

# NACS Age Verification Initiative: Vendor Walkthrough

June 18, 2020  
GoToMeeting

**NACS** Advancing Convenience  
& Fuel Retailing  
[convenience.org](http://convenience.org)

- Antitrust statement
- Initiative background
- Strategy signposts
- Proposed solution
- Observations on age verification
- Existing solution market overview
- Why NACS?
- Technology design; principles, architecture, demonstration, key timeline
- Next steps
- Q&A

# Antitrust Statement

## Alan Thiemann, of Counsel to Conexus

# Today's Presenters

NACS



**Gray Taylor** is Executive Director for **Conexus** & Technology Consultant to **NACS**, where he is leading the NACS Age Verification Initiative. He has 40 years of industry experience as a retailer, systems vendor & industry advocate. He has held executive positions at 3 global petroleum systems providers & was VP of Technology & Research at NACS.

<https://www.conexus.org/>



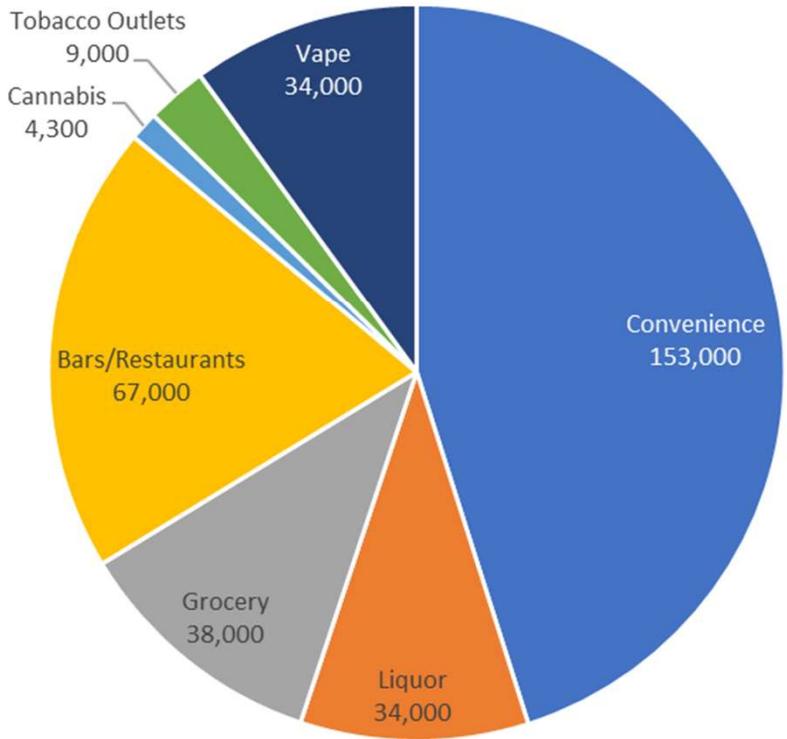
**David Ezell** is the Director of New Innovations at **Conexus**. He is an experienced Software Architect in Point of Sale & Financial Services, holding senior positions at Verifone & Bennett. Innovative & influential in creating & implementing new software designs based on emerging technologies. A proven leader in software industry standards development & incorporation of standards in technical platforms. <https://www.conexus.org/>



**Manu Sporny** is a five time entrepreneur, a Founder & CEO of **Digital Bazaar**, & a innovator, past chairman & current specification Editor for a variety of Working Groups at the World Wide Web Consortium (W3C). He has co-invented a variety of technology stacks such as JSON-LD, Linked Data Security, Verifiable Credentials, Decentralized Identifiers, some of which are used by hundreds of millions of sites on the Web. <https://digitalbazaar.com/>

# AGE Verification

Age-Restricted Retail by Segment - 339,300 total



WHY BULLET-PROOF VERIFICATION OF AGE IS REQUIRED FOR AGE-RESTRICTED PRODUCTS IN THE CONVENIENCE STORES



More than Half of All Dollar Sales is Generated from an Age Restricted Product



27% of All Unit Sales is Generated from an Age Restricted Product



37% of All Transactions Include Age Restricted Products

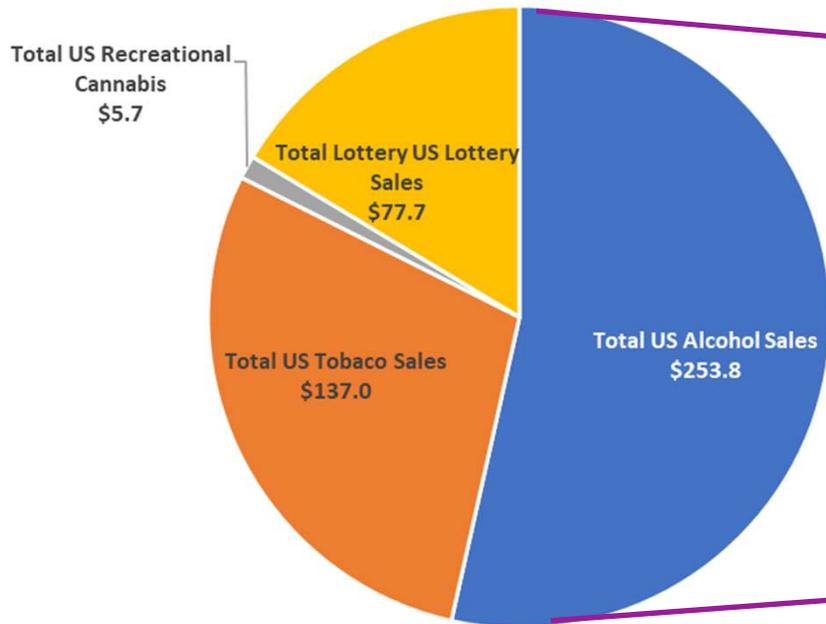
### Age-Restricted Products Drive Trips and Baskets

- Age restricted baskets contain fewer total items, averaging **1.8 units per transaction**
- Transactions with age-restricted products average **\$2.85 higher ring**
- Age-restricted products generated more than **\$2.4B in 2019**, up 3.0% versus prior year
- More than **20%** of all age-restricted items are sold **between 3 and 5 pm**



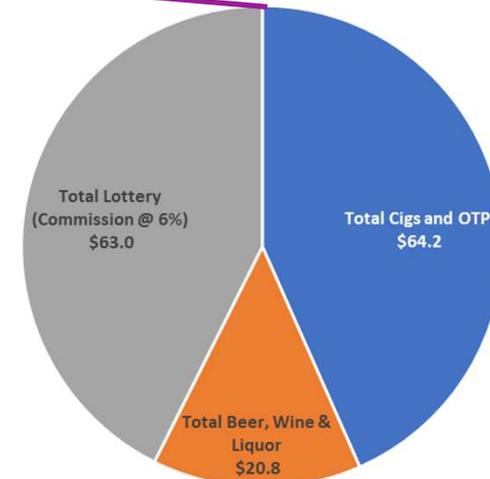
Source: NACS Research, SwiftIQ, Total U.S. Convenience Store Sales for Beer, Cigarettes, Liquor, Lottery, Other Tobacco Products and Wine, January - December 2019

Total US Age Restricted Sales \$474.2B  
(\$ billions 2018)



Total Industry Age Restricted Sales \$147.9B  
(\$ billions 2018)

31.2% of  
total US Sales



Source: NACS 2018 State of the Industry

## Consumers agree there is a problem...



**Three in five (61%) say** that the issue of age-restricted items being sold to underage customers is **“something that has always existed and is no worse than ever before”**

- However, fully 25% say the topic is a “new or growing problem”



**75% say in-store retailers** are doing an **“effective”** job

- By contrast, 45% say online retailers are “effective”



Half say **‘second-hand sourcing’ is how youth get access**

- The other half are ways we can better prevent (ex. checking or validating IDs)



Consumers want retailers to **focus on alcohol, vape, tobacco (cigarettes)**

- Vapes (66%) and cigarettes (61%) seen as “easy to obtain”
- 50% say alcohol is “easy to obtain”

## ...and we are empowered to find solutions



**90%** of Americans support a **nationwide standard** for age-verification (including 52% “strongly support”)

- Solid across all demographics: age, gender, race, region, and parents



More than **4 in 5 (78%) consumers favor** a mandatory / universal “We Card” style approach (i.e., **manually (physically) checking IDs for ALL** customers who make an age-restricted purchase)

Research-based messaging for convenience stores to embrace:

- ✓ A standardized process will be **most effective when followed by all stores**
- ✓ As responsible retailers, we support a standardized process that is **required by law**
- ✓ We are working **alongside partners** such as **state DMVs, pharmacies / drug stores, and gov’t**



We recognize **it’s impossible to completely eradicate the problem of youth getting access**, we are fighting for a **stronger age verification process that will get us much closer to this goal**



- The consumer is defining expectations:
  - The consumer expects retail to keep ALL adult products out of youth hands through uniform age verification; this is an industry BRAND issue...
  - The consumer understands the role of social sourcing in under-age use of adult products, & we should create solutions to this problem
- We sell legal products, responsibly, but we need improve our compliance to meet consumer expectations
  - We need to retain existing category availability for our viability
  - We need to establish our channel as the experts in responsible retail for future category availability
  - We need to lead the way to greater consumer privacy & control in digital commerce

# Proposed Solution - The Initiative

1. Publicly align industry stakeholders to mission, starting with tobacco/OTP
2. Create a standards-based & cost-effective system for age verification
3. Embrace consumer rights of privacy & emerging regulation
4. Publish standards & interfaces in the public domain, free to incorporate
5. Operate this system via transparent, “public benefit” entity
6. Minimize cost & tech debt through network economics & category expansion
7. Provide common infrastructure to:
  - Accommodate known regulatory needs,
  - Accommodate broad resale requirements of FMCGs
8. Lead innovation in digital identity migration – be the future
9. Advocate for stricter age verification enforcement; all products & channels

- Keeping age-restricted products from underage consumers requires societal approach – closing all opportunities
  - All age-restricted products should be treated with equal gravity
  - Every seller should adopt 100% verification; no leakage
- Verifying every customer of age-restricted products is essential
  - This requires every seller to adopt 100% verification
  - Without verification, there can be no tracking
  - The ability to do so is available, but fragmented & cost prohibitive
  - Verification will evolve to frictionless balanced against privacy
- The consumer must be vested in objective & supportive
  - Benefits must exceed cost of inconvenience
  - The consumer must not incur additional risk to identity

# Solutions Exist Today – Why Reinvent?

- **Big Tech**
  - Technically able to easily provide service due to natural monopolies & scale
  - Data flows required for real age compliance would put retailers at disadvantage; control of data
  - Winner take all business model for consumer identity, toll for “rentback” of consumer identity
- **Identity Service Providers**
  - Toll-based entities heavily vested in preserving paper ID
  - Toll-based document to digital ID conversion services
  - Winner take all, closed loop, digital identity ecosystems
- **Government Agencies**
  - Fragmented authority; Federal, State, Military, Agency, etc.
  - Lack of coordination & use-case consideration
  - Need private buy-in for emerging digital IDs (we really want this)
- **None offer neutral, unified public benefit model - balkanized**
  - Varying levels of verification; weak to overburdensome
  - No ability to track “social purchasers” across retail
  - No ability to provide systemic limits of purchase (Sudafed problem)

- Knowledge

- Strong experience in age-restricted sales compliance, through advocacy & We Card affiliation
- Strong technology & standards expertise through Conexus affiliation
- Strong data security & privacy expertise through advocacy & Conexus
- Fiscally responsible governance of non-profit operations expertise

- Connections

- Trade association for leading channel of age-restricted consumer goods
- Existing engagement by all relevant stakeholders
- Unique ability to avoid antitrust concerns while providing industry solutions
- Decades-long active leadership in technology standards development (Worldwide Web Consortium)

- Advocacy

- Well-respected advocate in all levels of Federal governance
- Established network of state associations
- Active in all relevant standards bodies

- Must be more frictionless & reliable than existing age verification
- Must work within common retailer technology stack
- Must operate in reality of retail operations
- Must not increase data security or privacy risk, today or tomorrow
- Distributed specification (POS) changes must be infrequent
- Operations & data flows must be consistent – standards
- Must be easy for tech vendors to incorporate - tools
- Must embrace emerging digital identity standards - lead

- Marketing Phase 1, POS specification for contemplated operations
  - Technical Phase 1 (TPhase1):
    - Standardized POS operations & dataflows for all phases
    - Focus on standardizing DL consumption at POS
    - Scalable & secure hosting system to tokenize, track, trace, limit & report
  - Technical Phase 2 (TPhase2):
    - Mobile device operation with tokenized ID; “wallet” & supporting infrastructure
    - Digital ID consumption to “calve” age token
    - Open APIs for qualified boarding entities
- Marketing Phase 2 – extend system to online use cases
  - Token consumption by third parties (digital promotion, loyalty programs, other “wallets”)
  - Usage of emerging AAMVA mobile DL and Federal ID standards

# POS Integration Design

David Ezell, Conexus

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## Retail Operational Goals

- To minimize operational friction with consumers
- To support verification through existing “paper” documents
  - Driver’s licenses
  - Passports
  - Military & Tribal IDs
- To support offline operation
- Path of migration to digital identity future

## Software Architecture Goals

- To leverage the speed & security of new identifier technologies
- To work “seamlessly” in merchant owned/operated communications stacks
- To leverage the newest standards in identifier technology
  
- To leverage “API Ecosystem Design Practice” using *microservices* to
  - Minimize software “churn” for POS vendors (cost & time to market)
  - Avoid departure from existing vendor programming practice
  - Allow functional upgrades without having future impact on the POS software
  - Provide a powerful test & certification environment (Conexus API Initiative)

## DL Flow

- Scan license
- Clerk verify photo
- POS validate DL scan data
- POS calculates age from ID
- Get single use token
  - Online, or
  - Create local token
- Check open-to-buy
  - Online, or
  - Use pricebook settings
- Finalize purchase
  - Online, or
  - Store for later forwarding

## “Non-DL” Flow

- Enter manual data
- Clerk verify photo (if any)
- POS calculates age from ID
- Get single use token
  - Online, or
  - Create local token
- Check open-to-buy
  - Online, or
  - Use pricebook settings
- Finalize purchase
  - Online, or
  - Store for later forwarding

## Tokenized Flow

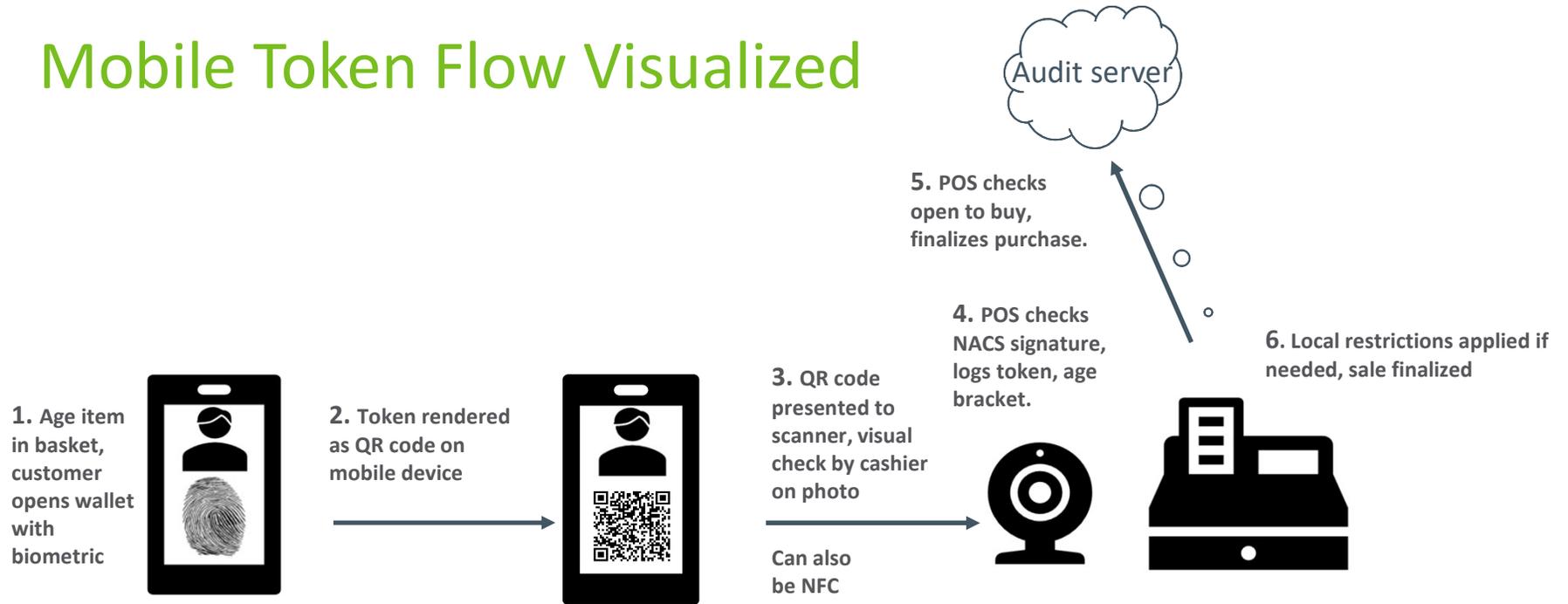
- Scan single use token
- POS *validates token*
- POS *obtains age from token*
- Check open-to-buy
  - Online, or
  - Use pricebook settings
- Finalize purchase
  - Online, or
  - Store for later forwarding

## PDF417 Data *OR* Manual Data *and* POS Data *and* Purchase Data

- Doc type: Driver’s Lic.
- Issuing authority
- Document number
- Date of Birth
- Expiration Date
- Doc type: “Passport”
- Document number
- Date of Birth (man.)
- Reason for override
- Site Verification ID
- Cashier ID
- Calculated Age
- Local Store Time
- Array of
  - GTIN Code + Mod
  - Quantity

- *ID Proofing = (PDF417 Data or Manual Data) + POS Data  
Returns Single Use Token (SUT)*
- *Audit Reporting = SUT + [ Purchase Data ]*

# Mobile Token Flow Visualized



# Cloud Services Design Overview

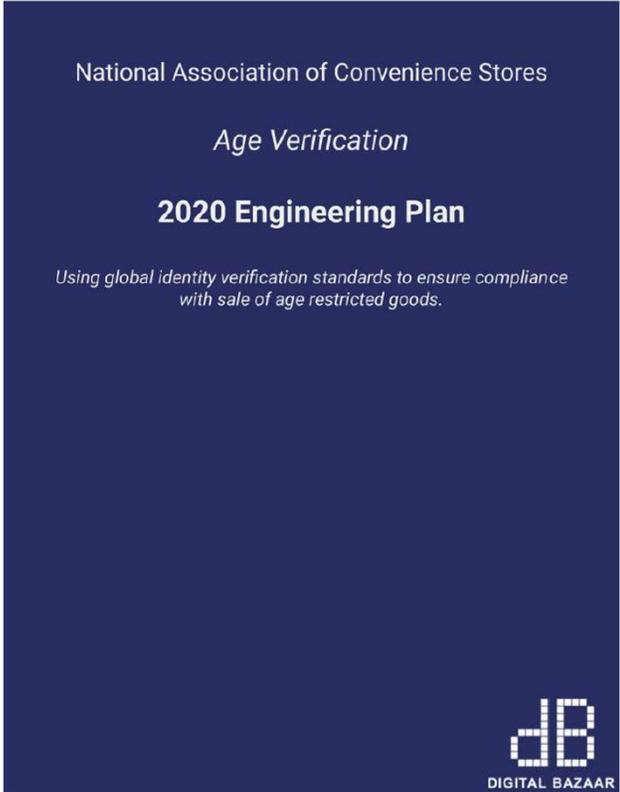
Manu Sporny, Digital Bazaar

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**Document Summary**

This guide provides details for a POS System Developer or Integrator to use in implementing changes to work with the NACS Age Verification System.



- We want to work with the vendor community to establish the best age solution...
  - Engage in the Conexus standards process approved by RBR last month.
  - The Project team would want to identify a PoC within each vendor to coordinate specification, support and feedback
  - We want to pilot a system this September. We are looking for an aggressive vendor to partner on this goal...

Gray Taylor

[gtaylor@Conexus.org](mailto:gtaylor@Conexus.org)

+1 512 508 3469 mobile, text, WhatsApp

- Thank you!