

• Case study

Pfizer fights back against fake drugs

Learn how Kezzler helped Pfizer **cut counterfeit Viagra by 40 percent** in Hong Kong



Introduction

Pfizer Inc. is one of the world's most prominent pharmaceutical corporations, manufacturing some of the most widely used drugs on the market, including Viagra. As one of the most heavily counterfeited drugs in the world, Viagra caused Pfizer significant revenue losses in Asian and certain African markets. The counterfeit pills also came with severe health risks, threatening both the Pfizer brand and consumer safety.

Pfizer Hong Kong chose Kezzler to combat the problem. Kezzler generated visible and hidden unique identities (UIDs) for every Viagra pack, letting both consumers and Pfizer easily verify that a pack was genuine. Within 12 months, Kezzler's solution **cut counterfeit medications in Hong Kong by 40%**. Pfizer then extended the solution to additional product lines and countries.

Fake drugs put patients and pharmaceutical companies at risk

The trade in counterfeit medicines is a multi-billion dollar industry. According to the **World Health Organization** (WHO), more people die each year from fake medicine than from heroin, estimating that up to two billion people worldwide lack access to necessary medicine. The resulting shortage is often filled by falsified products, creating problems for patients, health care systems, society, and supply chains.

As global supply chains grow more international and complex, it's increasingly common for products to be manufactured in one country, packaged in another, and distributed across borders to be sold in a third. This raises the risk of counterfeit medication entering legitimate supply chains.

WHO has identified fake drugs as one of the decade's most urgent health challenges. An estimated one in ten medicines in low- and middle-income countries is substandard or counterfeit, though no country is exempt: WHO has received reports of fake medicines from all over the world.

Fake medicines can contain hazardous substances, or simply lack the active ingredients needed to treat or prevent an illness. Either way, they undermine confidence in medicines and health care providers.

Source: WHO

Kezzler works with brands such as Pfizer to tackle counterfeit drugs and the unauthorized distribution of medicines. The **ProductVerify** solution enables consumers, retailers, and brands to track products through the supply chain and authenticate drugs before consumption.

→ Drug authentication built on serialization

Pfizer selected Kezzler to provide an authentication solution to reduce the large amount of counterfeit Viagra on the market. The initiative came from Pfizer's Hong Kong branch: with revenue slipping and sales under pressure from counterfeits, Pfizer needed a solution in place as quickly as possible.

Kezzler's unique, secure, and traceable identities let consumers, Pfizer, and other supply chain stakeholders verify every pack's authenticity. Consumers could check a UID by mobile phone or online to confirm a pack was genuine. Pfizer Hong Kong then ran a local marketing campaign to inform consumers about the new security feature and how it worked.

Why did Pfizer choose Kezzler?

- Patented technology that generates **encrypted UIDs** that are non-repetitive and completely random
- Built-in technology that **detects anomalies or irregular behavior** related to the UIDs
- A **scalable and modular platform** that allows customers, when ready, extend serialization beyond brand protection, for example, integrating with a point-of-sale system to build a retail rewards program



Project overview

Every pack of Viagra received two unique, secure, and traceable identities: one visible (2D barcode) and one hidden (alphanumeric). Kezzler applied the labels at distribution centers, bypassing packaging lines entirely to speed up the serialization process. Full implementation took place within a few weeks of printing and approving the first batch of labels. The hidden, 15-digit alphanumeric UID sits behind a peel-off layer that cannot be replaced once removed.

Customers can verify the product using one of two methods:

- Send the UID via mobile phone, free of charge, to receive a reply confirming whether the product is genuine
- Enter the UID online to receive product information, including verification

Viagra authentication

Pfizer's Viagra team won the company's internal Commercial Innovation Award for the Kezzler deployment, greenlighting further development into new geographical markets and SKUs. This led Pfizer to extend the Kezzler solution to two more multi-billion-dollar brands, Lipitor and Norvasc.



• Project overview

Point of Sales (PoS) integration

Kezzler added a point of sale (PoS) integration in 2018, connecting every drugstore selling Viagra in Hong Kong to Pfizer's CRM (Customer Relationship Management) system. By hand-scanning every box of Viagra sold, Pfizer could track sales, verify they were authentic and not diverted, monitor stock levels, and retrieve unsold drugs.



System integration

What started as a simple authentication program for Viagra in Hong Kong became proof of how far Kezzler's solution could scale. Kezzler now supports Pfizer's supply chain security and patient transparency efforts across several countries in Asia and Africa. Over the years, its application has expanded to cover the following use cases:



Extensive POS integration with Pfizer's CRM in selected markets



Integration with all Point of Sales systems in selected markets



Support for consumer engagement initiatives, in addition to brand protection.



Authentication solutions for the following Pfizer products in selected markets: Viagra, Lipitor, Norvasc, Xalkori, Celebra, Zithromax, Unasyn, and Camoquin

→ Expansion to cover additional countries

Confident in Kezzler's capacity to deliver anti-counterfeit solutions, Pfizer extended its authentication programs to several additional countries.

- An online Viagra authentication program was deployed in Vietnam and Thailand in 2015
- The Nigerian government mandated that all anti-malarial and antibiotic products on the market verify their authenticity via the NAFDAC Mobile Authentication Service. Pfizer once again selected Kezzler, which integrated with local telecom partner UBQT to provide free SMS verification on five products, including Zithromax, Unasyn, and Camoquin
- The program was launched in 2012, with a hidden UID under a scratch off label. After sending the code (free of charge once again), just like in Hong Kong, a confirmation of authenticity was received to a mobile phone. This service is still being used every day

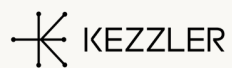




“From our experience, counterfeit versions of security labels are very often detected within 6–8 months after their launch. Since the introduction of Kezzler’s “PASS” SMS security labels in 2012, not one counterfeit package with Kezzler SMS label has surfaced.”

Ivan Ho

Regional Global Security Director
Pfizer Hong Kong



Kezzler.com

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