

Fake Product Identification

Abhi Jain, Gaurav Pal, Abhinav Das Lodhi

Department of CSE-Data Science

Raj Kumar Goel Institute of Technology, Ghaziabad, U.P., India

abhijn.2002@gmail.com, gauravpalmrt13@gmail.com, Abhinav.abss@gmail.com

Abstract: *Products that are designed to seem exactly like the real thing but are constructed using inferior materials lower their overall quality and are therefore considered counterfeit. Customers frequently fail to identify these counterfeit goods' poor quality at first glance, despite the fact that they may look similar to the real ones. Customers find it very challenging to determine if the product they are buying is genuine or counterfeit as a result. Only a few techniques are available to confirm a product's uniqueness. As a result, consumers frequently pause before buying because they are ill-equipped to verify the legitimacy of a product. Both the client and the business may suffer large losses as a result of this circumstance. Additionally, it may erode consumers' faith in the brand. Blockchain technology can be used for efficient product tracking to avoid such problems. Blockchain enables safe and impenetrable product tracking because of its well-known immutability and transparency. The primary objective is to develop a system that uses the Blockchain network to store crucial product data, such as the product ID, manufacturing date, location, and manufacturer's name. Peer-to-peer transactions and a decentralized, immutable record would be guaranteed. Customers can quickly validate the product's legitimacy by scanning a QR code after receiving it, enabling them to determine whether or not it is authentic*

Keywords: Blockchain technology, Decentralized system, Counterfeit prevention, immutability, transparency, product verification.

