Modern supply chains have various problems that blockchain would be adept at solving if given the opportunity. They are foremost subject to complex structures. If we take a simple pencil for example even if you do all the assembly yourself at your plant, you still would have to be aware of where all the parts for the pencil are and if there will be any shortages or delays in receiving the product. Without blockchain it can take various phone calls and points of contact to make sure everything is on schedule, however after implementing the blockchain technology the reporting will become self-sustained. As the parts get processed and shipped the distributed leger of suppliers will self-report the status of the shipment to the recipient and you can real time track your product deliveries and see any hang-ups in shipments before they happen. This is especially powerful for graphically disjointed entities. For instance, for the pencil again where graphite mining and rubber making and wood harvesting processes are miles away from where the assembly is taking place and even further away from the final destination the implementation of blockchain would streamline the communication issues you might have from other countries talking with each other and keeps everyone honest about their part in the process with a distributed leger system.

Another way blockchain improves the supply chain process is when it comes to a company’s traceability needs. For instance our wonderful pencil company does research and finds out that its customers do not like slave labor. It wants to make sure that at all parts of the development cycle are slave labor free. While it could ask everyone if the graphite miners are slaves or free, they at the end of the day might just tell you what you want to hear. However after implementing a block chain system, it would add a layer of traceability to the purchases and processing of your supply chain. Now if they tell you they got it from company A, (who does not use slave labor) and every where else in the blockchain ledgers you see they are using company B, (who does use slave labor) you then know that this person’s traceability account is not actually what is happening and your parts, even though you are paying for non-slave labor parts are coming from a slave labor company.