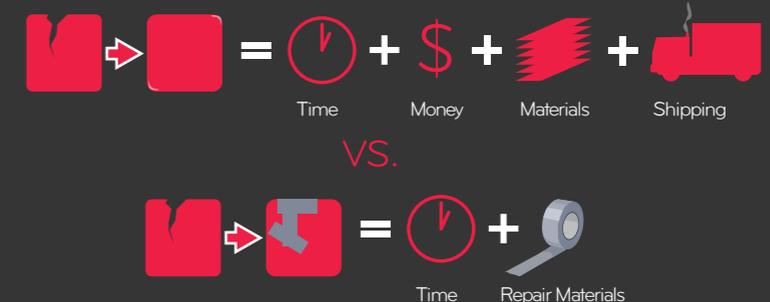
Bamboo, hemp, polylactides like corn starch all can be used to create a very large array of the consumer products that we use today.

In India, there is a company called Bakey's using natural ingredients to create **edible cutlery** that can biodegrade in a matter of days. Considering that the population of India is 1.25 billion people and disposable cutlery is used daily, this jump in efficiency is simple, sustainable and even nutritious!



## Be Satisfied.

When products break, it is a natural impulse to quickly go out and buy a new replacement. If you are willing to fix things yourself, you can save money, time and energy. The cost of a new product is seldom just money:



\*According to R.L. Polk & Co 2012 New car ownership is at 71.4 months and used cars stay on the road for 49.9 months. "Collectively, the ownership period currently stands at 57 months, up from about 38 months back in 2002". This math doesn't account for fuel and upkeep, but you can see where this logic goes.