

PRODUCT TRACEABILITY FOR BRAND OWNERS





PROTECTING YOUR LEGACY

Brand owners around the world are challenged to combat revenue and reputation loss from counterfeit and smuggled goods. Particularly the African markets are struggling with the effects of illicit trade, creating safety risks for consumers while reducing the brand value and brand reputation.

With decades of experience in developing brands and providing innovative enterprise solutions, we understand the importance of holistic brand security. Whether that is protection from counterfeits or the ability to give your consumers a way to authenticate your product: Legit VerifyTM covers all the modern-day brand protection needs in order to protect your legacy.



BRAND PROTECTION = SUPPLY CHAIN PROTECTION

Brand protection is the combination of all the activities you will take to avoid supply chain leakages that lead to counterfeiters using your long-built intellectual property. Brand protection starts at the inbound supply chain and should, when done right, end with a satisfied customer. Track and trace technology, in particular, provides a powerful tool against counterfeit because of its unique capabilities.

- Supply chain monitoring and visibility
- Product traceability
- Product authentication
- Brand promotions and direct consumer engagement

What does brand protection look like in this digital era?

We all recognize the rapidly growing need to protect brand owners from revenue and reputation loss due to counterfeit and diversion activity. But with so many of our business activities online nowadays, leakages in the supply chain become harder to catch. And when they are eventually discovered, it is always at the cost of consumer trust.



Legit Verify™



PRODUCT AUTHENTICATION & TRACEABILITY

Legit Verify™ is a digital anti-counterfeit turn-key solution that, integrated with oursecure labels, gives brand owners a powerful yet dynamic tool to authenticate and trace brands through out the supply chain. The aim is to uniquely identify and then track legitimate products through the supply chain to the end consumer. Obtain full supply chain and market visibility while allowing potentially harmful counterfeit products to be distinguished from genuine, certified products.

The web and phone-based security applications give quick analysis on potential supply chain leakages, as all track and trace information is stored in one centralized database. This data will provide strong business intelligence to make proactive and data-driven decisions. Legit Verify™ also offers a unique way to increase interaction between brand owner and brand consumer, which will enhance transparency and overall brand trust.

Legit $Verify^{\mathbf{M}}$ is compliant with industry best practices and meets the mandate of global standards.

OUR OFFER

Legit Verify[™] offers the following modular solution:

1. Secure Labels

- Production of Secure Label of the highest market standards, including several layers of overt and covert digital security.
- Multi-level serialization and unique identifiers are incorporated on every secure label to enable track and trace.

To consumers, the label provides the physical trust that the product is genuine. Its genuineness is simply verified

2. Traceability and authentication software as web and mobile applications

- White label mobile application for the authentication of the products' genuineness by consumers and inspectors. This application reads the hidden information in the unique identifiers and can also be used for direct consumer engagement.
- A centralized track and trace management system safely stores track and trace data into a centralized database and allows powerful data analysis.



ISO 9001: 2015 ISO/IEC 27001 QUALITY MANAGEMENT SYSTEMS INFORMATION SECURITY MANAGEMENT

Legit Verify[™] TRACK AND TRACE PROCESS

As a brand owner you might wonder about the possibilities of implementing your owntrack and trace solution. When deciding to go on the brand protection journey, we will carefully take you through the development of such a solution. The power of Legit Verify™ is in its flexible modular approach. This allows for full customization while making use of robust existing tools and software, making integration and implementation as simple as 'plug and play'.



TYPICAL TRACK AND TRACE PROCESS

Step 1

Collaborative process between Legit Verify™and brand owner



- Analysis of the brand protection challenges
- Solution development
- Secure label design process

Step 2

Legit Verify™



- Secure label printing
- Secure code generation
- Secure label delivery to the brand owner's production facility

Step 3

Brand owners' production facility



- Product aggregation
- Product information (product and batch data) is captured by brand owners on the centralized track and trace management system and associated with secure labels.
- Secure labels with unique identifiers (codes) are applied on products
- Codes are activated before leaving the manufacturer's facility (this process connects the physical to the digital)

Step 4

Centralized track and trace management system



- Depending on the type of supply chain, several stakeholders can now verify the products through out the supply chain route by scanning the code on the secure label. For example: distributors, retailers and consumers receive instant authentication via their smartphone application. This forms the data input on your centralized track and trace management system.
- Brand owners can now track every product (every secure label on the product) through the supply chain, giving full monitoring and visibility.
- All authentication data is uploaded to the database that is owned by the brand owner. This database not only safely stores all the authentication data, but also generates powerful real-time business intelligence reports.

Track and trace process flow



ABOUT SECURE LABELS

Legit Verify $^{\text{\tiny{M}}}$ offers secure labels of the highest industri standards. Secure labels are paper-based markings wir complex multi-layered security features that are ful customizable to the brand protection needs of any industry.

A key requirement during the collaborative design process of asecure label is the inclusion of track and trace capabilities within the stamp design. The aim of track and trace technology is to uniquely identify and then track legitimate products from production to the consumer. Brand owners can use information about the product's origin and the route by which it reached the point where it is being examined to identify suspicious or criminal activity in the supply chain.









PRODUCT IDENTIFICATION AND MULTI-LEVEL SERIALIZATION

Every secure label has a unique serial number and OR code, non-cloneable or re-printable. Information in the QR code contains both public primary information (for consumers) and hidden secondary information (for inspection).

Legit Verify[™] can generate multi-level serialization (or aggregation) to support track and trace in the supply chain. This means that the platform is able to create unique covert lavered codes that are readable by specific and authorized users through mobile authentication applications. The unique variable serialization is assigned to a batch of specific variable data numbers using barcode technology as per GS1 Global Standards according to a "father-sons" hierarchy.

Multilevel packaging



Primary level packaging: incorporation of 2D (GS1 data matrix) barcodes. encoding unique product identification code (GTIN) and Unique Serial Number of the primary pack.



Secondary level packaging: incorporating of barcodes (1D or 2D) encoding unique product identification code (GTIN), batch number, expiry date and Unique Serial Number of the secondary pack.



Tertiary level packaging:

incorporating of barcodes (1D) encoding unique product identification code (GTIN), batch number, expiry date and Unique Serial Number of the tertiary pack (shipper/carton).

PRODUCT AUTHENTICATION

One of the most critical functional layers of a physical tax stamp is the ability to authenticate the product. The following interdependent components can be considered when customizing your tax stamp authentication program.

AUTHENTICATION FEATURES ON THE STAMP

- Security paper
- Security ink
- Copy protected QR code

Talk to us about the possible options we can propose.



AUTHENTICATION EQUIPMENT

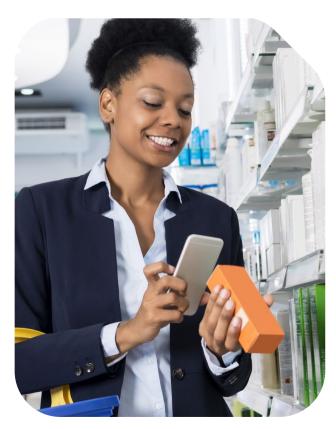
Legit Verify™ provides customizable mobile applications used by consumers, distributors, retailers and authorities for reading, authenticating, and tracing of unique codes attached to tax stamps. All authentication programs come with detailed capacity building of key stakeholder. Available applications for customization:

- Legit Verify™ consumer application
- Legit Verify[™] inspector application

Authentication on the consumer level

Legit Verify™ consumer application is a smartphone software designed for consumers, distributors, and retailers to verify product authenticity and trace products monitored by the system. It enables these target groups to scan the QR Code and authenticate the security labels applied to the products. It also verifies the information security of the labels, while retrieving product-related information associated with the unique code.

Once the product information is displayed, the application will ask the users to confirm product characteristics. In case of a mismatch, the user will be able to report the product as suspicious.



This information will be visible to relevant authorities on the digital tax stamp management system for follow-up and further action.

This first level of authentication is aimed at consumer empowerment and reassurance that the product they are buying is genuine and safe for use. An added value is the data collection on the consumption of taxable products.

With Legit Verify[™] consumer application, consumers can:

- Download the application for free via Android and IOS.
 - » The interface of the application is fully customizable to the relevant authority.
- Scan the QR code on the tax stamp and receive a binary answer 'Authentic' or 'Not authentic'.
 - » Offline SMS authentication is enabled for areas with low connectivity to the internet.
- See the product journey and receive product and manufacturer information.
- Report fraud, product defects, or otherwise suspicious tax stamps.



Authentication by inspectors



Legit Verify™ inspector application is a secure mobile application for reading, authenticating, and tracing of unique codes attached to secure labels. The application is patented and specifically developed to securely collect and display information from scanning activity by inspectors (for example law enforcement). It allows for restricted login, code decryption, and data extraction. The application is also used to followup on alerts (suspicious cases or consumer alerts) and can be used to assign cases for follow up in respective areas. Reports will be made and stored on the device and shared with the right stakeholder automatically.

DIGITAL TAX STAMP MANAGEMENT SYSTEM

The digital tax stamp management system by Legit Verify™ is a modular management platform that brings all stakeholders together on one central digital workspace.

The digital tax stamp management system:

- Is a secure way for taxpayers to order and pay for tax stamps;
- Collects and stores all track and trace information related to the implemented products, including reports on all forms of illicit activity;
- Allows authorities to make data-driven decisions based on the platform's aggregated data intelligence;
- Provides centralized data storage for all modules in highly secure data centers, compliant with ISO 27001 (Information Security Management);
- Is fully customizable and able to integrate with existing authority systems (for example tax payment systems);
- Is easily accessible via laptop, desktop, tablet, and mobile phone.





Business intelligence

Customized dashboards with real-time reports are available via the business intelligence module. These reports can always be changed according to the requirements and needs and can be downloaded at any time to Excel or Business Intelligence applications. The system provides a secure API (Application Programming Interface) that allows it to share information with other external authorized systems. For example:

- Receive alerts generated by the system based on various algorithms and data analysis;
- Receive reports on suspicious activities and counterfeit products located on the map;
- Assign cases to follow up on alerts.

Data management

Legit Verify[™] provides secure storage and reporting tools to support the system operations.

- The data is secured and only accessible by authorized personnel via the dedicated web portal.
- The reporting tools can provide near real time data, covering all events associated to products applied with Tax Stamps. The reports can be generated on-demand and on regular time intervals per schedule to be determined by the client.
- The reports assist the authorities in decision making; especially in the areas of risk profiling and market surveillance inspection and enforcement.
- The data is protected against intrusion attempts by monitoring inbound and outbound communications between the central system and un-trusted networks. All communication with the Central Data Management System is encrypted.
- The system has built in business intelligence capability where risk rules can be defined and automatic alerts can be sent on emails and SMS.



OUR UNIQUE APPROACH

Legit Verify[™] technology is fully customizable to your sector-specific needs. We bring a robust team of local and global experts that offer solid and proven experience in security printing with the latest technology and trends in the field of authentication and traceability programs. We promise:

- trustworthy and secure delivery of the highest standards of tax stamps, with flexible and fully customizable security features based on the latest innovation:
- in-house and fully customizable track and trace technology that is in line with Global Standards, including the possibility to incorporate blockchain:
- in-depth implementation support based on a true understanding of the local context, including detailed onboarding and training as well as full agency support from our sister company Legacy XP;
- the most competitive partnership package in the market. Legit Verify™ is determined to change the status-quo towards truly transparent and Africa-based partnerships.".

As an old African proverb says "If you want to go fast, go alone. But if you want to go far, go together". It is the combination of the best digital technology, our versatile expertise and above all the passion to forge sustainable partnerships that makes us the most suitable partner for any brand owner to **go far - together"**.



GET IN TOUCH

Legit verify[™] is a product of :



Talk to our team of experts for further information about Legit Verify™.

www.legacyxp.com info@legacyxp.com

© 2022 Legacy XP All rights reserved

Kenya

Address: George Padmore Road P.O. Box 2714-00202. Nairobi. Kenya

Telephone: +254 700932182 Email: info@legacyxp.com

Rwanda

Address: Kicukiro KK500 Street House N 32 P.O. Box 3495. Kigali, Rwanda

Telephone: +250 788308048 Email: info@legacyxp.com

DRC

Address: 130. Boulevard du 30 Juin. Commune de la Gombe Kinshasa. DRC

Telephone: +243 829084881 Email: v.matsoro@legacyxp.com

