Online trading has become very popular because of its reachability and expediency as it provides an effortless transaction environment to both the buyer and the seller. But in doing so, it exposes the parties of the online trading to possible fraud and money loss because of the anonymity of the other party or because of the unknown or untrusted seller/buyer. Also, the inclusion of a third party violates the transparency and privacy of the parties as well as costs hidden charges to them. Where online trading provides the benefits of convenience it may also threaten the parties with unwanted circumstances including money and data loss. Our framework TOTUS not only verifies the identity of the parties but also keeps a record of transactions in an immutable ledger-based technology called the blockchain. Once the transaction is initiated through the Smart Contract, which is deployed into the Ethereum blockchain in our framework, it can't be reversed and every party to the group is bound to accept the transaction. This creates an extra layer of protection for the seller/buyer against money loss and fraudulent transactions. The Smart contract in our framework also verifies the trustworthiness of the agent before it can initiate any transaction to eliminate the poorly reputed agents, ceasing them from entering into the online trade. All this ensures the proper commencement of the trading without any delay and fear of breach of the contract.