E-commerce and Supply Chains have been beset with problems for decades. EDI (electronic data interchange) is expensive, fragmented and non-uniform in how it is used; online sales have low conversions (under 4%); supply chains are subject to poor demand information which leads to the Bullwhip effect (wild swings in stock levels leading to overstock and understock); there is extensive counterfeiting, fraud, theft, waste (30% of all food is wasted); traceability is a serious problem leading to widespread death and harm (hundreds of millions get ill from contaminated food annually); and billions of people have limited access to present electronic methods.

Many of these problems can be solved by new and rapid advances in technology and economic theory. Advances in Contract Theory, a branch of theoretical economics, have now verified that a demand economy can be more fully met if transparency exists in the supply chain and reputation is built which leads to trust; and advances in blockchains now provides the opportunity for a global database of products and transactions which will solve many existing problems.

We propose building a new marketplace similar to what Google Shopping today offers but allowing far greater transparency of the products, the sellers, and the buyers. This would be an ecosystem for buying and selling products on a global scale.

The new marketplace would access a global database of products which would be accessible to everyone. These products would have a trust value based on their saleability on the platform. Products would be listed by sellers as they wish to sell them, and the data tokenized as other sellers use it (ie resellers).

Tokens would additionally be given as sellers offer increased competitive advantage in their sales which would be reflected in their conversion rates and sales figures.

This problem can uniquely be solved using blockchains because this provides transparency and global information which is self-sustaining.

A typical transaction would occur with a user registered via an established identity system, such as uport, listing a product to sell. A buyer would similarly register and then have access to search information and via a profile be able to filter products. The buyer and seller would be completed normally via a payment system, and the marketplace would record the success of the transaction.

If a company insures the transaction, then the entire payment can be cryptobased. With 800 million users coming online with smart phones by 2020, and many will have no bank accounts, then these services may greatly influence commerce.

Zillerium is an ecosystem which could be extended easily to supply additional details about product transactions such as traceability, cost management, accounting, supply chain finance, and more supply chain related issues.