

## **CRYPTO COPYCAT: A Fashion Centric Blockchain Framework for Eliminating Fashion Infringement**

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**Abstract :** The fashion industry represents a significant portion of the global gross domestic product, however, it is plagued by cheap imitators that infringe on the trademarks which destroys the fashion industry's hard work and investment. While eventually the copycats would be found and stopped, the damage has already been done, sales are missed and direct and indirect jobs are lost. The infringer thrives on two main facts: the time it takes to discover them and the lack of tracking technologies that can help the consumer distinguish them. Blockchain technology is a new emerging technology that provides a distributed encrypted immutable and fault resistant ledger. Blockchain presents a ripe technology to resolve the infringement epidemic facing the fashion industry. The significance of the study is that a new approach leveraging the state of the art blockchain technology coupled with artificial intelligence is used to create a framework addressing the fashion infringement problem. It transforms the current focus on legal enforcement, which is difficult at best, to consumer awareness that is far more effective. The framework, Crypto CopyCat, creates an immutable digital asset representing the actual product to empower the customer with a near real time query system. This combination emphasizes the consumer's awareness and appreciation of the product's authenticity, while provides real time feedback to the producer regarding the fake replicas. The main findings of this study are that implementing this approach can delay the fake product penetration of the original product market, thus allowing the original product the time to take advantage of the market. The shift in the fake adoption results in reduced returns, which impedes the copycat market and moves the emphasis to the original product innovation.

**Keywords :** fashion, infringement, blockchain, artificial intelligence, textiles supply chain

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