MASSACHUSETTS
EXPANDING SICPATRACE® INTO OTP

Presentation to: MA DOR – Illegal Tobacco Task Force
Presented by: Alex Finkel
Title/Department: COO
Company: SICPA
Date: April 6, 2017
Confidentiality level: **CONFIDENTIAL**
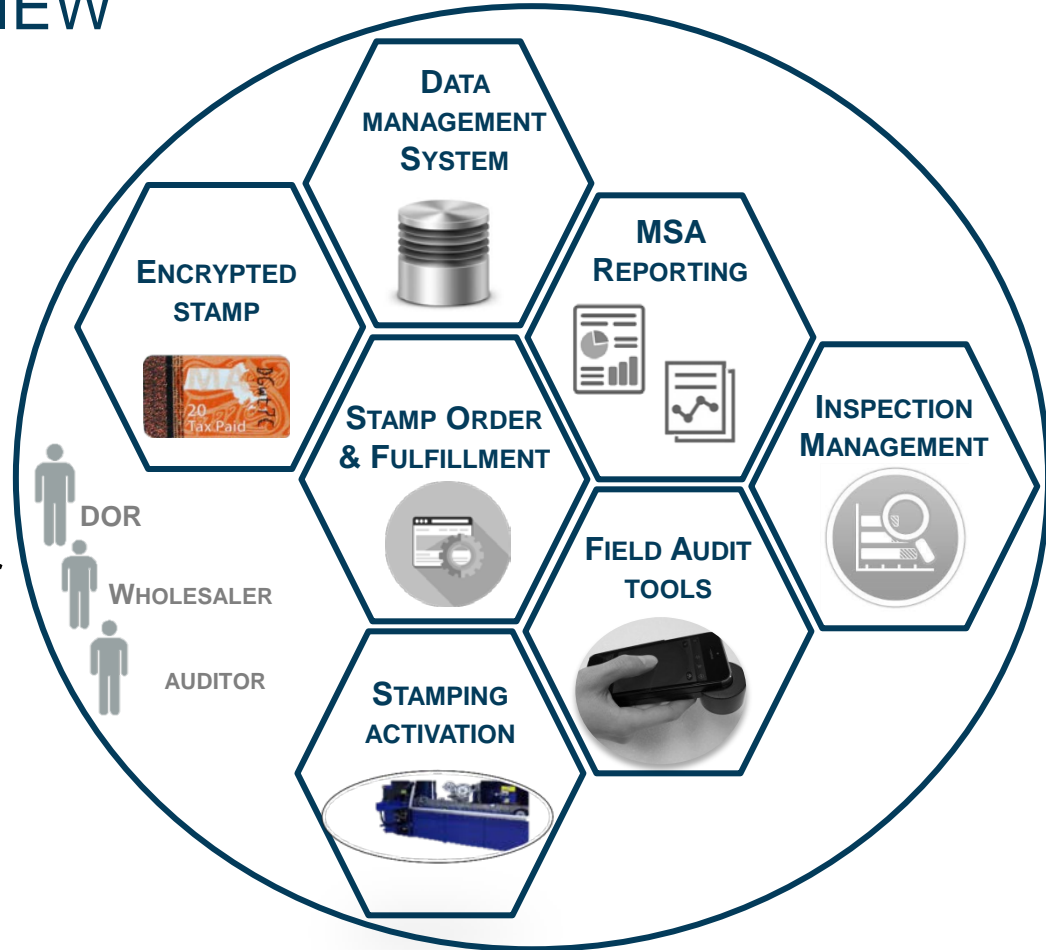
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Enabling trust

AGENDA

1. **Overview of MA Tax Stamping Program**

2. **Enhancing Through OTP Stamping**

3. **OTP Stamping Implementation Plan**

4. **Benefits & Next Steps**

I. OVERVIEW OF MA TAX STAMPING PROGRAM

SICPATRACE® - OVERVIEW

- Proven technology platform for tracking and tracing

- Modular Components

- Includes both material- and information-based security

- Provides 'Diligent Enforcement' Capabilities for MSA

- Provides Governmental customers with complete ownership of data generated by the Platform

DATA MANAGEMENT SYSTEM

MSA REPORTING

ENCRYPTED STAMP

INSPECTION MANAGEMENT

STAMP ORDER & FULFILLMENT

FIELD AUDIT TOOLS

DOR

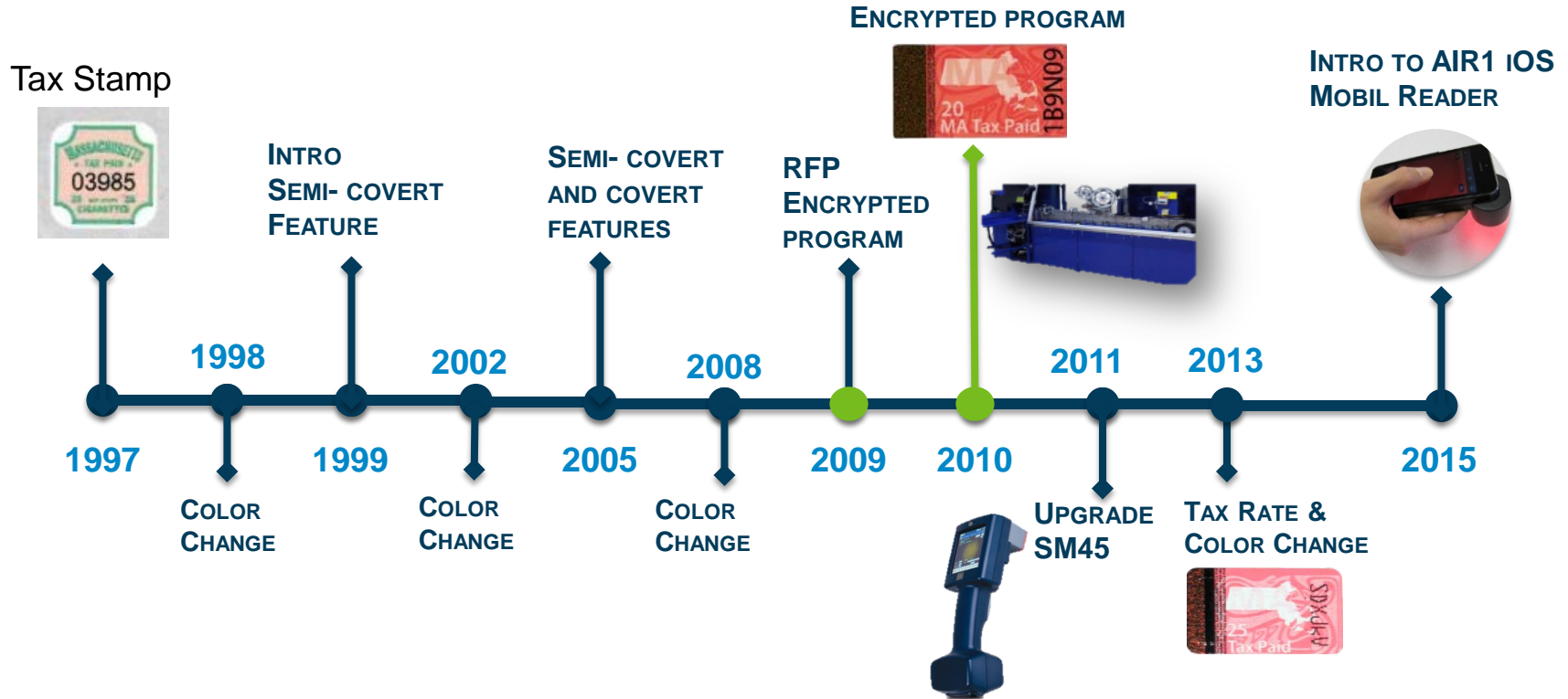WHOLESALER

AUDITOR

STAMPING ACTIVATION

SICPATRACE® IN MASSACHUSETTS

- Feb. 2010: MA DOR awarded SICPA a contract for the implementation of a State Tax Revenue Collection Platform

- The Encrypted Cigarette Excise Stamp Program distributes and tracks 180 million tax packs of cigarettes per year.

- Each stamp leverages self-adhesive stamps carrying overt, semi-covert, covert and forensic security features

- System enables validation of distributor names, date of stamp application, brand variance and other fields

- United Silicone is SICPA's machine partner for the development, implementation and servicing of all High Volume Stamping Machines

HISTORY OF THE MA TAX STAMPING PROGRAM

Tax Stamp

ENCRYPTED PROGRAM

INTRO TO AIR1 iOS
MOBIL READER

INTRO
SEMI- COVERT
FEATURE

SEMI- COVERT
AND COVERT
FEATURES

RFP
ENCRYPTED
PROGRAM

1998

2002

2008

2011

2013

1997

1999

2005

2009

2010

2015

COLOR
CHANGE

COLOR
CHANGE

COLOR
CHANGE

UPGRADE
SM45

TAX RATE &
COLOR CHANGE

SICPA COMMITMENT TO CONTINUOUS IMPROVEMENTS

SICPATRACE® CORE PLATFORM

Secure Stamp Production

Secure Stamp Coding

Stamp Fulfillment & Shipping

Stamp Activation

Stamp Activation Validation

MSA Data Product Capture

Remote Monitoring Stamping

Preventative Maintenance

Reporting, Alerts, & Alarms

Inspection Management

Field & Professional Services

PROGRAM EVOLUTION INPUTS

Biweekly Meetings

Stamper support and metrics KPI

Inspections tools support

Customer Support

Agency Initiatives

Stamping Program roadmap

MASSACHUSETTS STAMPING PROGRAM

Secure technologies to protect against counterfeiters

Tax stamp machinery that improves security and throughput

Modern technology to assist enforcement, tobacco tax collection and MSA compliance

Continuous improvement of field enforcement tools for compliance and authenticity

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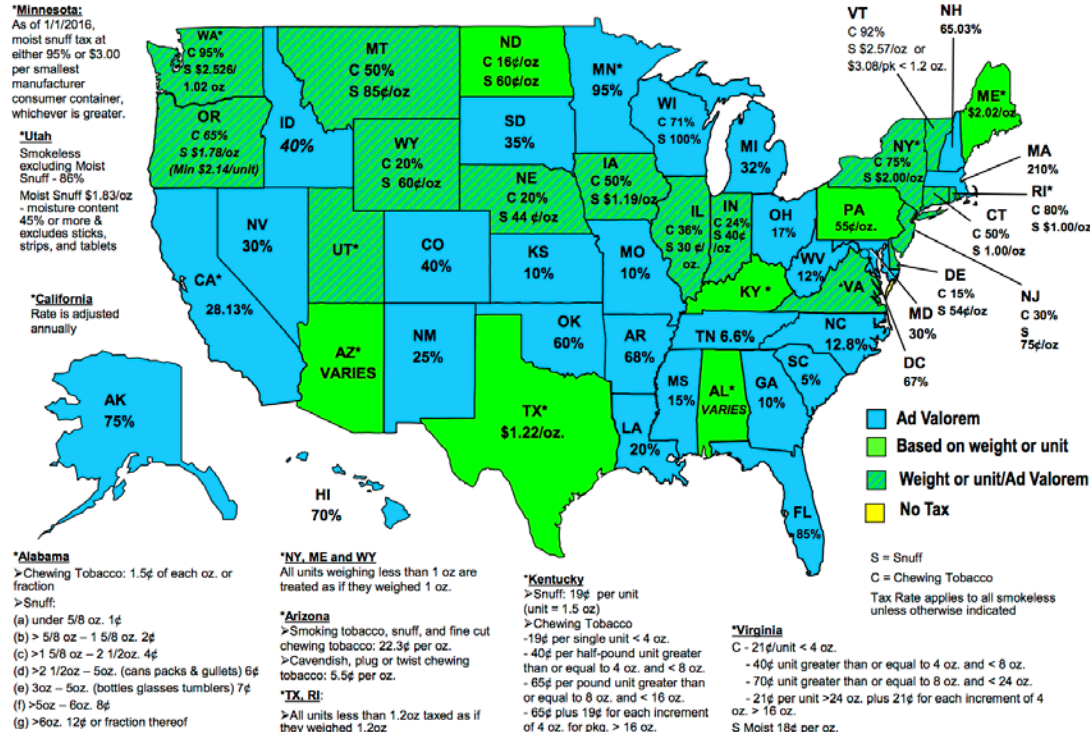
II. ENHANCING THROUGH OTP STAMPING

OTP TAX CHALLENGES

State Excise Taxes on Smokeless Tobacco
Rates in effect as of Oct. 1, 2016

Minnesota: As of 1/1/2016, moist snuff tax at either 95% or $3.00 per smallest manufacturer consumer container, whichever is greater.

Utah Smokeless excluding Moist Snuff - 86% Moist Snuff $1.83/oz - moisture content 45% or more & excludes sticks, strips, and tablets

California Rate is adjusted annually

WA* C 95% S $2.526/ 1.02 oz
OR C 65% S $1.78/oz (Min $2.14/unit)
ID 40%
NV 30%
CA* 28.13%
MT C 50% S 85¢/oz
WY C 20% S 60¢/oz
UT*
AZ* VARIES
NM 25%
CO 40%
ND C 16¢/oz S 60¢/oz
SD 35%
NE C 20% S 44¢/oz
KS 10%
OK 60%
TX* $1.22/oz.
MN* 95%
IA C 50% S $1.19/oz
MO 10%
AR 68%
LA 20%
WI C 71% S 100%
MI 32%
IL C 36%
IN C 24% S 40¢ /oz
KY *
TN 6.6%
MS 15%
AL* VARIES
GA 10%
SC 5%
OH 17%
WV 12%
VA
NC 12.8%
FL 85%
VT C 92% S $2.57/oz or $3.08/pk < 1.2 oz.
NH 65.03%
NY* C 75% S $2.00/oz
PA 55¢/oz.
ME* $2.02/oz
MA 210%
RI* C 80% S $1.00/oz
CT C 50% S 1.00/oz
NJ C 30%
DE C 15%
MD C 54¢/oz 30%
DC 67%
S 75¢/oz
AK 75%
HI 70%

Legend:
- Ad Valorem
- Based on weight or unit
- Weight or unit/Ad Valorem
- No Tax

S = Snuff
C = Chewing Tobacco
Tax Rate applies to all smokeless unless otherwise indicated

Alabama
➤Chewing Tobacco: 1.5¢ of each oz. or fraction
➤Snuff:
(a) under 5/8 oz. 1¢
(b) > 5/8 oz – 1 5/8 oz. 2¢
(c) >1 5/8 oz – 2 1/2oz. 4¢
(d) >2 1/2oz – 5oz. (cans packs & gullets) 6¢
(e) 3oz – 5oz. (bottles glasses tumblers) 7¢
(f) >5oz – 6oz. 8¢
(g) >6oz 12¢ or fraction thereof

NY, ME and WY
All units weighing less than 1 oz are treated as if they weighed 1 oz.

Arizona
➤Smoking tobacco, snuff, and fine cut chewing tobacco: 22.3¢ per oz.
➤Cavendish, plug or twist chewing tobacco: 5.5¢ per oz.

TX, RI
➤All units less than 1.2oz taxed as if they weighed 1.2oz

Kentucky
➤Snuff: 19¢ per unit (unit = 1.5 oz)
➤Chewing Tobacco
-19¢ per single unit < 4 oz.
- 40¢ per half-pound unit greater than or equal to 4 oz. and < 8 oz.
- 65¢ per pound unit greater than or equal to 8 oz. and < 16 oz.
- 65¢ plus 19¢ for each increment of 4 oz. for pkg. > 16 oz.

Virginia
C - 21¢/unit < 4 oz.
- 40¢ unit greater than or equal to 4 oz. and < 8 oz.
- 70¢ unit greater than or equal to 8 oz. and < 24 oz.
- 21¢ per unit >24 oz. plus 21¢ for each increment of 4 oz. > 16 oz.
S Moist 18¢ per oz.
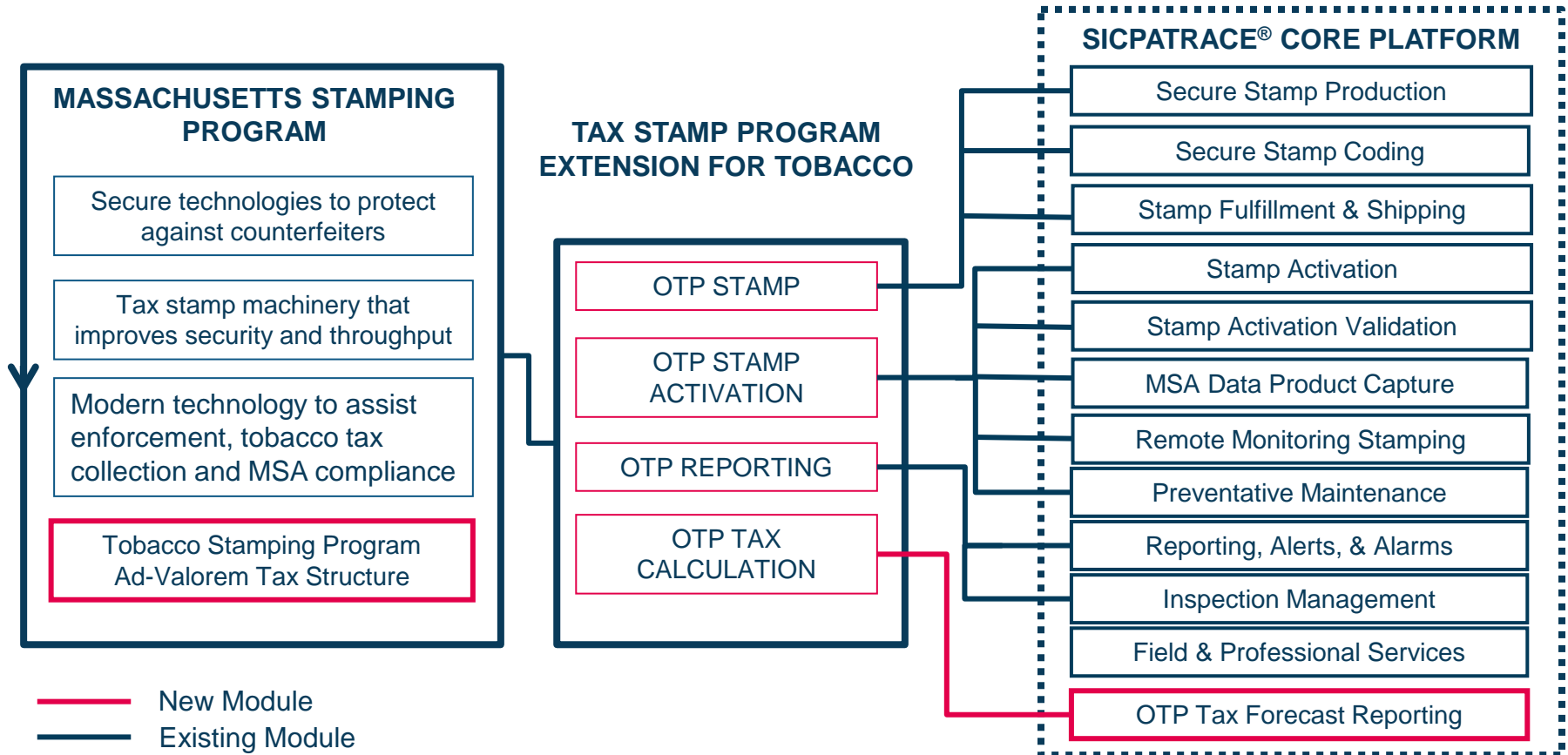
http://www.natocentral.org/tobacco-tax-maps

Even wider variation in OTP tax rates:

- MA has a flat 210% tax rate on top of wholesale price, NY has a 75% tax on chewing tobacco and a $2/oz tax on snuff and PA has a flat $0.55/oz OTP tax - All 3 are neighboring states

SICPA TAX STAMP PROGRAM: OTP EXTENSION

SICPATRACE® CORE PLATFORM

MASSACHUSETTS STAMPING PROGRAM

- Secure technologies to protect against counterfeiters
- Tax stamp machinery that improves security and throughput
- Modern technology to assist enforcement, tobacco tax collection and MSA compliance
- Tobacco Stamping Program Ad-Valorem Tax Structure

TAX STAMP PROGRAM EXTENSION FOR TOBACCO

- OTP STAMP
- OTP STAMP ACTIVATION
- OTP REPORTING
- OTP TAX CALCULATION

- Secure Stamp Production
- Secure Stamp Coding
- Stamp Fulfillment & Shipping
- Stamp Activation
- Stamp Activation Validation
- MSA Data Product Capture
- Remote Monitoring Stamping
- Preventative Maintenance
- Reporting, Alerts, & Alarms
- Inspection Management
- Field & Professional Services
- OTP Tax Forecast Reporting

— New Module
— Existing Module

INTRODUCTION OTP STAMP

OTP STAMP PROPOSAL

STAMP

BENEFITS

Advantages

- Non-denominational for variable tax rate retrieval
- Covert code compatible with existing SICPADATA™
- Consistent security features for various stakeholders

Security Features

- **Overt/Semi-Covert** – Color shifting ink, dual polarizing
- **Covert** – SICPADATA™
- **Tamper Evidence** – Surface
- **Unique Stamp ID** – Visible unique number

OTP STAMPING PROGRAM: Data Management System
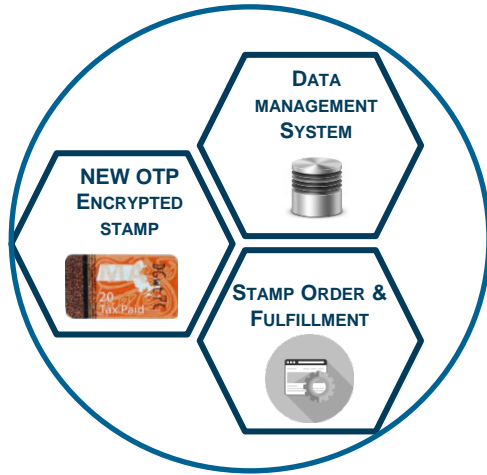
New Encrypted OTP Stamp

- New Stamp Design
  - New Code Type
  - New Roll Type

Registering Tobacco Wholesalers

- New licensees access MA DOR web portal to order OTP stamps
  - Stamp order fulfillment training

New Tobacco Product Directory and Tax Rates

- OTP Product Directory
  - Rules and tax rate calculations

DATA MANAGEMENT SYSTEM

NEW OTP ENCRYPTED STAMP

STAMP ORDER & FULFILLMENT

OTP STAMPING PROGRAM: Stamping and Reporting
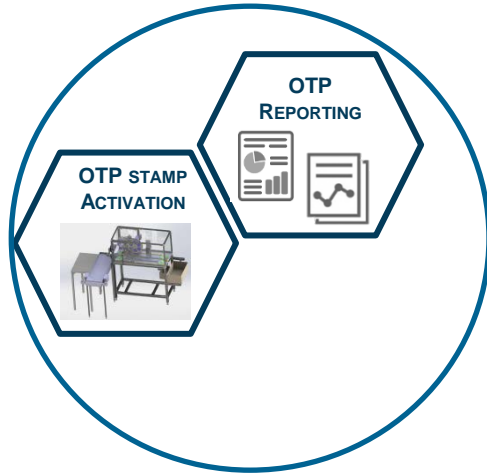
High Volume Stamping Machine (new device)

- Transports pucks of, varying dimensions, across at 80 pucks per min
- Product Registration
- Encrypted stamp application and activation to product
  - Capture and store product registration
  - Capture and store stamp data
  - Merge product registration and Stamp data to create unique data packets
- Deposit stamped pucks into a collection device/bin

Low Volume Stamp Application (leverages current install base)

- OTP software client application
- OTP modified activation workflow

Tax Rate Calculation and Forecasting

- Tobacco Product Directory and tax rates tables
- Algorithm to determine Variable tax rate

OTP STAMPING PROGRAM: Field Auditing

INSPECTION MANAGEMENT

FIELD TOOLS
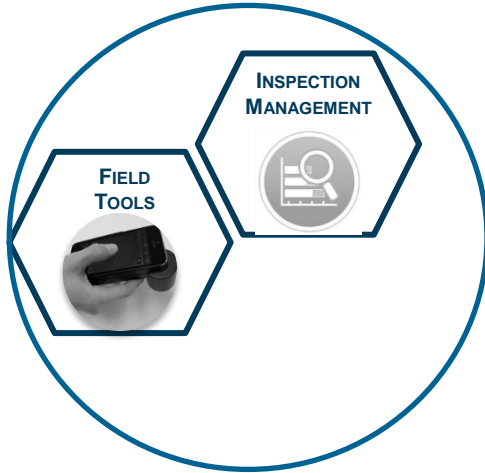
Auditing through SICPA Air1®

- Single Inspection Platform for both cigarettes and OTP
    - Ability to identify illicit product
    - Validate genuine product
    - Validate retail licenses
    - Report price discrepancy
    - Online synchronization with data management system
- While some OTP information is already being captured by field enforcemebt, application changes to capture OTP stamp information required

Inspector Management

- Capture all OTP field audit information through a single reporting Platform
    - Field audit reporting of OTP data to be configured
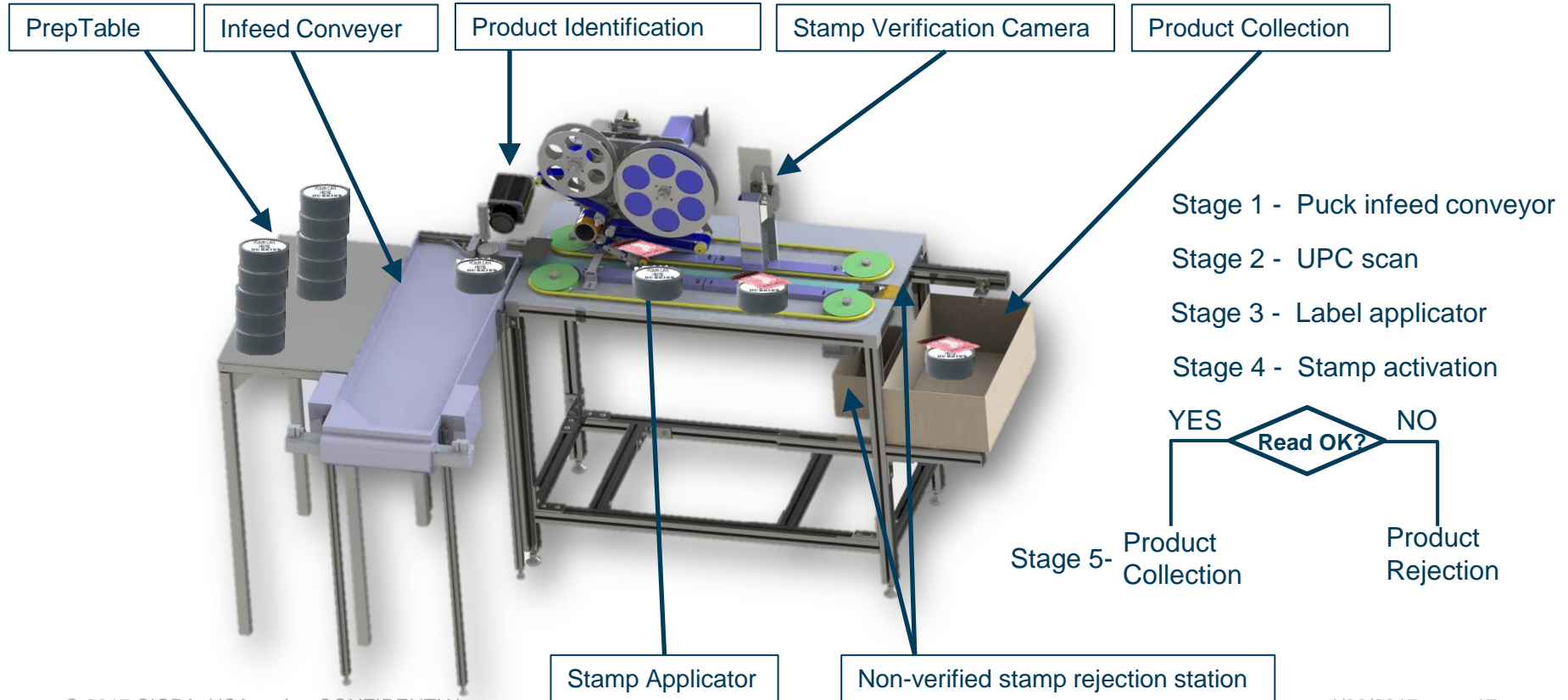
OTP STAMPING PROGRAM: Machine Specifications

FRONT VIEW SHOWN

TOP VIEW SHOWN
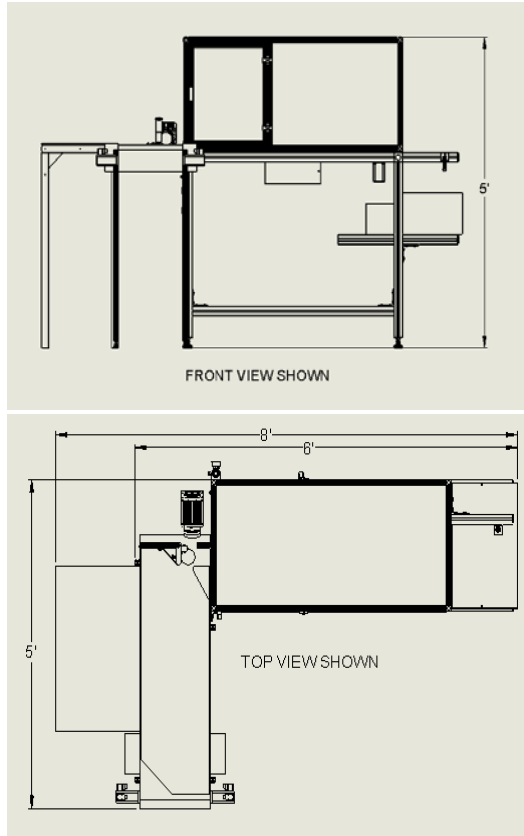
| Technical Specifications	
Length (with dump table)	8 ft.
Length (without dump table)	6 ft.
Width	5 ft.
Height	5 ft.
Stamp Applicator Speed	80 pucks/min
Power	110 volts A/C 20 Amps (Requires 3 lines)
Compressed Air	100 psi
Required number of operators	1

OTP STAMPING PROGRAM: High Volume Stamping

PrepTable

Infeed Conveyer

Product Identification

Stamp Verification Camera

Product Collection

Stage 1 - Puck infeed conveyor

Stage 2 - UPC scan

Stage 3 - Label applicator

Stage 4 - Stamp activation

YES   **Read OK?**   NO

Stage 5-   Product Collection   Product Rejection

Stamp Applicator

Non-verified stamp rejection station

Note: Guarding not shown, **Patent Pending

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III. OTP STAMPING IMPLEMENTATION PLAN

OTP STAMPING IMPLEMENTATION PLAN: OTP TRANSPORT

HVSM Components	Number of Units
In-feed conveyor	1
Main transport	1
Stamp applicator	1
Injection bin	1
Total cost	$45,000

Bagging System	Number of Units
Bagging unit	1
Total cost	$32,000

SICPA Kits	Number of Units
SICPA Vision System	1
SICPA Ancillary Equipment	1

OTP STAMPING IMPLEMENTATION PLAN
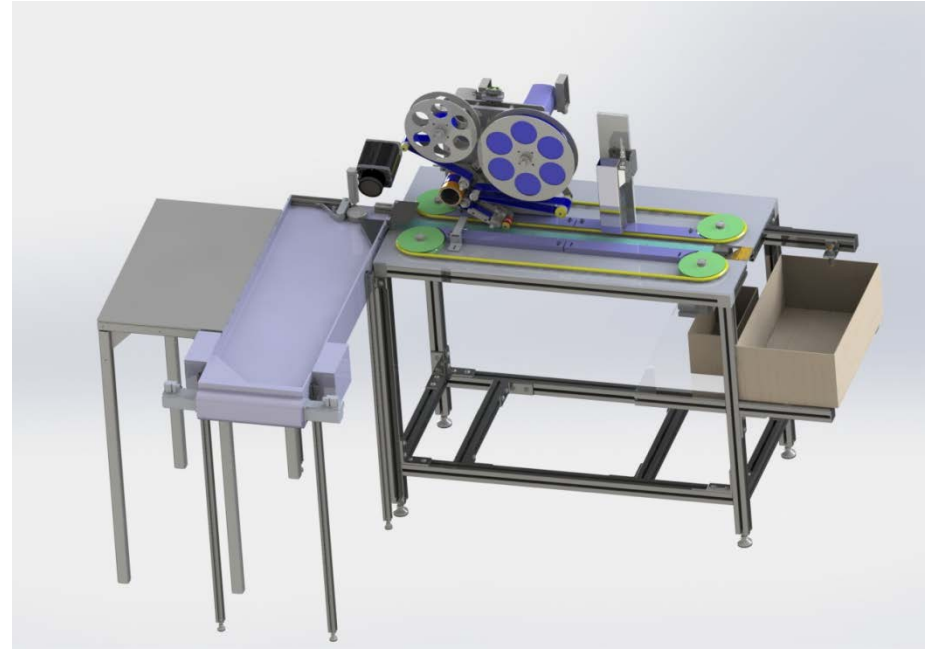
SICPA/USI

HVSM Machines
Available to order
1st machine - 12 weeks
(Delivery October 2017)
Subsequent Machines -
1/week

Apr '17	May '17	Jun '17	Jul '17	Aug '17	

Phase 1- POC - Complete

Phase 2 – prototype – in progress

Phase 3 – DMS Dev, Integration & Testing

Phase 4 – Stamper Field Test

Training -TBD

USI - POC (completed)

Infeed Conveyer
UPC Capture mechanism
Peripherals evaluation
   Bagging,
   de-sleeve,
   stack feed

SICPA/USI – 2.5 months

USI Transport Fabrication
PLC Programming
SICPA SAS Application
Vision System Testing
Network and COM Ports

SICPA – 3 months

DMS Web App Dev.
DMS Reports Dev.
Administration Screens
Tables-TPD – Tax Algorithm
Activation Data
PLC and SAS messages

SICPA/USI - 4 months

Machine industrialization
Data Capture Testing
Field testing
Optimize machine
Optimize data formats
OTP Machine Ready

IV. BENEFITS & NEXT STEPS

NEXT STEPS

- ## Complete Platform Development
    - Phase 2 – Prototype Development
    - Phase 3 – Software Module Development and SICPATRACE® integration

- ## Task Force Support
    - OTP Stamping technology evaluation
    - Environment investigative process
        - Number of potential stamper and install base

OTP STAMPING PROGRAM: IMPACT and BENEFITS

- Leveraging similar stamp design concepts in order to facilitate consumer and retailer compliance

- One stop portal for DOR, AG, Stampers and other agencies:
  - One reporting platform for DOR/AG
  - One inspection device/platform for DOR
  - Same stamp ordering and delivery process for licensed Stampers
  - Same activation process and support for MA licensed stampers

- Potential Market Impact
  - $16M was FY16 smokeless tobacco tax revenue
  - $58M - $78M range revenue estimate
    - Based on shipments & smokeless use in MA and consumption model
  - $41-61M range revenue recovery potential
  - Positive revenue protection for legitimate, MA licensed stampers

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