
CASE STUDY

Combating Counterfeits

**Pfizer fights back against
fake drugs**



Introduction

Pfizer Inc. is one of the most prominent multinational pharmaceutical corporations, manufacturing some of the most widely used drugs worldwide, including Viagra. As one of the most heavily counterfeited drugs in the world, Pfizer estimated significant revenue losses for Viagra in Asian and certain African markets. Additionally, the counterfeited pills came with severe health risks, posing a threat to the Pfizer brand and consumer safety.

Kezzler was chosen by Pfizer Hong Kong to combat the problem, generating visible and hidden unique identities (UIDs) for all Viagra packs. This enabled both consumers and Pfizer to easily authenticate packs as being genuine. Within 12 months, the implementation of Kezzler's solution had resulted in a 40% drop in counterfeit medications in Hong Kong. The solution was extended to cover additional product lines and countries.



Background

The trade in counterfeit medicines is a multi-billion dollar industry. The World Health Organization recently commented that more people die each year as a result of fake medicine than heroin. They estimate that globally, up to two billion people lack access to necessary medicine. The shortage of supply is often filled by falsified products which can lead to a variety of problems for the individual taking the medicine, health care systems, society as a whole and supply chains.

As global supply chains become more international and complex, it is not unusual for products to be manufactured in one country, packaged in a different country and then distributed across borders to be sold in a third country. Increasing the risk of counterfeit medication finding its way into legitimate supply chains.

Due to the threats and dangers associated with fake drugs, WHO has identified the issue as one of the urgent health challenges for the next decade. It is estimated that more than one in ten medicines in low- and middle-income countries are substandard or counterfeit. However, no country is exempt from this issue and WHO have received reports of fake medicines from all over the world.

Fake medicines have been found to contain hazardous substances, while others are dangerous simply because they do not contain the required quantities of the active ingredients needed to treat or prevent an illness. Fake medicines also contribute to a loss of confidence in medicines and healthcare providers.

Source: <https://www.who.int/health-topics/substandard-and-falsified-medical-products>

Kezzler is working with brands such as Pfizer, to tackle the issue of counterfeit drugs and the unauthorized distribution of medicines.

Technology is enabling consumers, retailers and brands to track products through the supply chain and authenticate drugs before consumption.





Pfizer Pass Label

Kezzler was selected by Pfizer to provide an authentication solution to reduce the large amount of counterfeit Viagra on the market. This was a local initiative from the Hong-Kong branch of Pfizer, due to the urgent need to raise sales and stop the loss of revenue caused by counterfeits it was important to get a solution in place as soon as possible.

The application of unique, secure and traceable identities enabled consumers, Pfizer, and other supply chain stakeholders to verify every pack's authenticity. The UIDs can be checked with a mobile phone or online to receive verification that the pack is genuine. Pfizer Hong Kong ran a local marketing campaign to help inform consumers of the new security feature and how it worked.

After implementing Kezzler's visible and hidden UIDs on their packs, the project resulted in a 40% drop in counterfeit medications in one year in Hong Kong. This helped to restore trust amongst consumers and protect sales of Viagra despite the aggressive entry of sildenafil generics. The solution was extended to cover additional Pfizer products Lipitor and Norvasc in Hong Kong and was replicated for Viagra in several other countries.



Why Kezzler?

Main reasons for selecting Kezzler for a brand protection project:

- 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.
- Scalable and modular platform that allows customers, when ready, to use serialization for other purposes that go beyond brand protection. For example, integrate with a point-of-sales platform to set up a retail reward program.



Project Overview

Every pack of Viagra was given two unique, secure and traceable identities, one visible (2D Barcode) and one hidden (alphanumeric). The labels were applied at distribution centers, avoiding packaging lines completely to speed up the serialization process. Full implementation took place within a few weeks of the printing and approval of the first batch of labels.

The hidden, 15 digit alphanumeric UID sits behind a peel-off layer. Once removed, this layer cannot be replaced.

The customer can verify the product using one of two methods:

- Send the UID via a mobile phone (free of charge), to receive a reply whether the product is genuine or not.
- Enter the UID online, which will also provide the consumer with information about the product including product verification.

Viagra Authentication



Pfizer Viagra won the internal Commercial Innovation Award for the Kezzler deployment, greenlighting future development into new geographical markets and SKUs. This resulted in the Kezzler solution being extended to both Lipitor and Norvasc, both Pfizer multi-billion USD brands.

Furthermore, thanks to Kezzler's scalability, the solution in Hong Kong was quickly extended to cover two further initiatives:



Point of Sales (PoS) integration

A Point of Sales (PoS) integration was added in 2018. Every single drugstore that was selling Viagra in Hong Kong was connected to Pfizer's CRM (Customer Relationship Management) system. By hand scanning every box of Viagra that was sold, this allowed Pfizer to keep track of sales and verify that the sales were authentic and not diverted. Furthermore, this can help keep track of stock levels and retrieve unsold drugs.



System Integration

What started as a simple authentication program for Viagra in Hong Kong has ended up being proof of Kezzler's extensive scalability capacities. Kezzler now supports Pfizer's supply chain security and patient transparency efforts in several countries across Asia and Africa and over the years the platform's application has expanded to cover the following:

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



Solution Expanded to Cover Additional Countries

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

- An online Viagra authentication program was deployed in Vietnam and Thailand in 2015.
- The Nigerian government mandated all anti-malarial and antibiotic products in the market to be able to verify their authenticity via the NAFDAC Mobile Authentication Service. Kezzler was once again selected by Pfizer and integrated with a local telecom partner UBQT to provide free SMS verification on 5 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.

Pfizer projects



"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



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Thank you for reading.

Please visit www.kezzler.com for more case studies and contact information.