Case Study

Authentix✓

40% improvement in operational efficiency.

Client Profile:

Authentix is the global a leader in authentication and tracking solutions for excise tax recovery and brand protection. As the inventor and developer of many of the leading nano-scale authentication solutions in use today, Authentix is renowned in the realm of verification and validation using a world-class technology portfolio.

Tecnology Used:

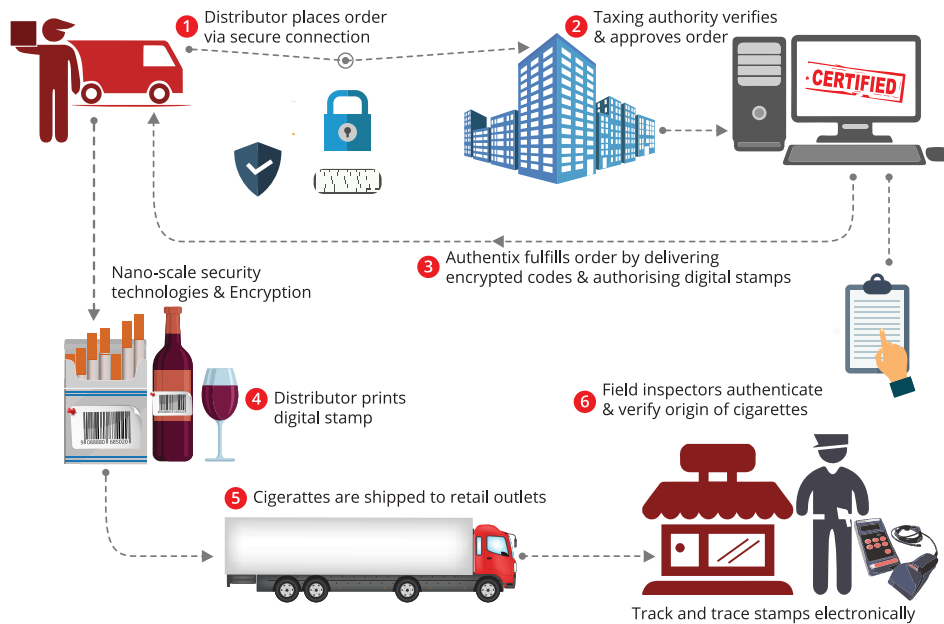Microsoft .Net which includes C#, WCF, SQL Server, web services and Windows Mobile.

Business Situation:

Tobacco tax evasion is a problem that costs federal and state governments billions per year. For example, the state of Washington loses an estimated $200 million per year due to tobacco tax fraud. Governments lose money in two ways: the first occurs when cigarettes are smuggled from lower tax to higher tax states. The second is from cigarettes stamped with counterfeit tax stamps. When tax revenues are stolen, they don't go to their intended sources of funding tax relief programs, healthcare and infrastructure. In some cases, these stolen revenues have been shown to fund criminal and terrorist activities. As a result, governments lose millions in tax revenue and the security of their citizens is threatened.

Like currency, traditional tax stamps carry inherent value and need to be treated as such. This creates challenges in securing the manufacturing, distribution, and application of the stamps. Tracking of cigarette packs throughout their distribution would enable tax authorities to ensure proper tax collection, but currently taxes on cigarettes are collected via a stamp system that has very limited track and trace capabilities. In order to manage tobacco tax revenue collection efficiently and securely, it is necessary to significantly improve tax stamp security features and transition stamp distribution from a centralized print and distribute model to a secure print-on-demand model.

Solution Approach:

Authentix partnered with BootUP in creating a digital solution along with RED Stamp, Inc. and Assure Digitax to offer the next generation the solution for tobacco tax revenue management and recovery. This unique the system enables tax collection authorities to collect tax revenues effectively and track the status of legally issued stamps electronically. This the solution brings tax stamps into the digital era by eliminating the need for expensive and vulnerable inventories of printed stamps while providing real-time auditing and immediate cash retrieval. The Authentic Digital Tax Stamp Solution significantly improves security and operational efficiency of tax stamp production, distribution and monitoring. With the Authentic solution, cigarette distributors and licensees can print, authenticate, and report tax stamp consumption electronically. Additionally, law enforcement authorities can authenticate the digital stamps and verify the embedded information on the stamps in the field via simple-to-use and secure and handheld instruments. This high-tech system combines the latest in nano-scale

BootUP

Diagram labels:
1. Distributor places order via secure connection
2. Taxing authority verifies & approves order
3. Authentix fulfills order by delivering encrypted codes & authorising digital stamps
   Nano-scale security technologies & Encryption
4. Distributor prints digital stamp
5. Cigerattes are shipped to retail outlets
6. Field inspectors authenticate & verify origin of cigarettes
   Track and trace stamps electronically
CERTIFIED

security technologies, sophisticated encryption technologies and secure e-commerce services. This solution provides the ability to track each cigarette pack throughout the distribution chain from point-of-origin to the point-of-sale.

Benefits & Results:

¤ Multiple layers of security: Each stamp includes multiple layers of overt, covert and forensic security features.

¤ Individual portable databases: Each stamp has a unique code that carries a significant amount of data.

¤ Digital stamps do not fully "exist" until applied: Until the encrypted code is applied via a digital printer by the stamp application at the wholesaler's site, the stamps are not valid or usable.

¤ Digital validation: Each stamp is validated in-line post application.

¤ Remote monitoring: The equipment applying the stamp can be monitored remotely by the authorities.

¤ Field verification: The stamps are field-verifiable without the need for connectivity to a central database. Tracking and sourcing information is available on each stamp.

¤ Increased throughput: New stamp applications enable stamping of 100 cartons of cigarettes per minute, as opposed to traditional systems which run 70 cartons per minute. The result is a 40% improvement in operational efficiency.

¤ Near real-time reports: This solution offers the ability to generate up-to-date reports, rather than waiting for monthly reports to be filed.

¤ Improved audits: Due to 24/7 access to data, auditing capabilities and accuracy are improved.