



# HP Indigo Secure

Brand Protection Printing Solutions

No brand and no product  
is immune to counterfeiting.

In today's digital world,  
it is big business.



# Security Printing and Brand Protection are two distinct segments



## Security Printing

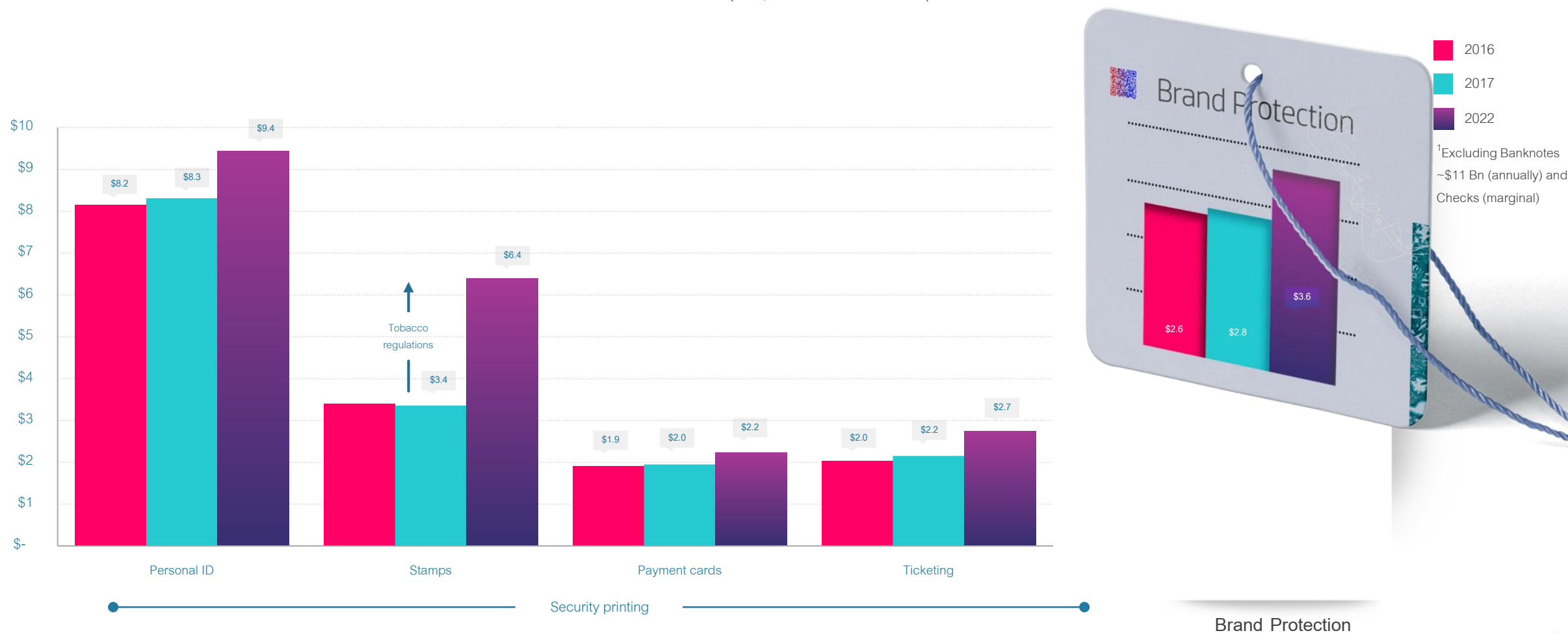
- Currency
- Personal Identification
- Tax stamps
- Secure documents: birth certificates, diplomas, etc.
- Lottery, Casino chips and gambling
- Financial documents

## Brand Protection

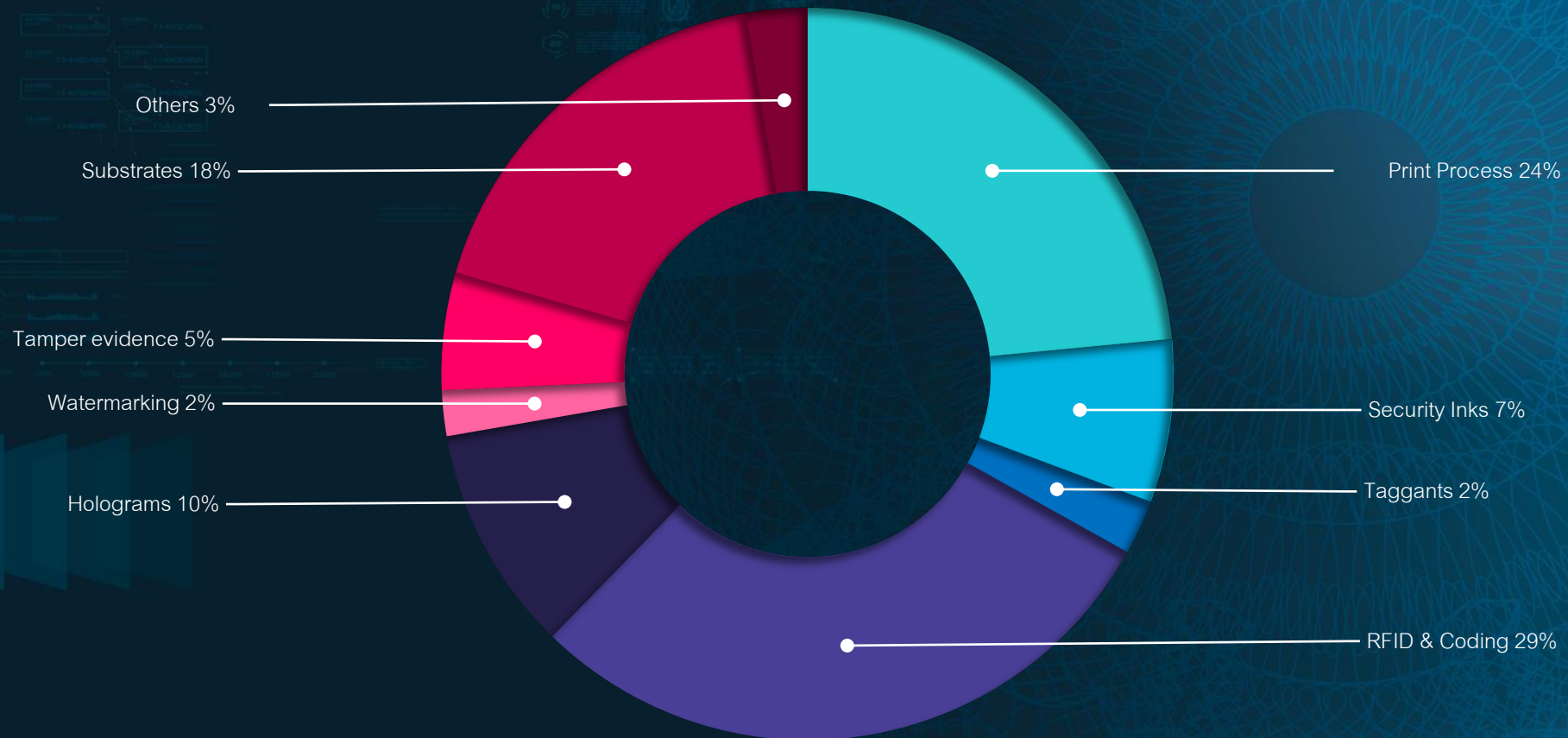
- Nutraceuticals and Wellness
- Cosmetics & Personal Care
- Spirits
- Agro-Chem
- Industrial and Automotive
- Controlled food and beverage

# The market spend for security printing & brand protection by verticals and solution

( A \$30 billion market )



# The market spend for Security printing & Brand Protection by solutions



# HP Indigo Secure competitive edge

security-grade solutions with digital agility & advantages



Vast portfolio of unique and exclusive security solutions



Stronger security with the power of variable data



Productive, one-pass, on-press process

A key heuristic in these industries:

Layered Security –

Because almost

everything can be counterfeited



Effective protection should make it  
too complicated  
or too expensive to counterfeit or  
divert

Layered protection is a critical principle in brand  
protection and security printing

# HP Indigo solutions are divided into different security levels and different types of authenticators

Authenticators

Authorized Inspector/  
Authenticator

Authenticated  
by End User

Security Levels



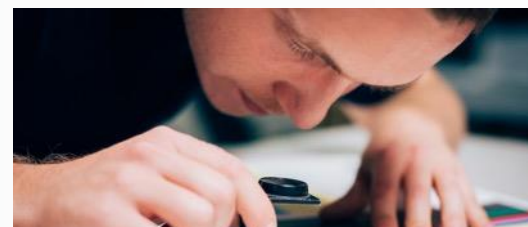
## Forensic

Features are only detectable in the laboratory and their exact nature is a closely held secret for security reasons



## Covert

Invisible to the eye. Detected by specialty devices such as: UV flashlight, IR laser, specialized readers



## Semi-covert

Requires simple test equipment such as magnifying glass, interference slide, etc.



## Overt

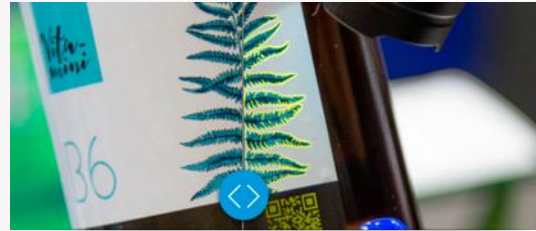
Visible to the consumer. Detection doesn't require any special equipment

# Additional layers of security features

Security features



Security elements  
and designs



Security  
inks



Track & Trace



Security  
substrates

# Combinations of security levels & features enable robust layered protection

Security Levels



Forensic



Covert



Semi-covert

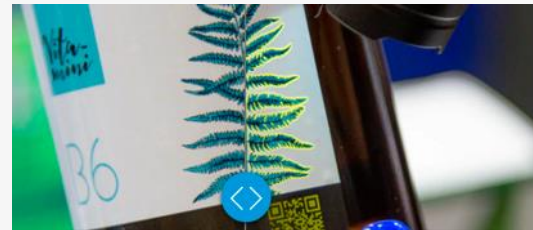


Overt

Security features



Security elements  
and designs



Security  
inks



Track and Trace



Security  
substrates



## Brand Protection

# Brand counterfeiting: a real threat

November 23, 2019

## Nike Pulling Its Products From Amazon in E-Commerce Pivot

\$500 MILLION in counterfeit Louis Vuitton, Gucci, Chanel goods seized in one of the largest busts to date

August 16, 2018 /TFL

According to the Los Angeles Police Department, counterfeit products for brands like Kylie Cosmetics, and MAC Cosmetics tested positive for high levels of bacteria and feces.

January 22, 2018

Earlier this month, the American Apparel & Footwear Association added Amazon to its “Notorious Markets” list for 2019, indicating that the re-seller has a counterfeit problem

October, 2019

# Brands are out to tackle the global threat of counterfeiting attacks



Amazon extends Project Zero beyond US market  
Amazon has launched its anti-counterfeit program-Project Zero-to its first European markets after what it says has been a successful roll out in the US



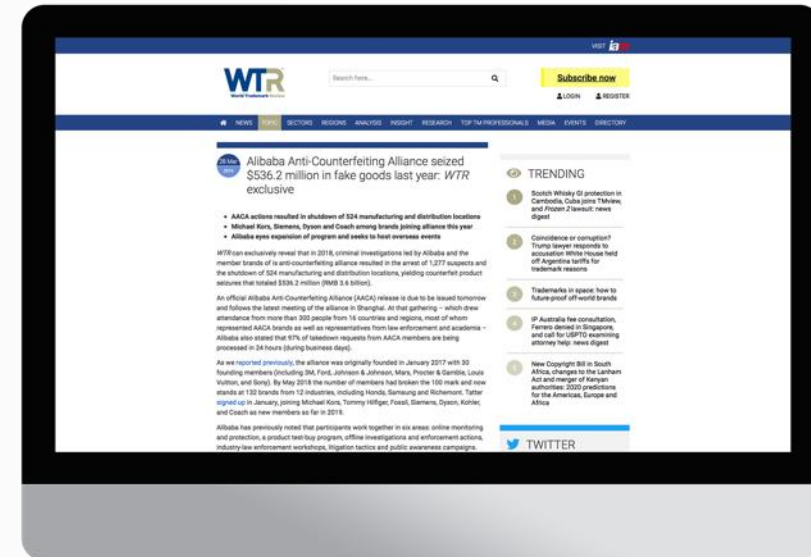
Alibaba Anti Counterfeiting Alliance seized \$536.2 million in fake goods last year: WTR exclusive  
- March 28th, 2019



August 6<sup>th</sup>, 2019



Click here



March 28<sup>th</sup>, 2019



Click here



# Brands are investing

The global market for security printing is growing at 5.3%, to reach \$3.6 billion in 2022.



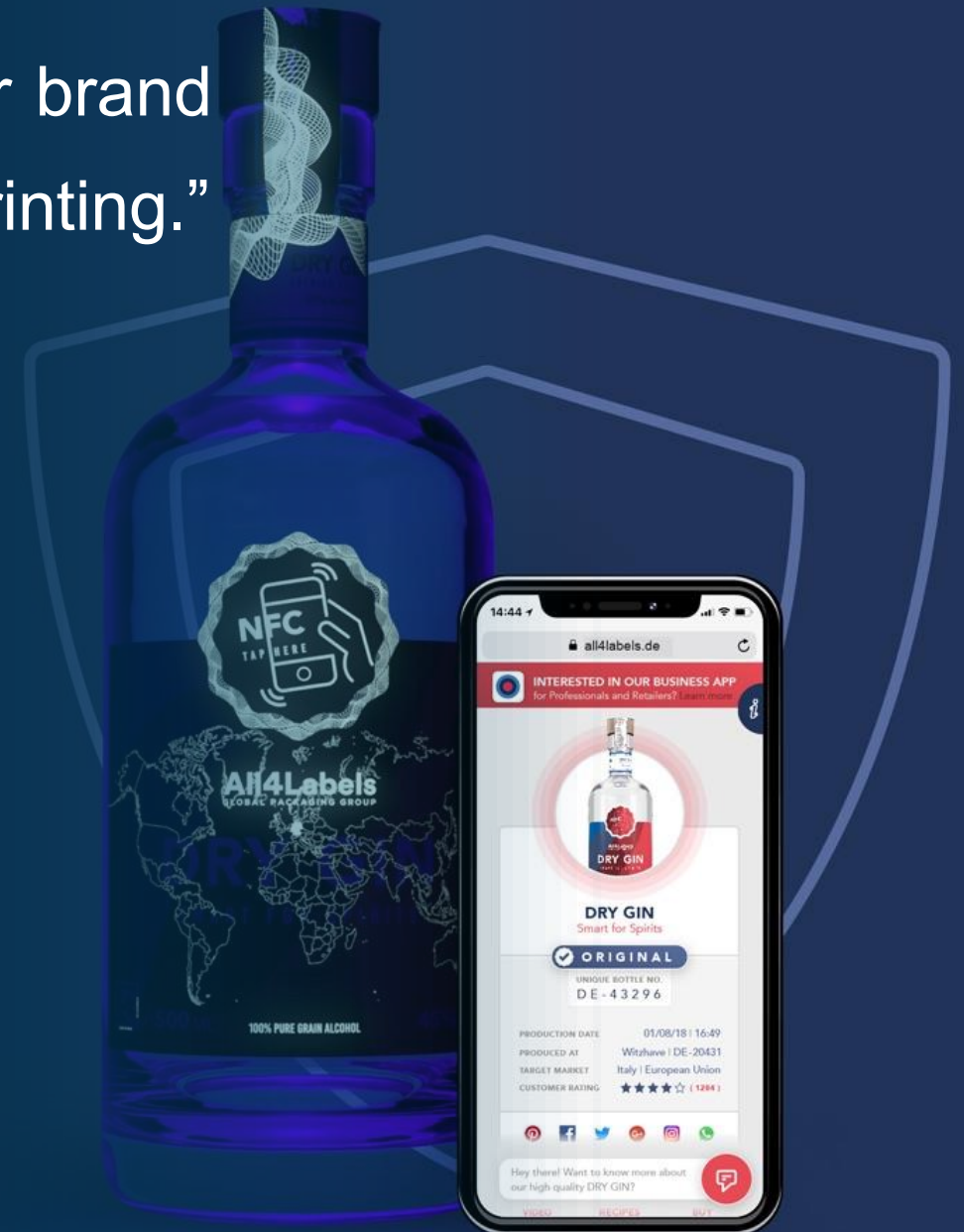
Global market for brand protection print technologies prediction (\$ billion)

“Brand protection is the #3 top attribute for brand owners when considering their package printing.”



“Smart & secure labels & packaging printing will no longer be a nice-to but a must-have”

Roger Gehrke, EVP, Operations & Bus. Dev., Global Packaging Group,  
All4Labels



“Brand protection is the #3 top attribute for brand owners when considering their package printing.”



Nosco is pleased to add HP Indigo invisible ink to its Security Product line, enabling us to land multiple million dollar customers in the Healthcare industry

Craig Curren, President, Nosco



In a digital world  
you cannot fight the battle of today  
with the tools of yesterday



# HP Indigo powers layered brand protection robust solutions



Vast portfolio of unique and exclusive security solutions

Match the benchmark PQ:  
due to wide variety of inks,  
substrates and  
established eco-system



Stronger security with the power of variable data

VDP gives the power to  
give each product a unique ID



Productive, one-pass,  
on-press process

“One Pass on One Press”  
vs. today's complex,  
multistep production

# Brand protection solutions

Protect brand owners from the threats of  
product counterfeiting, parallel trading, product tampering and product theft



Who/Identify



Identify target  
customer



How/Evaluate



Evaluate  
the problem



Show/Present



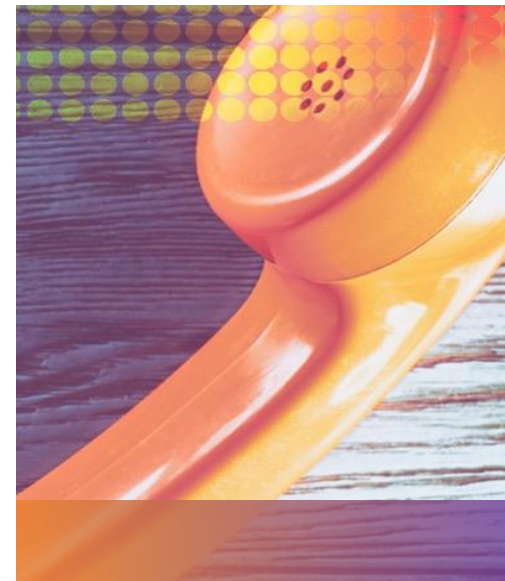
Present relevant  
case studies



Build



Tailor a  
solid solution



Contact



Contact your  
regional expert



# Identify

Identify Target Customer

# Identify target customer

Look for the verticals. Different verticals have different needs. Some have already embraced the trend.



## Market segments

- Nutraceuticals and Wellness
- Cosmetics & Personal Care
- Spirits
- Agro-Chem
- Industrial and Automotive
- Controlled food and beverage

## Pain points

- Increasing diversion problems, sensitivity to look and feel, multiple SKUs
- No single foolproof approach
- Safety / health concern
- Difficulty measuring problem / justifying cost
- E2E workflow integration & TCO



# Evaluate

Evaluate The Problem

2 6 3 9 2 1 8 1 3 8 5 2 0 1 4 3 8 5 1 2 9 2 5 8 4 0 2 1 2 9 5 0 0 2 2 2 7  
7 3 3 9 0 5 8 1 0 7 5 4 4 9 9 7 8 4 8 7 9 0 5 3 4 9 5 0 9 9 0 0 0 4 8 7 5 0  
3 5 4 7 3 3 9 3 7 1 5 1 0 8 9 1 3 7 5 1 0 8 1 1 3 6 9 9 6 9 6 6 1 0 7 9 1 0  
8 7 0 9 0 5 8 3 0 5 9 8 5 4 3 0 7 1 3 2 2 2 9 2 2 7 5 4 2 0 0 4 6 4 7 5 9 2  
4 5 3 2 8 2 4 4 8 1 7 3 6 9 6 9 0 8 3 5 4 3 1 1 4 6 3 0 4 5 2 2 2 0 0 1 9 8  
5 8 6 3 0 3 3 2 2 3 7 1 5 9 2 6 7 1 2 7 5 1 2 8 5 6 5 2 2 0 6 2 6 0 8 9 1 9  
1 9 2 1 5 5 3 3 7 1 8 6 8 2 8 4 4 7 2 1 4 0 3 1 3 0 8 8 3 1 1 7 9 2 8 9 0 7  
9 7 4 6 0 0 6 9 3 0 2 3 9 8 6 2 5 9 9 4 3 3 2 1 9 6 7 1 4 8 6 7 6 4 9 7 5 5  
5 0 1 1 1 3 8 4 0 1 1 4 9 7 1 7 2 6 2 2 6 0 6 1 4 6 7 5 4 5 5 8 8 5 7 8 6 6  
5 8 1 2 0 6 0 9 8 6 9 0 8 5 8 7 5 6 5 4 6 8 0 1 6 2 2 5 5 7 0 6 6 5 2 8 9 5



# Evaluate the problem to be solved

Look for the verticals. Different verticals have different needs. Some have already embraced the trend.

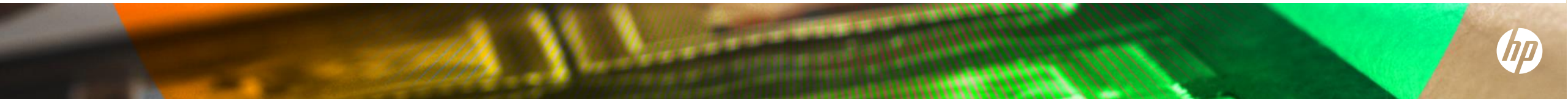


Is it a counterfeiting  
or diversion issue?

Is it an inside or outside  
problem?

Who will be the authenticators?

What current solution does the customer  
have and  
what are the weaknesses?





# Present

Present Relevant Case Studies

# Cosmetics & Personal Care

## CHALLENGE

A top tier cosmetic company suffered from a major counterfeiting attack and wanted to implement brand protection solutions for their skin care products that would deter counterfeiters from bypassing the protection feature yet would preserve their clean and sophisticated design.

## SOLUTION

Combine several layers of covert/semi-covert protection mechanisms to thwart counterfeiters, placed in strategic locations within the design (including name of the product) to prevent the features to be physically removed/corrupted. The label was printed using three special inks (silver, invisible blue and yellow) all together on press in one pass (reducing waste and optimizing productivity). The solution was so successful for the label that the brand deployed the solution on the package as well.



# Nutraceuticals & Wellness

## CHALLENGE

A vitamin company was confronted with a diversion and counterfeiting issue when they discovered that their products were already being sold in another country, as they tried to enlist a new distributor. Counterfeiters bypassed the existing overt Track & Trace solution by covering or removing it from the package. They wanted a robust solution that would not affect the look and feel of the brand design.

## SOLUTION

Combine several layers of covert/semi-covert mechanisms for extra protection (including 2 security inks for higher security level).

The brand's Track & Trace solution including Serialized QR codes printed with ElectroInk Invisible Yellow and placed in strategic locations, thus preventing counterfeiters from removing the feature and bypassing the tracking system. The solution was so effective for the label that the brand deployed the solution on the package as well.



# Agro- Chem

## CHALLENGE

A company that sells seeds to farmers wanted to combat counterfeiting of their product and at the same time, encourage consumer engagement and brand loyalty.

## SOLUTION

Enable consumer level authentication by printing secure, anti-copy, serialized QR codes using the ScanTrust third-party solution. As a cloud-based platform, ScanTrust enables traceability along the entire supply chain, business intelligence and two-way communication between brands and consumers.



# Spirit

## CHALLENGE

A high-end winery selling exclusive, limited edition wines was faced with a counterfeiting issue and wanted to prevent further revenue loss and future counterfeiting attempts, while still maintaining their elegant label design.

## SOLUTION

Combine several layers of covert protection mechanisms on the wine label including

- 1) An invisible static mark printed on the brand name;
- 2) An invisible number to identify the exact bottle # in this limited-edition collection; and
- 3) A machine readable security ink (taggant, offering the highest level of security).



# Industrial/Automotive

## CHALLENGE

A motor oil company suffered a counterfeiting and diversion problem, causing revenue loss.

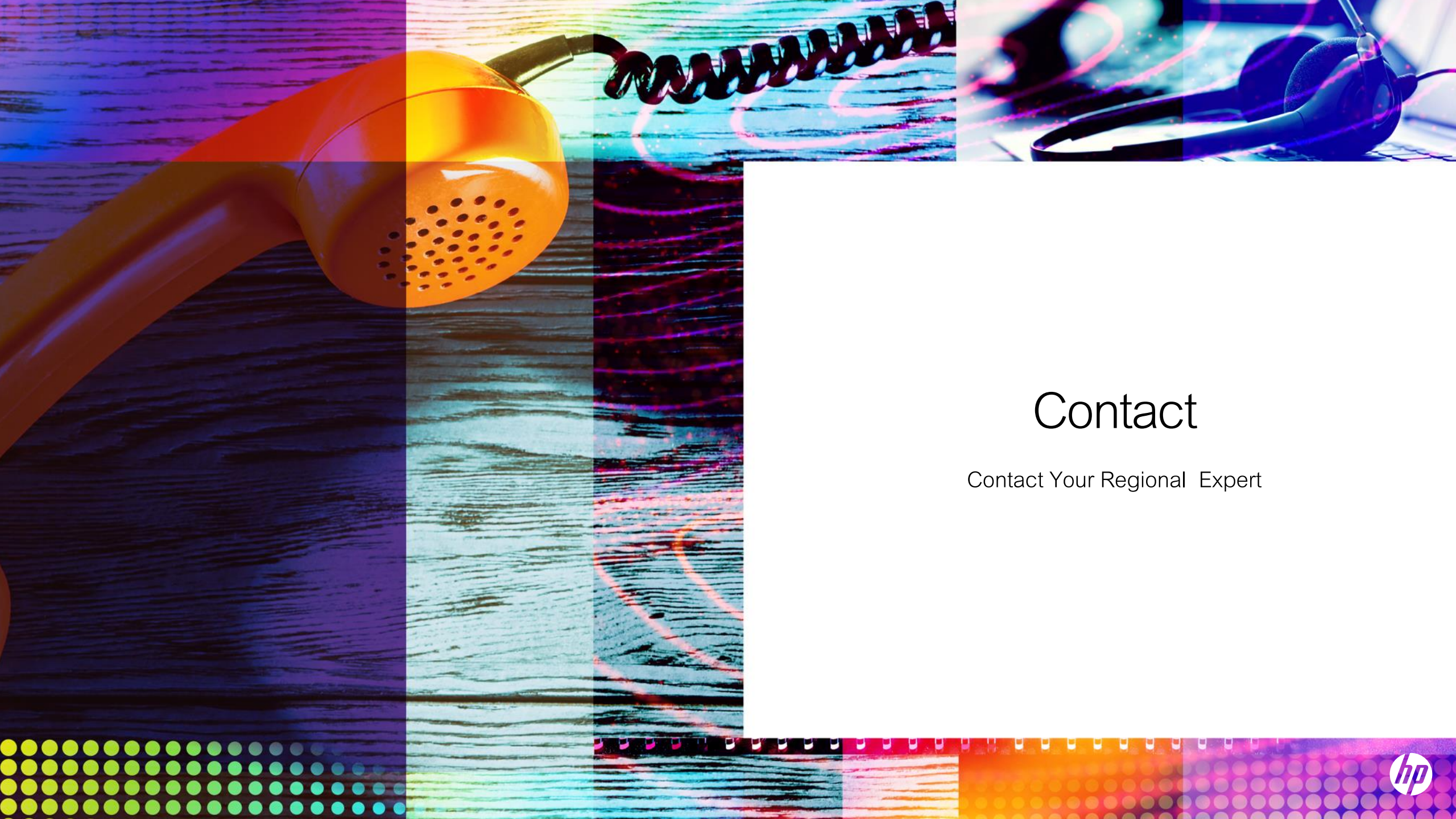
They wanted a solution that could be verified by brand inspectors yet also be visible to end-users in order to encourage consumer engagement and brand loyalty.

## SOLUTION

Print an invisible static mark on the company name, using ElectroInk Invisible Yellow. In addition, print a visible Micro focus QR code. With, a special pattern is embedded within each serialized QR code making it impossible to copy, thereby protecting and enabling tracking of each item through the entire supply chain. When the code is scanned, the brand can gather data and other information to verify proper usage.



Print an invisible static mark on the company name using Electroink Invisible Yellow. In addition, print a visible Micro Focus QR code. A special pattern is embedded within each serialized QR code making it impossible to copy, thereby protecting and enabling tracking of each item through the entire supply chain. When the code is scanned the brand can gather data and other information to verify proper usage.



# Contact

Contact Your Regional Expert



# Contact your regional expert

Don't go alone. We are here to help you tailor the solution

APJ

AMS

EMEA

GBU

Mahidi

[mahidi@hp.com](mailto:mahidi@hp.com)

Yoav Lotan

[yoav.lotan@hp.com](mailto:yoav.lotan@hp.com)

Lisa Watson

[lisa1.watson@hp.com](mailto:lisa1.watson@hp.com)

Lior Krasnovsky [lior.krasnovsky@hp.com](mailto:lior.krasnovsky@hp.com)

Valiquette Catherine

[catherine.valiquette@hp.com](mailto:catherine.valiquette@hp.com)

Patrick Cahuet

[patrick.cahuet@hp.com](mailto:patrick.cahuet@hp.com)

Cristina Moro [cristina.mm@hp.com](mailto:cristina.mm@hp.com)

Patrick Graber

[patrick.graber@hp.com](mailto:patrick.graber@hp.com)

Liron Einav [liron.einav@hp.com](mailto:liron.einav@hp.com)

Meital Tarazi [meital.tarazi@hp.com](mailto:meital.tarazi@hp.com)





# Build

Tailor a Solid Solution



# Tailor a strong solution with robust capabilities

## Security elements & designs

### Smart Stream Designer marks



- Microtext
- Micro 2D Barcodes
- Guilloche



- Variable, differentiated secure designs
- Press signature



- Full Color Barcode
- Hidden Images
- Digital Fiber Pattern



- Simplified Variable secure designs

## Security inks



- Invisible Yellow/Blue



- GOSure- Taggant Ink



- RainbowSecure™ – IR Ink



- Sherlock – Taggant Ink

## Track & trace solutions



# HAIYAA - examples of security features

## Hidden Images

visible only with a lenticular lens



- By rotating the lenticular film (Key )with the same or different lpi in different angles, different hidden text appears
- Support up to 4 layers, each layer links to its own variable data
- For optimal results it is recommended to use a solid (100%) ink separation

## Haiyaa Oreo Label



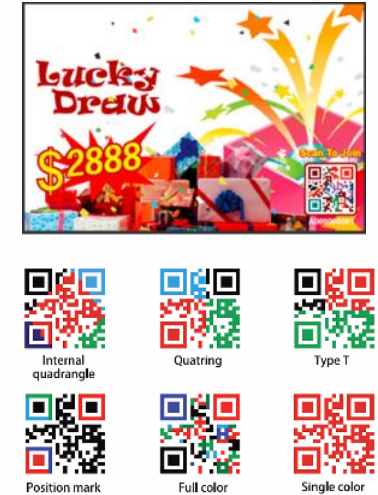
- Haiyaa Oreo label has three layers
- The label production combines Haiyaa's VariPrint multiple layer PDF technology, HP Indigo's sandwich printing feature and a customized substrate
- only available on HP Indigo web presses with one shot technology which guarantees the registration of the variables on the surface and the variables in the background

## Digital Fiber Pattern



- Product authentication for consumers
- 2D barcode and digital fiber pattern
- scan 2D barcode using a smartphone barcode reader
- Match the pattern displayed on the smartphone and the one on the label for authentication

## Full Color Barcode



- As the QR color squares are randomly generated, the color of every barcode is different, which makes it impossible to reproduce, so the feature can be treated as another security method for anti-counterfeit

# HP SmartStream Designer Security Features

Designer provides the following security features, without requiring any special installations or extra cost:

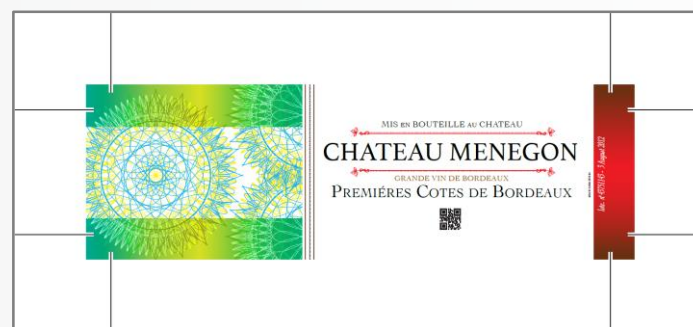
## Micro text

A special font which looks like a thin line or a decoration, and is readable only when using a magnifying glass



## Micro 2D Barcodes

Small QR and DataMatrix barcodes that are almost unnoticeable in the design and can encode data for verification



Regular QR

Micro QR



## Security Fonts

When duplicated, the line spaces will be uneven, and the duplication will be noticeable. micro text below or inside the characters is another protection method



# HP SmartStream Designer Security Features

Designer enables 3<sup>rd</sup> party security integrations:

## Microfocus (GPAS)

GPAS allows using a smartphone to scan a QR code. Immediate results show whether the product is real or counterfeit.

## Advanced Track & Trace

Printed at the highest resolution possible, Seal Vector deteriorates when copied, making it possible for brand agents to detect fake products

## HAIYAA

HAIYAA offers a rich set of security solutions based on propriety VDP engine and SW modules, simplify the creation of sophisticated anti-counterfeit applications

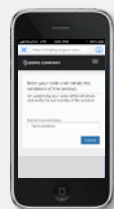
### 1 Choose a mark



### 2 Print it



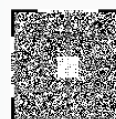
### 3 Scan & Submit



### 4 Validate



Original code



Copy



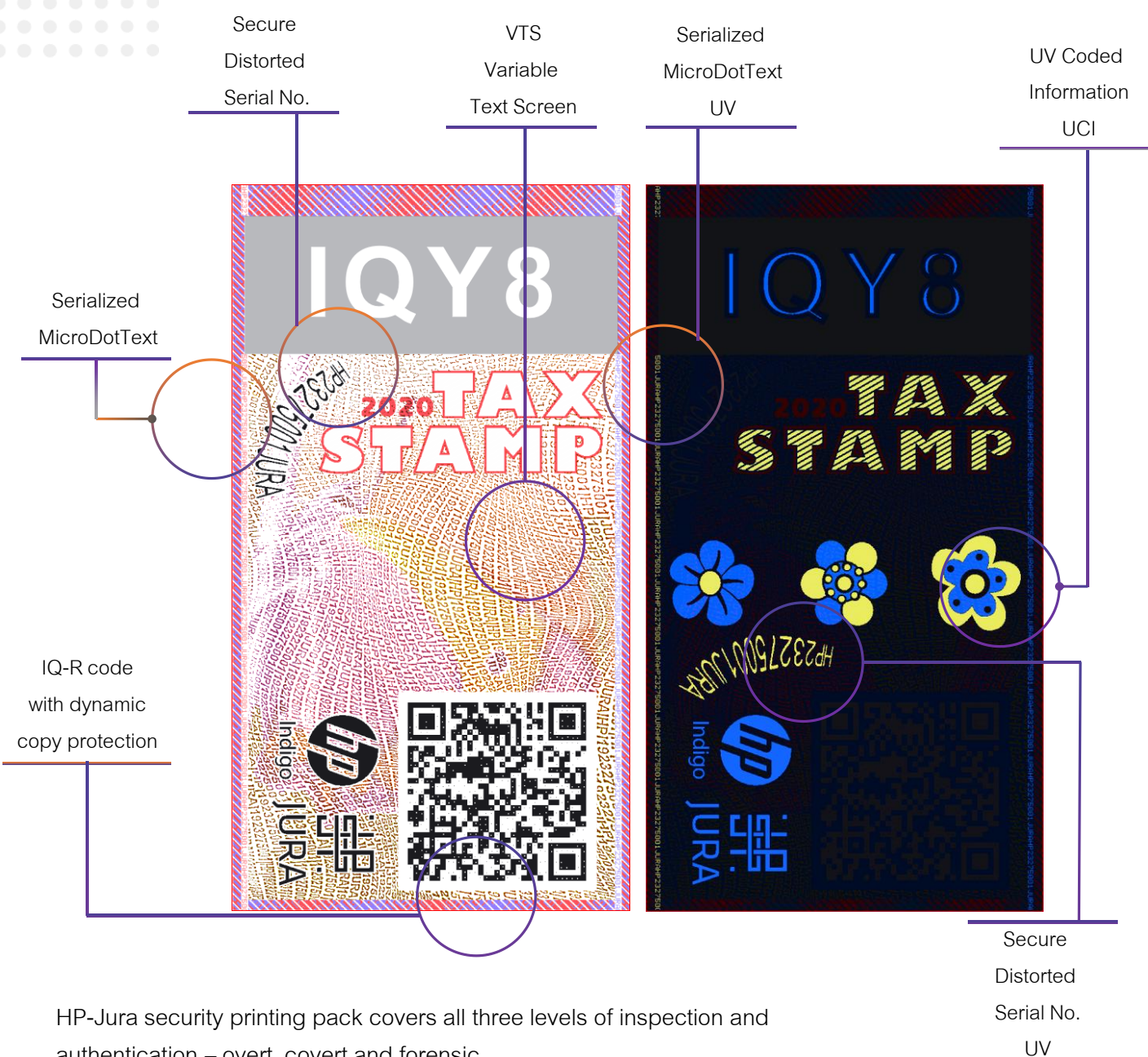


Jura, a global market leader in high-security design and security personalization features, has over the last few years dedicated a significant amount of research and development to the digital printing market which resulted in a comprehensive and sophisticated digital security printing pack.

With the access to the security printing pack, HP Indigo presses are becoming a real “weapon” to fight against growing counterfeiting challenges.

Part of the pack are origination tools, that enable hidden serialization and personalized data to be seamlessly integrated into every part of the original design.

The main advantage using Jura origination tools is in chaining related data, through different elements of the design, to become non-editable and unchangeable parts of the complete smartphone-enabled verification and authentication solution.



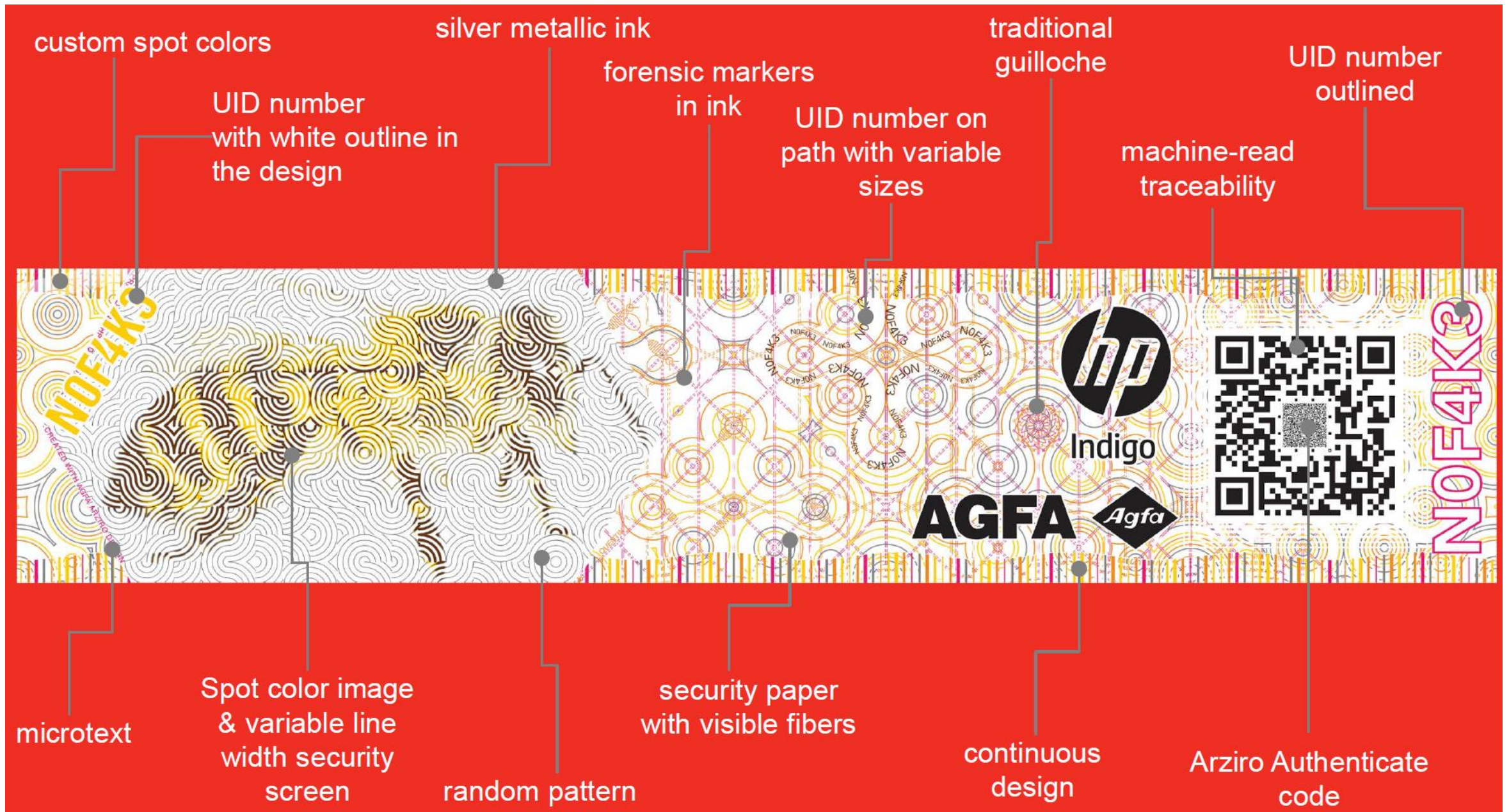
HP-Jura security printing pack covers all three levels of inspection and authentication – overt, covert and forensic printed in one pass.





Agfa & HP Indigo  
announce collaboration  
on brand protection and security  
printing solutions





serialized security  
text screen with  
UID

design  
guilloches

UID number on  
white background



security paper  
with UV  
fluorescent fibers

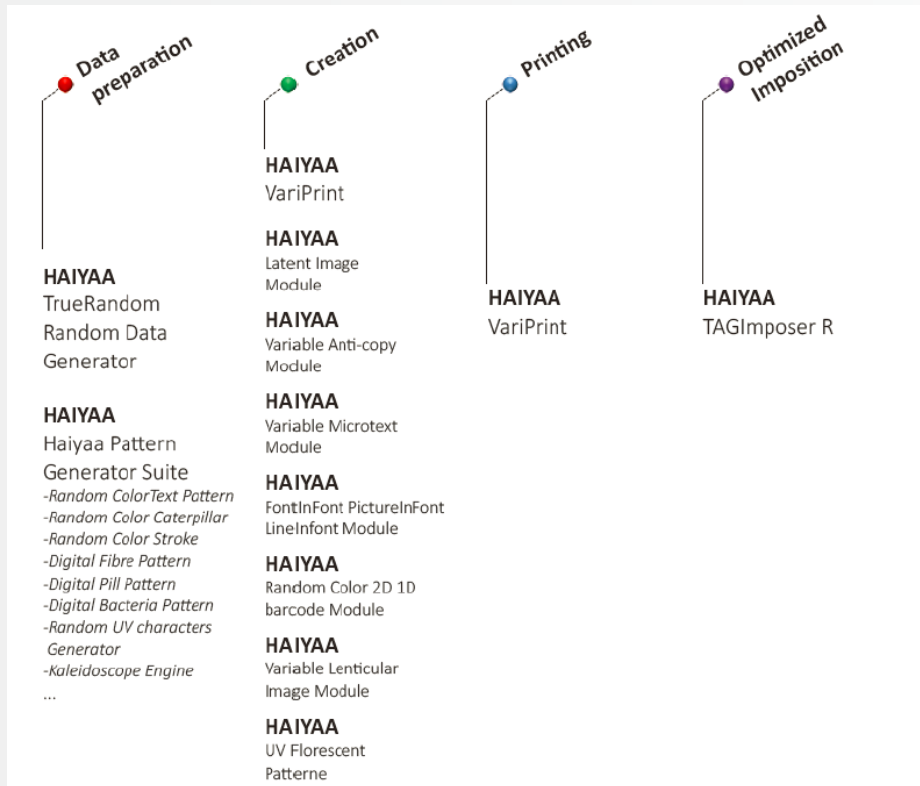


# HAIYAA



HAIYAA offers a rich set of security solutions based on a propriety VDP engine and SW modules, simplifying the creation of sophisticated anti-counterfeit applications

HAIYAA Security modules are listed below:



HAIYAA solutions are implemented on:

- 1) Security Label & Packaging
- 2) Security Certificate
- 3) Security coupon and cards



# HP SmartStream Designer and Composer Resources

Find tutorial videos and ideas in PrintOS

## Knowledge Zone

Videos with instructions on how to add micro-text and other Anti-counterfeiting marks in HP SmartStream Designer can be found in PrintOS

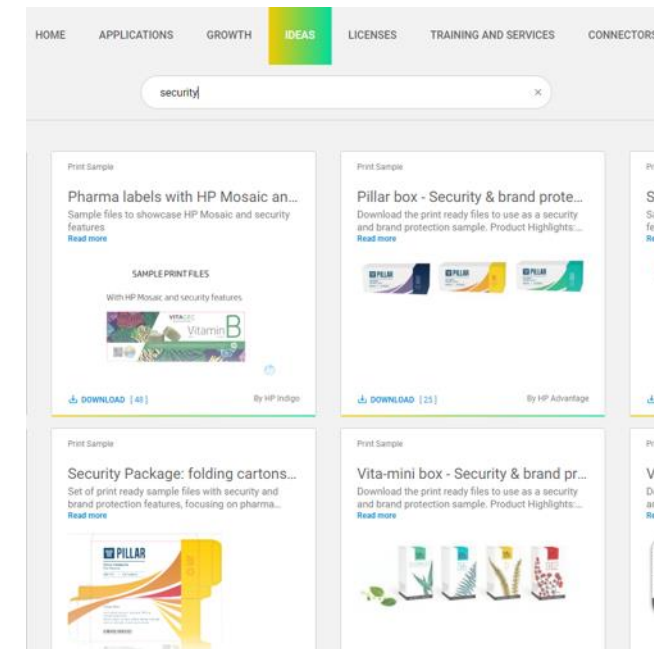
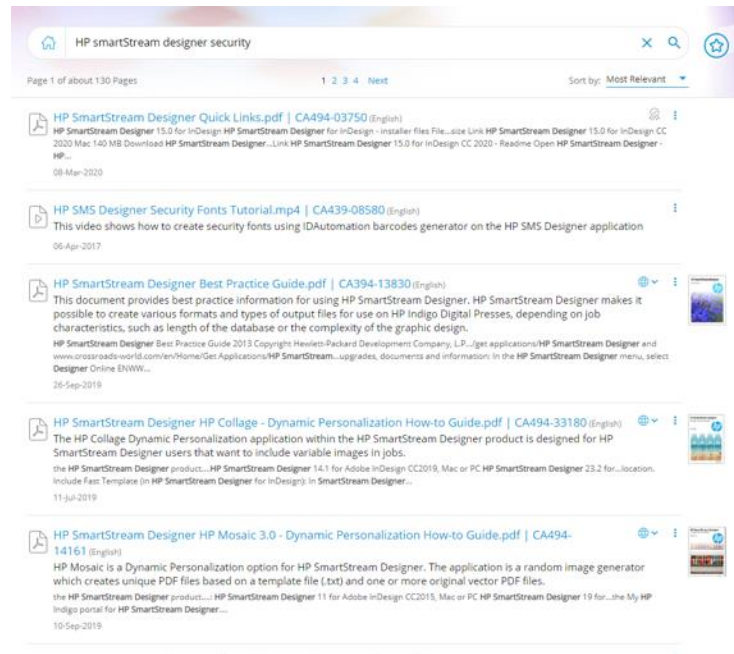
Knowledge Zone

<https://www.printos.com/knowledge-zone/#/>

## Ideas

Ready-made templates and various ideas of security marks and codes can be found in PrintOS Marketplace in the 'Ideas' tab

<https://www.printos.com/market/#/ideas>





## 'Go Sure' - Machine readable taggant ink

The 'GoSure' solution was developed in collaboration between HP Indigo and Bsecure and is formulated exclusively for HP and available only for HP customers. This unique, highly-secure, covert tagged ink can be authenticated by the 'GoSure' handheld reader.

The authentication of a printed security feature is easy with the 'GoSure' handheld reader, which provides audio and visual confirmation when authenticating the presence of the unique marker. Printing with GoSure Ink on an HP Indigo Digital Press enables selective and powerful marking, delivered in one single print-pass. This allows brand owners and authorities to easily authenticate products throughout the supply chain, reducing counterfeiting and product diversion.



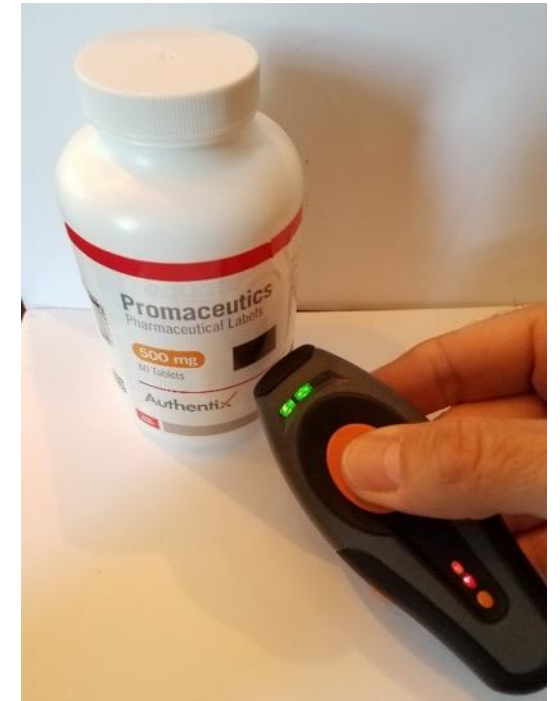
## “Sherlox”

A suite of machine readable taggant ink and comprehensive brand protection services

Authentix offers a complete authentication solution that enhances today’s printed packaging with data insights to support the Brand Owner’s fight against product counterfeiting and diversion.

Authentix Sherlock, enables users with in-field authentication and mobile connectivity to help investigators efficiently gather data to report and take action on counterfeit activity.

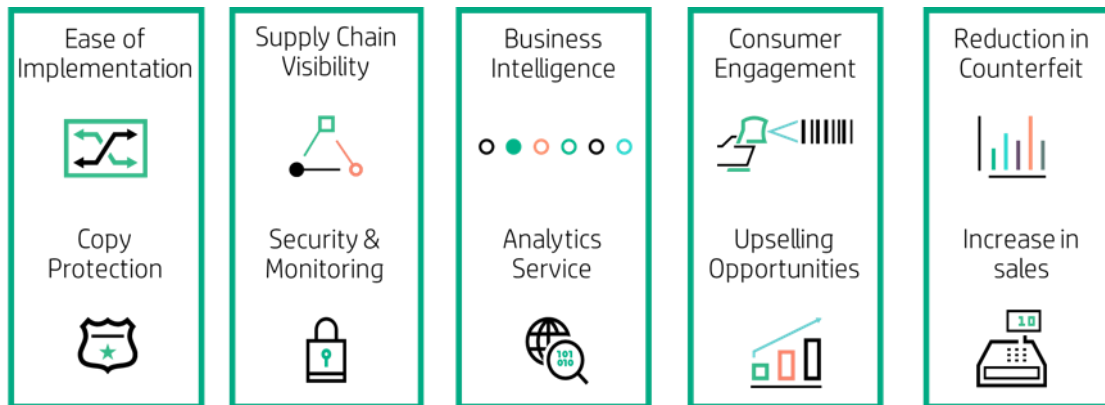
The complete solution of authentication markers and reader technology, a powerful information system on the cloud, and comprehensive services, helps users build market confidence and maximize revenue. Within a local, regional or global supply chain, discover counterfeit hotspots in real time.



# Microfocus (GPAS)

## Value Proposition

- The Global Product Authentication Service allows customers to use their smartphone to scan a product's QR code or send the code via a text message. Immediate results help verify whether the product is real or counterfeit.
- This helps customers from potential physical harm and businesses from facing lawsuits, loss of revenue and brand erosion
- All Services will be delivered by HPE GPAS direct to the PSP customers as a cloud service offering with no service integration required at the printer site.



## How Does it work

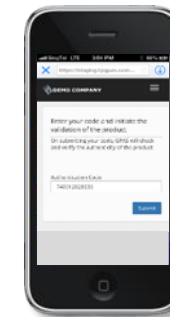
### 1 Choose a mark



### 2 Print it



### 3 Scan & Submit



### 4 Validate



# ATT – Titanium Security

Titanium® is a 3-in-1 security solution for packaging and labelling

## Authenticate products with copy-sensitive code Seal Vector®

Printed at the highest resolution possible, Seal Vector® deteriorates when copied, making it possible for brand agents to detect fake products with a smartphone and optical adaptor

## Ensure the identification and traceability of each product

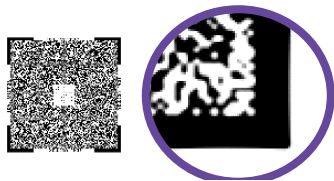
With a unique serial number and QR code. Titanium® meets international standards and is compatible with all 2D-code based traceability software. With unique identification, brands can follow their products, detect and deter parallel markets

## Inform customers & promote products

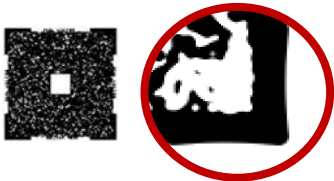
When scanning the QR code, one can check the serial number and customized signature of each product.

Optionally, brands can generate a mobile website for mobile marketing and targeted operations

Original code



Copy



All elements are generated with ATT Vary.IDs webservice and implemented into the PDF files

For more information, please visit [www.att-fr.com](http://www.att-fr.com)

# FiberTag™, a cost effective solution to produce security labels with HP Indigo

- **What is FiberTag™?** It is a security concept to produce labels with a unique and visible fingerprint impossible to duplicate even by its original manufacturer
- **What is it for?** FiberTag™ are used for brand protection and document security
- **How is it produced?** FiberTag™ are printed on the Fibertracker™ material with any HP Indigo digital press using its serialization capability. After printing, each FiberTag™ is recorded and uploaded to the ProofTag Cerv online platform

## Authentication

FiberTag™ offers online visual authentication through any internet connected device.

FiberTag™ seals are design to prevent tampering

## Track & Trace

FiberTag™ seals are serialized with a 2D code to enable item level track and trace.

## Marketing

Each FiberTag™ is linked to a dynamic presentation page to provide information on the secured item.





Hp Indigo Secure:

Your single trusted technology  
provider  
for Brand Protection printing





Thank You