

The AUTHENTICATION Times

The Official magazine of Authentication Solution Providers' Association (ASPA)

COVER STORY

**Healthcare:COVID-19:
Supply Chain
Challenges, Risks,
Lessons, and
Importance of
Securing Vaccines
from Fakes**

CASE STUDY

**COVID-19 Pandemic:
3M Fighting
Respirator Fraud,
Counterfeiting, and
Price Gouging**

SPECIAL REPORT:

**Authentication &
Traceability
acquisition of 2020**



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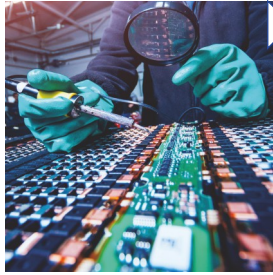
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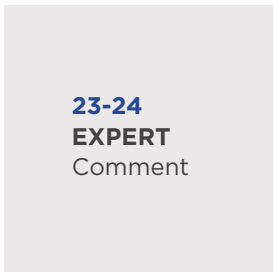
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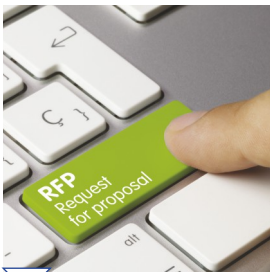
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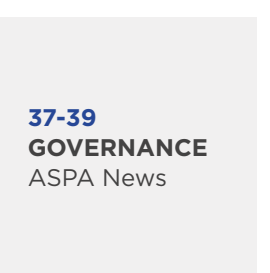
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About The Authentication Times

The Authentication Times is the official magazine published by Authentication Solution Providers' Association (ASPAs). The publication offers in-depth analysis, news, research, article, and expert opinion on the latest developments on Anti-Counterfeiting, Brand Protection, Serialization and Traceability in and out of India. The editorial team welcomes news, contributions, and comments. For further information, subscriptions, contributions, and advertisement, please email your submission at vikram@aspaglobal.com

Editor's Corner



Dear Readers,

Welcome to the 39th edition of The Authentication Times.

We hope all our readers are doing well, staying healthy and safe.

2020 had come with challenges for all of us. A year on from the first known case of COVID-19, the world has been hungry for good news. This

month, vaccine makers have provided welcome nourishment.

While various distribution challenges are lying ahead for transportation including temperature, humidity compliance, shock prevention, Supply chain integrity may seem like an obscure part of the pandemic-ending effort, but it is a critical component of vaccine acceptance globally.

Without preparation for the quality assurance of diagnostic tests, drugs, and vaccines, the world risks a parallel pandemic of substandard and falsified products. Interventions needs globally to ensure access to safe, quality-assured, and effective medical products on which the world's population will depend.

We need to be alert and pro-active as this issue is not a new one. Substandard drugs are driven by cost reduction, whereas falsified agents (because of fraud) thrive on shortages, particularly when buyers depart from regulated supply chains. Panicked global populations are desperate to procure products that might prevent and treat COVID-19.

The current cover story focuses on this issue and summarizes the importance of securing vaccines and other personal protection equipment from fakes. From this edition, we are also starting a dedicated section providing the financial health of companies in the industry to understand industry pulse.

Apart from it, readers will also find an update on anti-counterfeiting policy measures taken by authorities across the globe, counterfeit seizure reports, industry trends, and analysis. It also covers a case study on How 3M fighting counterfeits and a special report on merger and acquisition happened in the authentication industry in 2020.

Hope you will find this issue informative and interesting and as always, look forward to receiving your feedback. If you have any news, contributions, or comments for the editorial team, please email us at info@aspaglobal.com

We wish all our readers Merry Christmas and Happy New Year 2021 in advance. May the New Year bring you happiness, peace and prosperity.

Sincerely,
Chander S Jeena
Editor, The Authentication Times



COVID-19:

Supply Chain Challenges, Risks, Lessons, and Importance of Securing Vaccines from Fakes

“The distribution of a COVID-19 vaccine will pose challenges including supply chain security, product verification, falsified vaccines, theft, hijacking and illegal product diversion”

While emergency efforts are underway to find optimum medical products and vaccines to prevent infection and diagnose and treat patients during the COVID-19 pandemic, new crime trends have alarmed stakeholders globally.

The COVID-19 pandemic had already threatened a global surge in substandard and falsified medical products essential for COVID-19 treatment. Production and supply chains for COVID-19 candidate drugs (such as chloroquine and hydroxychloroquine), and many other essential medical products, are being impaired by this crisis. However, the development and manufacturer of a prophylactic is just the start of a process. There are further significant challenges to rule out in the safe distribution of this precious commodity. While vaccine R&D is underway, this give us an important time to plan for its distribution.

RISKS – Issue of Supply Chain, Falsification, Theft and Hijacking

The distribution of a COVID-19 vaccine will pose challenges including supply chain security, product verification, falsified vaccines, theft, hijacking and illegal product diversion.

According to recent story published in The Wall Street Journal, the vaccine makers such as Pfizer Inc. are deploying GPS software for tracking distribution and plotting fake shipments in dummy trucks to confuse criminals. Glassmaker Corning Inc. is equipping vials with black-light verification to curb counterfeiting. Some hospitals expected to be among the first vaccination sites are beefing up their pharmacy's security systems¹.

The goal, industry and health officials say, is protecting the shots against professional thieves who have a long history of targeting valuable medicines, and have pilfered COVID-19 tests, masks and other personal protective equipment during the pandemic. Over the past five years, world-wide incidents such as theft and counterfeiting of pharmaceutical products rose nearly 69%, according to the Pharmaceutical Security Institute, a trade group².

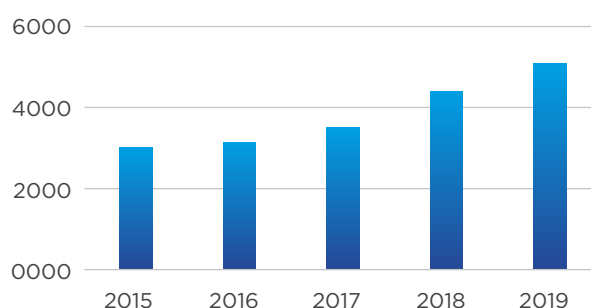
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Vaccine makers are deploying GPS software for tracking distribution and plotting fake shipments in dummy trucks to confuse criminals. Glassmaker is equipping vials with black-light verification to curb counterfeiting.

Source: Wall Street Journal

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Annual pharmaceutical counterfeiting, illegal-diversion and theft incidents



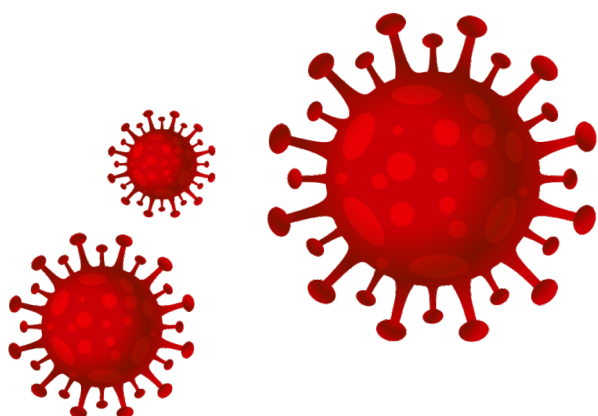
Source: The Pharmaceutical Security Institute

These concerns are justifiable and genuine, as from time to time various enforcement authorities had issued global alerts in last few months by including the USA FDA, WHO, Interpol and CBI in India. In March-April 2020, Homeland Security in the USA identified 19,000 suspect COVID-19 related domain names and seized over \$3.2 million linked to 494 shipments of “mislabelled, fraudulent, unauthorized or prohibited COVID-19 test kits, treatment kits, homeopathic remedies, “purported antiviral products and PPE”. 6.5 million products with inaccurate claims have flagged by online retail giant Amazon³.

Falsified Medicines Illicit Trade Continues Today

History provides us with warnings. Quackery was rampant during the Great Plague of the 17th century. When cinchona bark became the treatment for malaria in the 17th century, they adulterated it on a vast scale. After World War 2, penicillin shortages led to widespread falsification. Reserving penicillin for British and US soldiers in post-war Berlin created a lucrative illicit trade⁴.

Substandard drugs (because of production or supply chain errors) are driven by cost reduction, whereas falsified agents (because of fraud) thrive on shortages, particularly when buyers depart from regulated supply chains. Panicked global populations are desperate to procure products that might prevent and treat COVID-19. When chloroquine was used for malaria treatment, falsified versions were common. Paracetamol is at risk; in the past, nephrotoxic substandard and falsified paracetamol syrup caused hundreds of deaths.



“Over the past five years, world-wide incidents such as theft and counterfeiting of pharmaceutical products rose nearly **69%**, according to the Pharmaceutical Security Institute, a trade group.”

“Substandard drugs are driven by cost reduction, whereas falsified agents thrive on shortages, particularly when buyers depart from regulated supply chains.”

There are ample recent examples alarming the situation.

- **October 2018, China:** A Chinese vaccination firm was fined \$1.3bn (£988m) after it was found to have illegally produced the human rabies vaccine. The company also falsified production data for the vaccine. It was estimated that over 200,000 children could be affected.⁵ Many of these vaccines had been exported to several countries, including India.⁶ This was not the first-time substandard vaccines had been produced in China. In 2016, an illegal vaccine ring was uncovered in Shandong. Some \$88m worth of vaccines were found to be inadequately refrigerated and were not transported in approved conditions.
- **December 2018, Philippines:** A large, tertiary, university-affiliated hospital in the Philippines discovered that their legitimate supply chain was infiltrated with counterfeit rabies vaccines (Verorab®). The incident happens subsequently, as the Philippine Department of Health (DOH) faces a global shortage of supply.⁷
- **May 2020, South America:** In May 2020, fake Israeli coronavirus vaccine being sold in South America.⁸
- **September 2020, India:** Odisha's drug enforcement agency arrested a man on charges of trying to sell fake COVID-19 vaccine in Bargarh district. They found the accused preparing vials with COVID-19 vaccine stickers on them.⁹

Without preparation for the quality assurance of diagnostic tests, drugs, and vaccines, the world risks a parallel pandemic of substandard and falsified products. Interventions needs globally to ensure access to safe, quality assured, and effective medical products on which the world's population will depend.



Image: Substandard vaccines produced in China



Picture: Vials seized by Odisha drug enforcement agency,
Source: <https://www.hindustantimes.com/>



Source: Picture: Fake MIGAL Covid-19 vaccine, <https://www.jpost.com/>

Ensuring the Safe Delivery, Quality and Traceability

While, various distribution challenges lying ahead for transportation including temperature, humidity compliance, shock prevention, Supply chain integrity may seem like an obscure part of the pandemic-ending effort, but it is a critical component of vaccine acceptance globally. The illegal activities are shocking and shows criminals crossing a moral line, but, in the greed and new society we cannot expect that everything will be under moral values and must be prepare ahead with technology solutions already available in market.

Protecting COVID-19 vaccines and other essential products from falsification and diversion require cutting edge authentication and traceability solutions, public-private collaboration, and national level support. One way everyone can prevent falsified products entering their supply chain is to put in place a robust authentication and traceability mechanism. Brands should contemplate putting in place a comprehensive anti-counterfeiting system that starts with training staff to spot and test for counterfeit products, buying only from trusted sources, monitor the flow of goods, and report the entry of fake goods into the supply chain.

Ideally, they must adopt key consideration as follows.

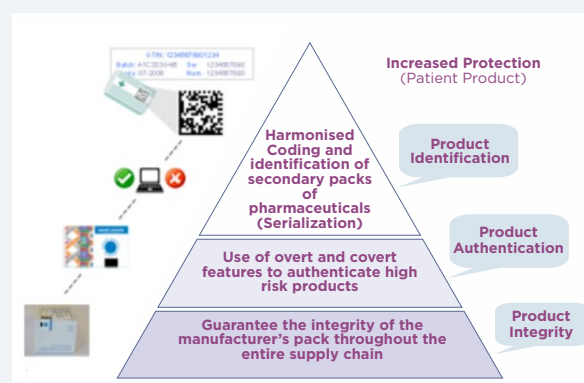
- Adopt combination of authentication & traceability solutions to eradicate tampering chances and securing supply chain integrity.
- Engage consumers to verify product authenticity with user verification applications.
- Register their trademarks with custom agencies.
- And last but not the least, training staff in anti-counterfeiting practices.

A contingency plan should always be ready to alert customers, suppliers, the authorities, and the public in case the falsified products discovered in the supply chain.



Sanofi CSR: Ensuring medicines authenticity and traceability

Sanofi a global pharmaceutical leader had adopted several methods to ensure the quality of medicines by taking a layered (three-level) approach to pack protection.



Level 1: Protecting integrity and inviolability of pack: Tamper-evident packaging to reduce the risk of violating the integrity of the original manufacturer's packaging is in place on many products (secondary packaging boxes, bottles or syringes). Sanofi decided to take a voluntary position, implementing tamper-evidence for all products included in the scope of its serialization program. While in some countries, such as the United States, this goes beyond strict regulatory requirements, for Sanofi it represents an additional means of ensuring patient safety.

Level 2: Authenticating the product: Authentication of the product uses a specific label known as the Sanofi Security Label (SASL). It contains the means for visible verification (by distributors and patients) as well as invisible verifications (which are known only by Sanofi).

Level 3: Identifying each box with a data matrix code: A code printed on the secondary packaging contains unique identification information (product code and serial number) in addition to traceability data (batch number and expiration date)

Source: Sanofi¹⁰

Turning crises into opportunity

Currently, 75 percent of world has adopted Serialization including the USA, EU, Turkey, Russia, Gulf Countries, and India (for exports) which is going to help the pharmaceutical industry tracking medicines throughout the supply chain. It is possible to track each batch number and ensure authenticity and source of supply.

While we (India) have made great strides toward requirements for exports, laid out in early 2011, the proposal for domestic market is still pending for the last 5 years. If that would have implemented in last few years, we would have been in better position ensuring safe, quality, and genuine to our citizens at this panic situation. India is a member State of WHO policy group on eradicating falsified medicines and products, and this is the right time to show the global world our commitment towards high quality products. Emergency responses require pragmatic, agile and well-coordinated action. Done right, the COVID-19 response will leave a legacy for safe and more efficient medicine supply chains for a longer-term benefit.

As a nation, we have survived many lethal epidemics, and need to learn a lesson from the current crisis to build a healthy and prosperous nation. While the corona warriors are playing their vital role, as society, we also need to develop habit of handwashing, coughing or sneezing in handkerchief, social distancing, stoppage of spitting in public places and ensuring what we buy is genuine. At the end, we all need to stand & prepare society together to fight this pandemic.

“

Protecting COVID-19 vaccines & other essential products from falsification & diversion require cutting - edge authentication & traceability solutions, public private collaboration & national level support.

”

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Safe Aviation: Aurora Airlines to assure Passenger Health with SICPA CERTUS™ myHealth Pass

Aurora Airlines (part of Aeroflot Group) has signed an MOU with SICPA SA to put in place a highly secured COVID-19 test verification system to ensure the health of passengers and staff.

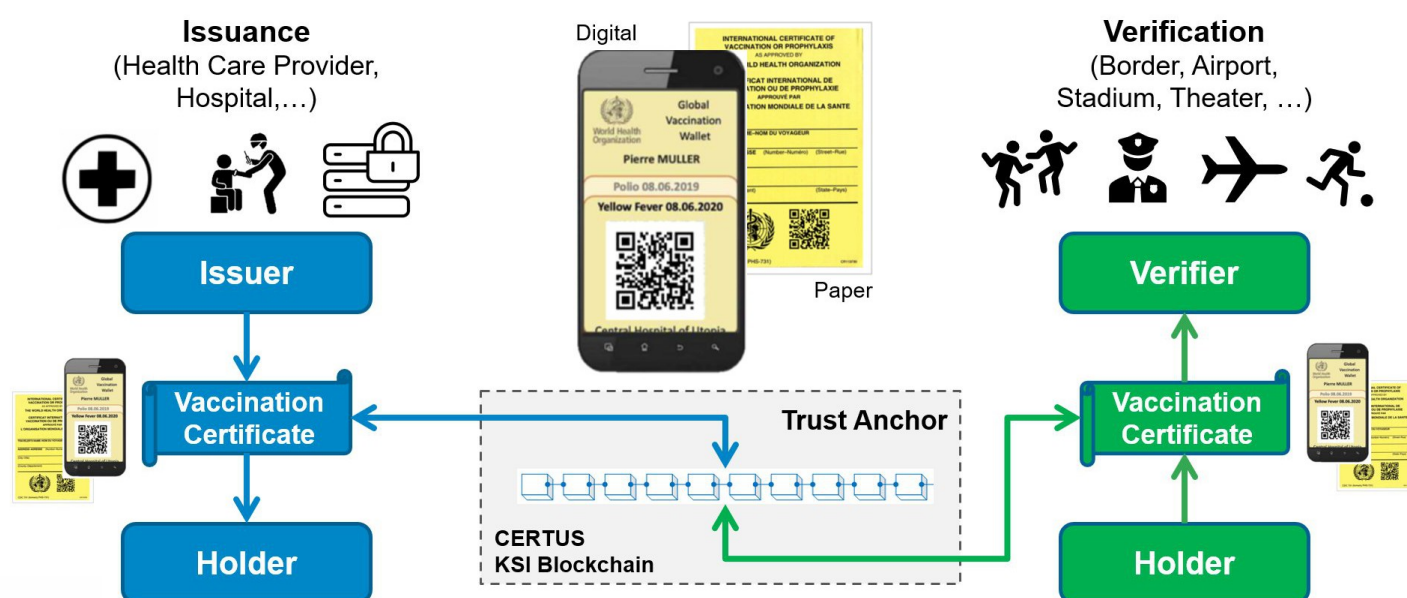
Working closely with local authorities, Aurora will promote the introduction of pre-flight testing for COVID-19 up to 72 hours before departure. They have reached agreements with a range of laboratories, including KDL and Helix, to undertake the tests.

The test data will be secured and made available for verification by necessary authorities through the

Certus™ myHealth Pass solution provided by SICPA. The solution is ready to operate immediately.

CERTUS myHealth Pass provides secured proof of test status in both digital and material form. The technology is secured digital seal, based on the Guardtime KSI Blockchain.

"The system we are putting in place will allow a safe travel experience and better service for our passengers. This will be the first highly secured system to be implemented in our sector and we are proud to be leading the way," said Konstantin Sukhorebrik, CEO of Aurora Airlines.



The example of Vaccination Certificates -
Deploying distributed ledger technology without compromising health data privacy

WHO Draft Policy-Paper brief on Traceability of Medical Products

The World Health Organization has published a policy document on traceability of medical products. The draft is intended for review by Member States and all interested parties for the purpose of consultation.

Background

In recent years, Member States have called on the World Health Organization (WHO) to facilitate the exchange of experiences, lessons learned, and information gained about traceability technologies, methodologies, and models. The publication is a consequence of WHO's pledge to develop a 'mechanism' to tackle substandard and falsified medicinal products, which has prioritized work on traceability as part of a drive to publish global framework or guidelines for member states. A global framework or guidelines have however yet to be developed. It is an attempt to outline the key features of existing traceability systems for health products and to provide guidance on the

development of regulations in this area among WHO member states.

Member States contributed

19 member states, International Coalition of Medicines Regulatory Authorities and the European Directorate for the Quality of Medicines participated as members of the working group.

It should be noted that this work is being conducted in parallel with the planned guidance developed by the International Coalition of Medicines Regulatory Authorities (ICMRA) on interoperability of T&T systems. The mapping of the existing national or regional traceability systems and the glossary attached to the WHO Policy Brief will be developed and fully identical for both WHO and ICMRA guidance.

Scope - What it covers

It covers medicinal products, including vaccines and drugs, but doesn't extend to raw materials such as active pharmaceutical ingredients (APIs) and excipients that are used to make drugs, medical devices in vitro diagnostics, blood and blood products (except plasma-derived medicinal products which are medicines), organs, tissues and cells, personalized medicines, traditional medicines (except

those registered as medicines), food supplements and veterinary products.

While this policy paper outlines the key features of existing traceability systems and provides guidance on developing workable regulation, it does not presume to tackle all aspects of traceability in depth. While some countries are already implementing traceability systems, the WHO hopes its document will avoid variation in the requirements and standards deployed. It serves more than a starting point for Member States in their regulatory and implementation efforts.

Readers can access the full document with the link

<https://www.who.int/publications/m/item/policy-paper-on-traceability-of-medical-products>



WHO African Region	WHO European Region	WHO Eastern Mediterranean Region	WHO Regions of the Americas	WHO South East Asia Region	WHO Western Pacific Region
Benin	Russian Federation	Iraq	Argentina	India	Republic of Korea
Ethiopia	Spain		Brazil	Indonesia	
Kenya	Ukraine		Chile		
Liberia			Mexico		
Mozambique			United States of America		
Nigeria					
United Republic of Tanzania					

Table: List of member States

Olam confirms 100% Cocoa Sourcing Traceability in its Supply Chains

Olam Cocoa, a leading supplier of cocoa beans and ingredients, announces achieving 100 percent traceability of directly sourced cocoa across its global supply chain, a commitment first stated five years ago. This means the company can now track approximately 12 percent of the world's cocoa beans back to an individual farm or community.

This is the first significant milestone for Cocoa Compass, Olam Cocoa's sustainability ambition for the future of cocoa. In a progress update published, the company confirmed it is on track to meet its targets. These include a commitment to achieving 100 percent deforestation and child labour

monitoring across all managed sustainability programmes worldwide in its direct supply chain by the end of 2020.

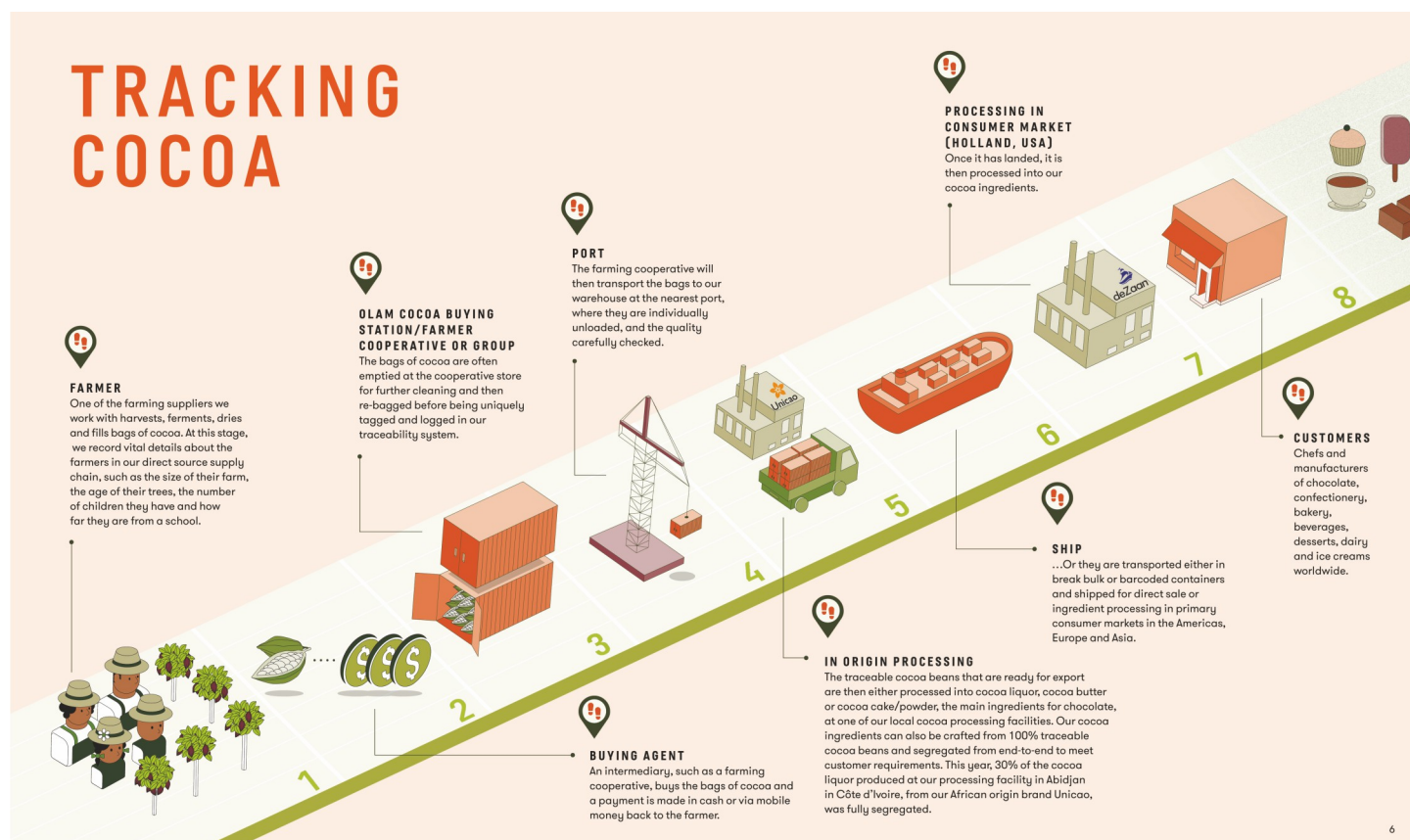
To achieve 100 percent traceability, Olam Cocoa has developed an end-to-end traceability system which tracks the cocoa at every stage in the direct supply chain across nine countries. By collecting data such as farm and community metrics, cocoa bean purchasing and transportation information, and details on the facility where the cocoa is process, it can provide unprecedented transparency for customers and allow sustainability programmes targeted at tackling child labour and deforestation to tailor to the specific needs of farmers and cocoa-growing communities.

This builds on insights from existing tools, namely the Olam & Farmer Information System (OFIS), which feeds through to Olam's sustainability insights

platform, At Source. A dashboard shows where the cocoa beans have come from, as well as the social and environmental impact they have had on their journey from source to manufacturer.

Over 325,000 cocoa farmers across Asia, Africa and South America are now using Olam's sustainability technology to share their data in this way.

Source: <https://olamgroup.com/>



Source: Olam

UAE to launch 'Tatmeen' Platform to Secure Healthcare Supply Chains

The Ministry of Health and Prevention (MoHAP), United Arab Emirates has announced the development of a new digital platform "Tatmeen", a track-and-trace platform for the country's healthcare sector to fortify and secure healthcare supply chains.

As a first for the region, "Tatmeen" will use advanced serialisation and tracing technology to track medicines from production to end-use. MoHAP is partnering with EVOTEQ, a UAE-based digital solution provider for the development and operations of the platform.

The solution will enable tracking of pharma products through their journey in the supply chain on a single integrated digital platform, promoting trust and transparency in the healthcare industry from end-to-end. It will also help MoHAP tackle challenges such as counterfeit or expired medical supplies and unauthorised products.

Regulatory authorities will use "Tatmeen" to assist them in their mission to prevent the entry of counterfeit or unauthorised medicines into the country using a web portal and mobile.

The platform will also empower consumers to be able to verify products at the point of purchase allowing them to avoid unapproved and counterfeit medicine, providing visibility on product origins, safety, and validity through a unique, serialised 2-D matrix bar code.

AwadSaghir Al Ketbi, Assistant Under-Secretary of the Support Services for MoHAP stated that "Tatmeen" is based on an advanced track and trace product for pharmaceuticals which will serve as the core serialisation repository. With the use of advanced technology and standards, the solution will ensure greater accountability from participants in the healthcare supply chain and speed up our ability to trace drugs at every point of the supply chain.

Mubarak M. Ibrahim Director of Information Technology for MOHAP, noted that Tatmeen will be built using best technology components which will enable speed of transaction processing, agility to change and adapt to new scenarios and deliver a highly secure mechanism to trace drugs from point of manufacture to the point of consumption.

The platform will be designed considering the future needs of the UAE healthcare market and integrated with the existing services provided by MoHAP.

Source: Emirates New Agency
<https://wam.ae/en>

Spain: More Olive Oil Firms Turn to IBM to Tackle Fraud with Blockchain

More olive oil producers have signed up with IBM's blockchain-driven Food Trust to protect their brands from counterfeiting and food fraud, and to provide traceability for their customers.

Conde de Benalua, a cooperative in Spain made up of over 2,000 farmers, and Rolar de Cuyo, an olive oil supplier in Argentina, are

the latest sign-ups to the platform, which is also being used by CHO of Tunisia's Terra Delyssa brand olive oil and Italy's I Potti de Fratini.

IBM Food Trust is based on QR codes placed on the labels of products, linked to a blockchain back-end that operates on the cloud. Scanning the code allows consumers to trace production from the groves where the olives were grown and the mills where they were processed into oil, to the stores where it is sold.

Producers meanwhile can get the benefit of a permanent, unchangeable record of transactions as each bottle of oil travels through the supply chain that can be shared between partners and according to IBM can "help ensure the freshness of food, control storage times and reduce waste."

Counterfeiting and fraud is a big problem for the \$16bn-a-year olive oil industry.

Counterfeiting and fraud is a big problem for the \$16bn-a-year olive oil industry, with some studies claiming that between 60 and 90 per cent of olive oils sold in the US are adulterated with cheaper pomace oil or oils from other plant species such as sunflower, canola and peanut.

Last year, an Europol - coordinated operation resulted in the seizure of 150,000 litres of low-quality oils that had been

adulterated with colourants to make them appear like extra virgin olive oils, with 20 arrests made. The scam estimates to have netted the network around \$9m.

IBM says that consumers are increasingly interested in being able to check the origin of products, citing a study by its Institute for Business Value unit which found that 73 percent of consumers will pay a premium for full transparency into the goods they buy.

Chris Fowler, sales manager at CHO America, says that its Terra Delyssa brand of premium olive oil has seen a spike in demand since bottles of traceable olive oil reached store shelves earlier this year.

“Consumers in the US and Canada can now buy Terra Delyssa in over 10,000 grocery stores and online platforms, with more retailers adding Terra Delyssa’s premium, traceable olive oil to their shelves,” he added.

Rising demand in early January helped CHO expect a spike in sales because of its new consumer traceability app, according to the company. That meant supply chains had ample products on store shelves throughout the pandemic, during which time demand rose 30 percent because an increase in consumers cooking at home. CHO says it is now working on creating a separate enterprise application for distributors and retailers that will provide processing information, such as whether a product is first cold-pressed, extra virgin or organic.

Source: <https://aithority.com/>

Tanzania Rolls Out Electronic Tax Stamps on all Soft Drinks and Bottled Water

From November 1, 2020 onwards electronic tax stamps will now be installed on fruit or vegetable juices and bottled water confirmed by Tanzania’s Revenue Authority (TRA).

Tanzania Revenue Authority (TRA) conducted the first phase of the ETS rollout on January 15, 2019 whereby electronic stamps were installed on 19 companies that produce alcohol, wine and spirits.

The second phase which involved soft and carbonated drinks and bottled water, was rolled out on August last year. However, TRA late last year said that with a huge number of manufacturers involved in the manufacturing of soft and carbonated drinks and bottled water, it was its (TRA’s) view that some of them would require training to understand the pros and cons of electronic

stamps. In what explains that the training and planning processes have been completed and that the ETS was ready for rollout.

Using Electronic Tax Stamps (ETS) for excisable goods have contributed to a 34 percent increase in revenue collected on branded products.

Source: <https://allafrica.com/>



Canada: Nouveau Monde Drives Traceability for Critical Battery Materials, with Global Battery Alliance

Québec Minister of Energy and Natural Resources Jonatan Julien kicked off the pilot project on battery materials traceability for which Nouveau Monde Graphite (“Nouveau Monde” or “the Company”) has been selected as the sole and strategic battery material partner. Having an integrated business model, from mining operations to manufacturing of carbon-neutral anode battery materials, the Company is ideally positioned to drive the implementation of the Global Battery Alliance’s (“GBA”) Battery Passport principles guaranteeing the traceability and sustainability of strategic minerals.

Founded by the World Economic Forum, GBA is actively working to develop a circular and responsible battery value chain as one of the key drivers for achieving the 2°C aim of the Paris Accord in the transportation and energy sectors. Membership includes key manufacturers, regulators, and NGOs such as Audi, BMW Group, Google, Groupe Renault, Honda Motors, the International Energy Agency, LG Chem, Microsoft, Mitsubishi Corp., Propulsion Québec, Saft, SK Innovation, the United Nations Environment Programme, Umicore, Volkswagen, Volvo Group.

“The mineral traceability project in the battery sector is an initiative that fits perfectly with our vision for the development of strategic and critical minerals

(“SCM”) in Québec. Consumers are increasingly concerned about the origin of the products they purchase. A reliable traceability program becomes a pledge of our responsibility in the valorization of SCMs and a strategic advantage to be even more competitive. These are essential ingredients to ensure a sustainable energy and technology transition” said Jonatan Julien, Minister of Energy and Natural Resources and Minister Responsible for the Côte-Nord Region.

Eric Desaulniers, President and Chief Executive Officer at Nouveau Monde, commented: “The production of graphite-based materials with a carbon-neutral footprint is already central to Nouveau Monde’s business strategy to drive sustainability across the EV and energy storage value chain. Now, with our roadmap to traceability and battery identity, we are positioning ourselves as the western leaders thanks to turnkey solutions for manufacturers.”

Traceability for increased sustainability and access to Strategic Markets

The Battery Passport is set to become the dominant norm attesting to the environmental and social compliance of a battery throughout its value chain. By contributing to the definition of global parameters for materials traceability, Nouveau Monde gets a head start in

tailoring its transformation chain, technologies and reporting mechanisms to meet the expectations of today’s marketplace.

In recent years companies such as Tesla and Volkswagen have adopted responsible sourcing policies and auditing systems, a clear sign that pressure for sustainable production is increasing from shareholders, consumers, governments a, environmental and social advocacy groups. Correspondingly, the European Commission will table new regulations to ensure that batteries manufactured or imported into Europe meet the highest ESG standards.

Nouveau Monde’s traceability program will therefore strengthen its competitive advantage and facilitate commercialization in strategic markets, in some cases with a premium for its advanced materials, and also contribute to strategically positioning Québec and Canada as a prime destination for building a green battery value chain.

This GBA-affiliated project brings together resources and expertise from the Government of Québec, the Government of Canada, Investissement Québec, CIRAIG, OPTEL Group, and Propulsion Québec.

Source: <https://nouveaumonde.ca>



Costa Rica and Australian Polymer Banknotes Features KINEGRAM REVIEW and ZERO. ZERO



Image: KINEGRAM ZERO. ZERO registered stripe on new Australian banknote series

Recently, two Central Bank, The Banco Central de Costa Rica (BCCR) & Australian Reserve Bank issues their new Polymer banknotes featuring KINEGRAM REVIEW & ZERO. ZERO technology. While Banco Central de Costa Rica (BCCR) issues its new 20,000 colones featuring KINEGRAM REVIEW foil stripe applied over the transparent window, Australia new \$100 banknote feature KINEGRAM ZERO. ZERO a top-to-bottom transparent window with a registered foil stripe applied on top, which can view from either side of the banknote.

While KINEGRAM REVIEW shows different diffractive images seen from the front and from the reverse. For example, the foil can display a diffractive portrait on the front of the note and a patterned image of the denomination on the reverse. KINEGRAM ZERO. ZERO technology gives the designer complete freedom in placing the metallised areas of a KINEGRAM security feature. Ultra-thin metallised lines or lines brilliantly glowing and solid areas in any shape can be designed without limits and thus offer optimal integration into the document.

Source: <https://www.kinegram.com/>

Watermarks and Intaglio remains key Security Features on Banknotes

Increasing the number of security features does not necessarily reduce counterfeiting

Traditional banknote security features, including watermarks and intaglio printing, remain the most popular anti-fraud elements featured on banknotes around the world. A total of 91 percent of currency managers use watermarks to help the public identify their banknotes; while just under 95 percent of respondents use intaglio printing, according to the 34 respondents to this section of Currency Benchmarks 2020. Many central banks are also embracing other technological elements for banknote security. It is to be noted that Watermark is one of the oldest security feature in use since 13th century.

Source: www.centralbanking.com



Image: Watermark with the face of Europa on the new 50 euro banknote

Security features such as the hologram, watermark and microtext are the same as on the old banknotes, but new features have also been added.

Danmarks National Bank Issued New Secure Banknotes

Danmarks National bank has issued new, updated 500-krone banknotes. The new banknotes are very similar to the existing banknotes, but with a few minor differences. The other denominations will follow in the coming years. Some security features such as the hologram, watermark and microtext are the same as on the old banknotes, with new added security features such as more visible window thread, hidden security thread and tactile marks. The new editions of the banknotes are the result of Danmarks National bank's decision in 2014 to close its printing press and outsource the printing of banknotes. The usage of cash is declining in country and in 2018, it was among the top twelve EU member states with the most cashless payment transactions, and third in terms of most cashless transactions among the Nordic countries, after Sweden and Finland.

Source: <https://www.nationalbanken.dk/>

Schreiner ProTech Develops RFID Component Tracking Label

Autoliv incorporates customized version of Schreiner ProTech's ((rfid))-Poly-Track label for in-line data acquisitions and product authenticity.

Schreiner ProTech, a Germany-based global leader in developing and manufacturing innovative functional labels with value-added benefits for the automotive and engineering-based industries, developed RFID labeling solutions

enabling fully automatic component data acquisition during the automotive manufacturing process, as well as authenticity via tamper-evidence for longer-term product verification.

In automotive manufacturing, typically all components are marked to ensure authenticity and traceability. Barcodes are frequently used to document relevant component information, but reading them often is difficult. For example, items such as airbags are frequently installed in areas difficult to access by handheld readers or camera inspection stations.



With RFID technology, component information can be read automatically, with antennas installed at the assembly line reading and documenting pertinent per-item data as component travel between stations. Recently, Autoliv – the world's largest automotive safety supplier – began equipping its driver-side airbags for Volkswagen with a labeling solution from Schreiner ProTech's ((rfid))-Poly-Track product family.

Source: <https://www.schreiner-group.com/>

XRD Announces UV Casting Tooling, Machines, and Chemicals for Authentication Industry

Customized secured tooling depth structures from 50 nm to 12 microns deep

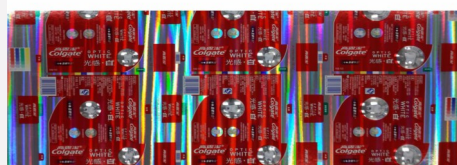
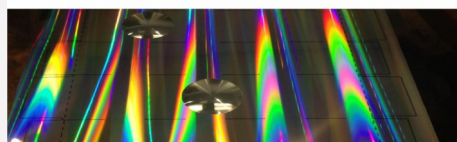
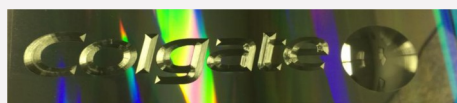


Image: Colgate



Multiple fresnel lens & entire taxcode of the state is in nano text. The image is being used for information purpose only.

UK: Cambridge based XRD Nano announces solutions for authentication and packaging industry. They base it on creating unique tooling and replicating these deep structures. It is offering a pre-press system, UV casting machine, Tooling and Chemical formulations.

According to Guri Dhillon, Sales Director of XRD Nano, "Hologram manufacturers in India have been using thermal embossing for mass replication of security holograms. The surface profile in a diffraction-based hologram master has a maximum structure depth of 400 nanometers. This technology though common has several limitations as it is unable to replicate deep structures which

limit the effectiveness of the end product from counterfeiting; Significant loss of information occurs from mastering to embossing process because the use of heat and pressure. Furthermore, inconsistency in replication, low brightness, low contrast is there due to use of shims".

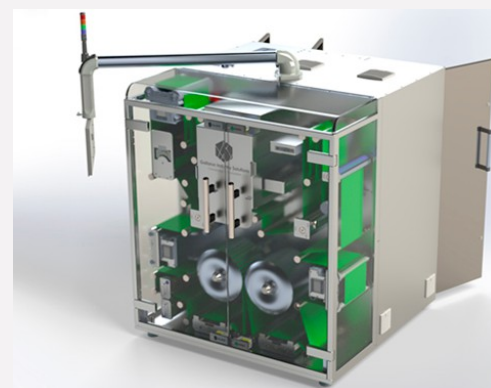
For an effective authentication label or packaging, master, which we will refer to as Tooling should have deeper structures such as Fresnel lens, linear lens and more. The thought is that the Tooling should not be easily available, thus making the product very secure. Typically, this kind of Tooling is made by combining the features of Diamond Turning, Electron beam lithography, Direct laser writers, Diffraction, FIB and other proprietary methods. This Tooling has a different depth of structures on its profile. It could vary from 50 nanometers deep to 12 microns of depth or more. For combining their varied depth of structures together, UV recombination along with seamless cylinder technology and machines are required and one would require the chemical formulations to Mold and Demold smoothly to prevent any loss of information."

XRD Nano's vision is to develop complex Tooling such as colour control, colour switch, Fresnel lens, linear lens, microlens array, Deep engraved, Etched high security patterns, lenticular, cost-effective UV casting machines and matching chemistry for their clients. For information on Products and Prices visit <https://www.xrdsnano.com/products>

Source: www.xrdsnano.com

Domino Launches New Variable Data Printing Solution for Pharmaceutical Applications

Domino Printing Sciences announce the launch of the new K600G – an innovative new blister foil and web digital Printing solution for product-level serialisation in pharmaceutical applications. Developed in collaboration with Gallarus, and with engagement from life science industry experts SeaVision, the K600G is a high-resolution, digital printing solution promises to meet the needs of pharmaceutical manufacturers now and in the



future. The K600G is capable of printing at speeds of up to 75 metres per minute and print widths range from a single print module, covering 108mm (4.25"), up to seven dual print modules with a combined width of 782mm (30.81"). The smart i-Tech StitchLink micro-motor provides accurate print head alignment and image stitching to achieve seamless printing across a full web print width.

Source: <https://www.domino-printing.com/>



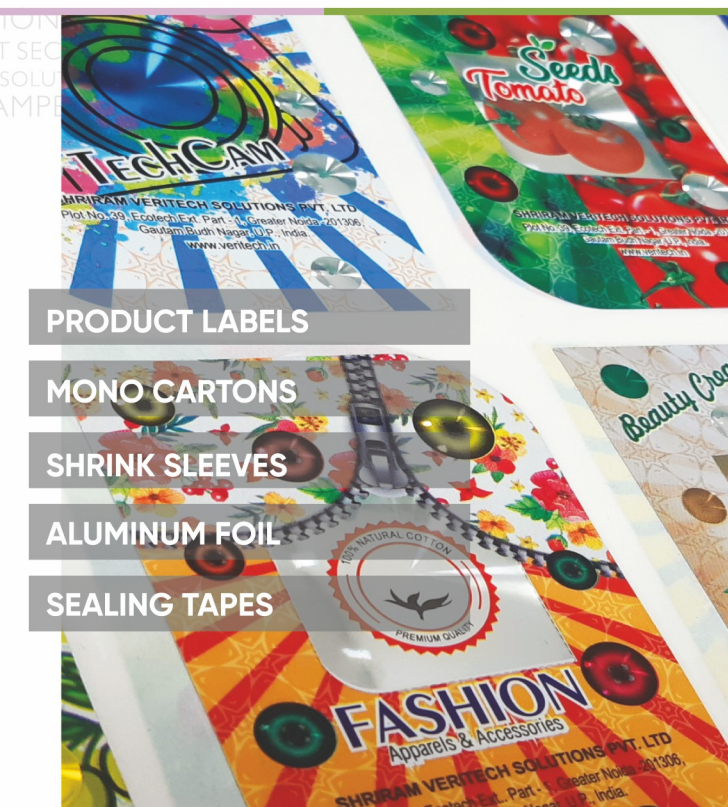
Visible Protection, Invisible Security.

Shriram Veritech needs no introduction when it comes to brand protection solutions. Our continuous innovation and advancements in technology have enabled us to create world class, state-of-the-art **Brand Security, Packaging** and **Digital Solutions** that protect against the threat of counterfeiting throughout your supply chain.

PACKAGING SOLUTIONS

Product packaging is one Veritech's core strength areas, with a formidable range of materials, inks, finishes and designs. Our premium packaging solutions can complement any product and greatly enhance its shelf appeal.

Veritech also has the technology to integrate holographic counterfeiting and tamper security features with packaging, thereby serving the dual purpose of brand enhancement and brand protection at the same time.



PRODUCT LABELS

MONO CARTONS

SHRINK SLEEVES

ALUMINUM FOIL

SEALING TAPES

SECURITY SOLUTIONS

Veritech is committed to fighting the global menace of counterfeiting with its highly secure holograms and holographic products. Employing some of the most advanced holography and printing technologies in the world, we can integrate virtually unlimited security features in our products that are impossible for counterfeiters to replicate.

HOLOGRAMS

TRANSFER FOILS

SECURE LABELS

HOLOGRAPHIC PRODUCTS

DOCUMENT SECURITY



DIGITAL AUTHENTICATION

TRACK & TRACE

DIGITAL SOLUTIONS

Veritech's Digital Solutions give unparalleled protection against counterfeiting at each and every level of the supply chain, and enable your end-customers to quickly and easily verify the authenticity of any product.

A powerful and unique combination of physical security products integrated with robust digital security, our digital security solutions are the future of supply chain management & traceability.

SHRIRAM VERITECH SOLUTIONS PVT. LTD.
PLOT NO. 39, ECOTECH EXTENSION, PART - I
GREATER NOIDA - 201 306, GAUTAM BUDH NAGAR (U.P.), INDIA.
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COVID-19 - Crisis for Humanity, Opportunity for Counterfeiters

Maharashtra: Counterfeit masks using leading brand's name major concern for manufacturer; cases, raids in many cities

"Counterfeited masks hold public health concern. The masks seized during raids were of inferior quality cloth with no quality checks to ensure they prevent exposure from virus"

One of India's leading mask manufacturers Venus Safety and Health Private Ltd has issued at least 38 legal notices during the COVID-19 pandemic to owners of manufacturing units that produce counterfeit masks using the company's brand name. As demand for masks continues in the pandemic, counterfeiting has remained an issue of concern.

"Everyone is making money in our name. The local manufacturer, distributor and retailer selling the mask," said Mahesh Kudav, managing director of Venus. The company has registered seven cases where over 47,000 fake masks have been retrieved through police raids, and FIRs have been lodged across Delhi, Ghaziabad, Bengaluru, Kolkata, and Mumbai.

Counterfeited masks hold public health concern. The masks seized during raids were of inferior quality cloth with no quality checks to ensure they prevent

“Mask is not a very well-regulated product. For a chemist to differentiate between a fake and an original mask is difficult”.

exposure from virus. Instead of meltblown non-woven fabric called polypropylene (which traps dust), small-scale manufactures use a similar-looking fabric to make N-95 masks.

In the latest case on November 3, Sahibabad police in Ghaziabad raided a manufacturing unit and found 7,562 fake masks with the brand name Venus 4400 N-95. The FIR stated the manufacturer had used a white cloth and put a fake Venus seal to sell the masks. The police have named one Amit Mohan as the accused in the FIR. Mohan was a cloth bag manufacturer who bought a machine and started producing masks, selling them under the brand name of Venus and 3M.

Anil Navander, from The Maharashtra State Chemists and Druggists Association, said the number of distributors in the supply chain of masks has shot up during the pandemic. “Mask is not a very well-regulated product. For a chemist to differentiate between a fake and an original mask is difficult. And that is why we prefer buying only branded products. But if it is a counterfeit, then a chemist cannot make out the difference,” he said.

Rakesh Bhagat, director of Magnum Medicare Pvt Ltd, also a mask manufacturer, said he has reported the issue to the Textile Ministry and the Health Ministry. “When we came across cases initially in May, we had warned a couple of manufacturers to refrain copying our brand name,” he said.

Source: <https://indianexpress.com/>

Canada Project Purify Nets Counterfeit COVID-19 Related Goods

Canada: In November, the Canada Border Services Agency (CBSA), Health Canada and the Royal Canadian Mounted Police (RCMP) announced the results of a Government of Canada initiative (Project Purify). They established the initiative Project Purify to enhance the identification, interception and tracking of unauthorized or counterfeit COVID-19 health related products in British Columbia between March 20th and June 30th, 2020.

According to officials, over 380 shipments of unauthorized content or counterfeit COVID-19-related goods were detained at the border, including 48,000 COVID-19 test kits, 4.5 million units of personal protective equipment (PPE), 33,000 prescription tablets and pills; and over 1,500 other intercepts of fraudulent and potentially dangerous products.

Any companies found to be selling unauthorized health products online or in stores in Canada are subject to enforcement action from Health Canada. During its investigation, CBSA officials found some importers did not know the permits and licenses required for shipment to Canada, while others, alleged, were trying to take advantage of the circumstances created by the pandemic.

Smoked Out: Europol Shuts Down Massive Illegal Cigarette Factory in Europe

In last 10 months, Europol has successfully shut down massive illegal factory in Poland, Germany, and Netherlands. Amongst them the illegal factory seized in Germany's and Netherlands were one of the largest illegal cigarettes factories in respective countries. The illegal factory seized in Germany was equipped to produce 40 million cigarettes per month.



Image: illegal cigarette factories uncovered in the Netherlands, courtesy, Europol

According to the European Fraud Office, it is hard to estimate the total size of the illegal tobacco industry in the EU, however, according to seizures 2 billion illegal cigarettes were confiscated between 2013 to 2018 which comes down to a production rate of 38 packs per minute. The industry costs the EU and its Member States up to 10 billion in tax revenues per year.

Source: <https://www.europol.europa.eu/>

Illegal Cigarettes Account for One-Fourth of Indian Market

Illegal cigarettes now account for one-fourth of the Indian market with such trade growing at a steep rate amid COVID induced disruptions in the country leading to tax evasion value of Rs 400 crore in June to September as per reported seizures in the media, according to a latest report.

The report by tobacco industry body The Tobacco Institute of India (TII), the steep tax increases on cigarettes have provided a boost to illicit trade with ever increasing tax arbitrage. "The reported seizures are only the tip of the iceberg of a much larger operation, as for every seizure dozens of consignments escape any surveillance," it said. TII said India is now the fastest growing and fourth largest illicit cigarette market in the world. It said the increased inflow of smuggled cigarettes into the country has led to a sharp spurt in seizures by the Indian enforcement agencies in different parts of the country.

The report quoted Euromonitor International which has estimated that the illegal cigarette market has reached an annual volume of 28 billion sticks in 2019. TII said the government loses revenue of more than Rs 15,000 crores per annum on account of illegal cigarette trade. It said illegal trade hurts the earnings of tobacco farmers as smuggled cigarettes do not use domestic tobaccos and aids the prevalence of organized criminal syndicates and terror outfits.

Table: Recent major illicit cigarettes seizures incident reported in 2020

Month	Seizure	Area
October	Fake cigarette factory	Muzaffarpur, Bihar
October	Counterfeit Zarda Manufacturing Units Busted	Bhadrak, Orissa
September	Fake cigarettes brand wrappers found in raid	Varanasi, UP
September	Fake gutkha factory raided in Kota	Kota, Rajasthan
August	Trader supplying fake Mirage tobacco arrested, 3200 pouches seized	Udaipur, Rajasthan
July	Covid 19 special trains being used to transport smuggled cigarettes	Delhi
July	Foreign cigarettes worth Rs 1.3 crore seized, five in the dock	Hyderabad, Telangana
July	Contraband items worth lakhs seized	Manipur
June	RPF seizes cigarette packs worth Rs 18 lakh	Raipur, Chhattisgarh
June	Customs seize foreign cigarettes worth Rs. 11.62 lakh	Kolkata, West Bengal

Source: <https://www.tionline.org/>

COVID-19 Pandemic: 3M Fighting Respirator Fraud, Counterfeiting, and Price Gouging

“3M one of the world's largest makers of the popular N95 respirator mask has launched a global crackdown on counterfeit respirators and price-gouging related to a flood of knockoffs”.



The surge in demand for masks and other protective equipment for health workers fighting the COVID-19 pandemic has resulted in a tide of counterfeit goods. As the pandemic crisis intensified, it received reports of people fraudulently representing themselves as being affiliated with 3M, selling 3M products at grossly inflated prices, selling counterfeit products falsely claimed to be from 3M and falsely claiming to manufacture 3M products.

Understanding the situation, 3M as commitment to help ensure a safe supply of needed personal protective equipment expands its global actions to fight COVID-19 fraud, counterfeiting and price-gauging. Acting proactively, it expands its action and started working with important stakeholders around the world.

The highlights of the global actions include.

- Working with Stakeholders:**
 3M is also working with large e-marketplace operators on a coordinated plan to identify and remove counterfeiters and price-gougers from their sites and refer them to the law enforcement authorities. It has engaged with many major e-marketplace including Amazon, Alibaba, Mercadolibre, Lazada, eBay, Flipkart, Shopee, Made-in-China and several others. Also started working with law enforcement agencies around the world in Latin America, United Arab Emirates, Vietnam, Europe, South Africa and India.

- Resources to fight fraud:** Created a new hotline to call for information on how to help identify authentic 3M products and to ensure products are from 3M authorized distributors. If customers have concerns about potentially fraudulent activity, price gouging, or counterfeit 3M products, they can also report their concerns at 3M's website. https://engage.3m.com/covidfraud?utm_medium=redirect&utm_source=short-url&utm_campaign=covidfraud.
- Pricing:** 3M respirators are in high demand around the globe as healthcare workers continue to fight the COVID-19 outbreak. Since the outbreak began, it doubled its global output of N95 respirators to an annual rate of over 1.1 billion, or nearly 100 million per month. It has not, and will not raise prices for 3M respirators and continue to work actively to eliminate price gouging by resellers of 3M respirators. To help customers identify and avoid inflated prices, it has published current single-case list prices for many of the most common 3M N95 respirator models sold in the U.S. on its website.
- Packaging - Avoiding counterfeit products:** To avoid counterfeit 3M respirators it awareness users to buy respirators in 3M packaging with model-specific user instructions accompanying the product. 3M respirators should not be sold individually or without packaging and user instructions. Products that have missing straps, strange odors, blocked valves, or misspelled words are likely not authentic 3M respirators.
- Investigation:** It has investigated over 7,700 fraud reports globally, filed 19 lawsuits, and has been granted nine temporary restraining orders and seven preliminary injunctions. Over 13,500 deceptive social media posts, over 11,500 fraudulent e-commerce offerings and at least 235 deceptive domain names have been removed.
- Action on criminals:** Filed lawsuits in courts across the country against wrongdoers, terminated 3M distributors for engaging in price gouging or violating 3M policy. 3M has been awarded damages or has received settlement payments in seven cases, with all proceeds being donated to COVID-19 related charities.



Fighting Respirator Fraud Globally. Every day.

3M Fraud Hotlines

3M has dedicated teams to investigate fraud globally

Reports to date: 8,400+

Legal Actions

20

lawsuits filed to date

9

temporary restraining orders granted

8

preliminary injunctions granted

Trademark Takedowns

30+

law firms in 3M's Preferred Counsel Network that have offered to help bring cases forward

13,750+

false or deceptive social media posts removed

12,000+

fraudulent e-commerce offerings removed

245+

deceptive internet addresses removed

It is Crucial to Ensure the Safety and Physical Traceability of the Products.



JEAN-PIERRE MASSICOT
CEO of ATT

The European Union's Farm to Fork Directive is certainly a turning point for the years to come and demonstrates the ambition to make The European food system safer, healthier and more invested in sustainable development. For the first time, the European Union is giving itself the means to implement a regulation of the "Food Chain", with clear and measurable objectives throughout the value chain, be it production, distribution but also consumption.

This comprehensive strategy sets out legislative initiatives for the coming years aimed at making the European food system more sustainable in terms of environmental impact while bringing economic, social and health benefits. Among the initiatives highlighted, the safety and sustainable development of the food chain are certainly two of the most significant, as they affect consumer safety.

A food chain at risk

There are many threats to the security of the European food system. Illegal, unreported or unregulant activities have been abounding in the supply chain for a long time: false names, recycled and re-processed

expired products, fake organic products, hazardous substances substituted for those allowed, introduction or substitution of forgeries in the circuits are some dramatic examples of criminal practices to which consumers are exposed. According to some studies, 1 in 3 French people have already bought counterfeit food.

In addition to this "frequency" of illicit practices, the COVID crisis has shown the importance of a resilient supply chain capable of absorbing a shock of this violence without being disorganized. While the supply chain partly weathered the shock of the crisis, it did not emerge unscathed: seizures of non-compliant, out-of-date or modified foodstuffs were substantially higher during the crisis, showing no doubt that criminal networks are taking advantage of the disruption of supply chains to introduce counterfeit, non-compliant or illegal products into the flows.

It is therefore absolutely critical to ensure the security of the food chain, on the one hand to protect the consumer, and on the other hand, in the event of a crisis such as the one we have experienced, to ensure the security, stability, and resilience of the chain itself. It is also important to differentiate between the players involved in the quality and safety of the chain from others.

Blockchain, a Trompe l'oeil Solution

How do we do that? We are currently seeing the flowering of many Blockchain technology initiatives.

Beyond the buzzword, what exactly does this cover? In a very schematic way, blockchain is a technology for storing and transmitting encrypted and distributed information, i.e. without a central storage organ. It records all transactions made over a given time, and by distributing them in "blocks" can by comparison detect any falsification of the data.

Blockchain technology has done wonders in finance and fintechs, and it's only natural that it's now looking for its way into other applications. Thus, in the case of the food chain, it would be possible, for example, to secure all transactions: it is thus

possible to identify, integrate into the value chain all invoices, all transport and delivery vouchers, and ensure their integrity. Thus it is thought, it is possible to secure the entire value chain, and consequently, the entire food chain.

This technology is excellent for securing transactions, but is it enough to ensure the safety of the food system? The answer is very clearly and resolutely: NO. The blockchain only secures transactions. It is able to secure actions on the value chain, but it lacks the determining criterion of safety, which is that of the physical safety of products. It is quite real that all transactions - purchases, transport, deliveries - were legitimate, and that despite everything, fake products were introduced into the value chain. Yes, the products were bought here, and delivered there: but how can we ensure that fakes have not been introduced in the meantime or upstream, or downstream? This is precisely how unscrupulous operators and criminals operate, taking advantage of the lack of physical Track and Trace solutions on products.

Imagine a monetary system where transactions would be absolutely secure, by the blockchain (or another solution), and where the notes and denominations would not be! False cuts would easily mingle with others, ultimately destroying the entire system and the public's trust. That's exactly what's going on right now in the food chain. The Consumer is not mistaken.

Ensuring the physical safety of products: authenticate and trace

The only viable way to truly secure a system, food or otherwise, is to integrate unit identification and digital safety marking physically on products - or the primary container closest to products - in order to authenticate them and then trace them individually throughout their life cycle. This has long been understood and implemented by certain health, cosmetics and luxury industries, for example (some of which are close to food) under extreme pressure from illegal practices. By using these

technologies, they have been able to detect and reduce fraud and embezzlement, to control production and distribution channels and networks, to attract, reassure and retain consumers. It is only through the physical safety and unit traceability of the products that it will be possible to secure the food chain.

The benefits of unit marking technologies (PUF) to ensure physical safety

Digital traceability authentication technologies first allow for the detection of forgeries immediately and remotely. The first step is to give each product a unit digital identifier, or "Digital ID." The product is thus marked for its lifetime and can be authenticated and traced at all stages in the supply chain, right down to the consumer. In addition, it is also possible to detect any illegal practice: why did the code disappear? Why are these products no longer in the batch or delivery to which they belonged? Why do they find themselves in a different market than they were intended for? Why was it manipulated? Abnormal situations are detected, which allows corrective action to be taken, either at the manufacturer's level or at the level of the authorities in case of health risk, the recalls are targeted and safe, they demonstrate a good control of the products and the organization by a manufacturer, by a Brand.

Improving information and the relationship with the consumer

In addition to the security benefits, digital physical marking technologies bring a crucial benefit to industry in the field of consumer relations. Manufacturers must now prepare for the introduction of new packaging and labelling standards. The space taken on packaging by regulatory information - origin labelling, provenance, nutritional information, climatic, environmental and even sensory aspects of products - will increase considerably in the future, leaving little room for information from the producer. New

labelling practices will need to be put in place, while consumers will no longer be satisfied with the few information that are now provided to them by manufacturers.

Consumers are becoming more demanding and producers need to find new channels to demonstrate the quality of their products, maintain a confidence and build loyalty.

Digital physical tagging technologies allow brands to establish a direct connection with the consumer via a simple smart phone and with a simple click, to bring to them, in addition to the regulatory information that can be certified by a trusted third party, all the information they deem relevant in order to stand out from the competition and put their products forward. Moreover, being digital, these technologies are extremely flexible and scalable: the information available to the consumer can be adapted in time and space, and according to current events and circumstances. They allow virtuous companies to highlight their involvement in improving the food chain and the benefits of their products.

Economically viable solutions

Finally, physical marking technologies respond perfectly to economic feasibility issues. A concern that emerged following the publication of the "Farm-to-Fork" directive was that of the costs of implementing such measures. Some have warned of the risk of exploding costs, leading to debt and the disappearance of the most at-risk players, such as SMEs, organic producers or small producers. Fortunately, digital physical branding technologies of products are extremely economical, and can be implemented for absolutely minimal costs largely offset by commercial benefits and gains. They seamlessly integrate into existing marking and printing processes, require no additional consumables - no special inks,

holograms, or special tags, and have zero carbon footprint. In these circumstances, their cost is more than offset by the benefits that users derive from it, whether in terms of security or the relationship of trust created with the consumer.

The Farm-to-Fork Directive is certainly one of the most ambitious initiatives in the world to ensure the safety and sustainability of a food system. All the implications are not yet fully known and will become clearer as it is implemented. There is no doubt that Europe will become one of the most regulated but also the safest food regions in the world. This represents a tremendous opportunity for producers and manufacturers to implement real security and traceability strategies, and to integrate these assets to ensure and regain consumer confidence in Europe and further afield. For other regions of the world, Asia or the Americas, where consumers have the same concerns and fears, the appetite for European products that have become authenticable and with guaranteed traceability is growing rapidly, opening up new opportunities and new markets for companies that know how to evolve and adapt. The technologies are available, they are safe, proven, economically viable and even - if the political will of the EU is, easily integrate into the eIDAS trust environment. The companies that use the market first to stand out and benefit from this new environment.

About Author

Author is CEO of Advanced Track & Trace® which develops innovative authentication, identification and tracking technologies for a better protection of products, companies, citizens, and trade. For more information, email at info@att-fr.com or visit www.att-fr.com



Metrc Strengthen its Position in Cannabis Traceability, secured a third Contract in 2020

Metrc provider of Cannabis regulatory technology in the United States added another State contract to its growing list by securing a deal with Oklahoma Medical Marijuana Authority (OMMA) and West Virginia Office of Medical Cannabis (OMC). With this Metrc now holds exclusive contracts with State regulators in 15 States and the District of Columbia, serving over 15,000 business licenses and over 500,000 patients. "This is an important step to make certain medical cannabis is available only to West Virginians with serious medical conditions and to prevent diversion of products in West Virginia," said Jason Frame, director of the state's Office of Medical Cannabis. The regulatory agency said in a news release that it will begin issuing medical marijuana patient cards in spring 2021, with sales expected to follow.

"We are honored West Virginia selected Metrc to implement the state's first cannabis tracking system. As more states across the country move to legalize cannabis for patients, it is encouraging to see The Mountain State support a balanced, regulatory approach. A focus for the state's new track-and-trace program will be helping regulators ensure no illicit cannabis products are sold in the newly legal market, and that no legal cannabis products are sold unlawfully. Because Metrc's system tracks every legal product back to the cannabis plant, regulators can easily identify if an illicit product is introduced into the supply chain. Similarly, the disposal process for any legal product is documented in Metrc's system, allowing regulators to see if the product is being improperly removed for unlawful sales," said Jeff Wells, CEO, Metrc.

Source: <https://www.metrc.com/>

De La Rue Surges on Strong Year 2020

Closed Covid-19 contract, secures tax stamp & banknotes tenders

De La Rue is on way to surge strong financial year 2020 with a series of new contracts, including one to authenticate and protect COVID-19 testing kits. The contract with the undisclosed "international" customer for the COVID-19 kits covers tests that are being shopped around the world, a key development given the almost routine reports of counterfeit coronavirus tests – as well as drugs and vaccines – being seized by customs and other enforcement agencies around the world.

De La Rue says it has also developed existing physical and digital solutions to provide a COVID-19 immunity certification scheme. That could be an important development as countries around the world try to relax lockdown measures to contain the pandemic, particularly as some countries are asking for documented evidence of immunity status before they will allow entry to travelers.

So far this year, De La Rue's authentication division has been awarded contracts with total lifetime value exceeding £100m, which the company says puts it on track to increase the division's annual revenues to £100m by fiscal 2021/2022.

That includes a five-year deal to supply polycarbonate data pages for the new Australian passport, that include security features developed under a deal with Note Printing Australia in 2016. Meanwhile, in currency, De La Rue says it has seen strong demand

that has already taken up around 80 percent of its production capacity.

While on tax stamps front, it announces the award of a five year contract with the Ghana Revenue Authority (GRA) for the supply of a Digital Tax Stamp (DTS) solution, on banknotes it got a three-year extension from Bank of England to operate the printing facility at Debden, until 2028.

Source: www.delarue.com

Spectra Systems Secures Contract from Central Bank

Spectra Systems had executed a services contract with a central bank for the development, manufacture and servicing of a sensor system. The contract included \$1.9 million to start phase-one development work and had three major additional phases. These included a \$5.6 million phase-two development through 2023 and a service component worth around \$7.5 million. "We are pleased that this technologically sophisticated central bank has provided us with the opportunity to provide new cutting edge sensors for their cash operations," Chief Executive Nabil Lawandy, said.

Source: <https://www.stockmarketwire.com/>

Nanotech secures multi-year Brand Protection contract with CONCACAF

Nanotech Security Corp. provider of secure and memorable nano-optic security features announces it has been selected as the exclusive supplier of authentication labels to protect licensed merchandise for the Confederation of North, Central America, and Caribbean Association Football (CONCACAF). Identification markers including Serialization, covert elements, and a suite of other unique identifiers coupled with Nanotech's LiveOptik technology will be employed in labels to fight counterfeit merchandise and reporting royalties from licensees to Conacaf for the Gold Cup in July 2021.

Source: <https://www.nanosecurity.ca/>

SICPA Awarded Contract to Provide Tax Solution for Alcohol Products in Oregon

SICPA, has been awarded a new, 10-year contract to implement its industry-leading SICPA Excise Tax System (SETS) to provide a secure, online platform for the payment, collection, and tracking of Oregon's alcohol privilege taxes, also known as excise taxes.

In 2017, Oregon's alcoholic beverage industry worked with Oregon legislators to pass legislation directing the Oregon Liquor Control Commission (OLCC) to "allow manufacturers or importing distributors of wine,

cider or malt beverages to file required statements and pay privilege taxes by electronic means." By partnering with SICPA, the OLCC gains access to a system that was specifically designed to deliver efficiencies for both industry and the OLCC though integrated, online, role-based software to support the unique needs of excise tax administration.

MSP won Bangladesh Smart Card Contract

Madras Security Printers has been appointed by Bangladesh Road Transport Authority (BRTA) to issue 4.0-million smart cards in the next five years to overcome a backlog in the issuance of paper-based licence. The BRTA issued about 600,000 paper licence as the earlier appointed company Tiger IT had failed to perform on issuing of smart cards in time.

KL Hi-tech and Holoflex Secure UIDAI New Card

UIDAI has launched the high security PVC Plastic Aadhaar card for Indian residents. Apart from being more durable than the paper Aadhar, this card has several security features to prevent identity theft & fraud. While KL HI-TECH Secure Print Ltd was involved in production and processing of these cards, Holoflex provided security hologram for authentication. The new card is available in a convenient credit card size that one can carry in the pocket. To apply for yours, use the link here to and make an online payment of Rs 50.

Source: <https://residentpvc.uidai.gov.in/>

Smart Protection Closes €10M Series B Funding Round

Smart Protection, a Madrid, Spain-based platform that protect brands against online counterfeiting, closed a 10m Series B funding round. The round was co-led by Knight Capital, the Spanish Israeli Swanlaab Venture Factory, specialized in SaaS B2B, alongside CDTI, the Spanish National Innovation Agency. Existing investors Nauta Capital, JME Ventures, Bankinter, Big Sur Ventures and Telefónica, through their new investment vehicle Telefónica Tech Ventures specialized in the field of cyber security, have also taken part in the round. The company intends to use the funds to build the engineering teams to speed up its international expansion and broaden its technological solutions.

Led by Javier Perea, CEO and co-founder, Smart Protection provides a tech platform to combat piracy and counterfeiting on the internet. The company currently works with clients across 25 countries, and 76 percent of its income is generated from companies outside of Spain.

Source: <https://smartprotection.com/en/>

Authentic Vision secured \$5M in Series B Funding

Authentic Vision, an Austrian-based technology startup that provides anticounterfeiting solutions had closed a \$5m Series B funding round with Custos Privatstiftung (Austria), Dolby



Family Ventures (USA), Gronova Vision (UAE), TAKKT AG (Germany) and business angels. It provides anti-counterfeiting solutions consists of customizable holographic fingerprint tag that can be integrated into the packaging, free CheckIfReal app, which can verify the authenticity of products by scanning the tag, and a web platform with business insights. Its customers include HDMI and Helen of Troy in the US, Danfoss and Eurostampa in Europe, Japan Bio Products in Asia and Elsewedy in Egypt. The company is planning to invest the proceeds into the further acceleration of its international expansion.

Source: <https://www.authenticvision.com/>

YPB Raises \$3.6 million to Accelerate Growth, Channel Panel Strategy Advanced in India, China, and Thailand

Product authentication and consumer engagement solutions provider YPB Group has raised \$3.6 million to accelerate its growth strategy. YPB is currently focused on growing its footprint in the Australian, South East Asian, and Chinese markets in industries such as alcohol, cannabis,

cosmetics, and dairy which are affected by counterfeit products.

Over the past year, the company has focused on advancing its channel partner strategy. They achieved new partner in China, India, and Thailand during the quarter, building out a low-cost Pan Asia distribution network for the company. It includes:

- Entry into India with Optimum Interface Consulting, a provider of investigative and risk mitigation solutions, including anti-counterfeit technology solutions. A prior entry into India in 2016 was unsuccessful.
- Suzhou-Haishum Packaging – a leading packaging supplier to Chinese pharma manufacturers. S-HP will be taking an advanced, anti-counterfeit foil product jointly developed with YPB to its customers.
- Beijing Haihu Printing (BHP_ - a major anti-counterfeit label printer in China. BHP will offer YPB's T2 tracer-scanner technology to its clients.
- Appointed three channel partners in Thailand including OPP Gravure Printing, Specific Products and Bangkok based Jirawattano.

Source: <https://ypb.io/>



Mixed Reactions - Industry Report latest Financials

With this issue we are adding a dedicated new section reporting financial results of key companies in Authentication & Traceability industries. The starting of this section is important, as we all are facing a major recovery from pandemic and thought it would be an ideal situation to start with it.

In this issue, we have analyzed companies which had recently announced their quarterly or half yearly results (for period ending September 2020). These include a mix of companies providing authentication & traceability solutions, features, raw materials, and machinery.

Avery Dennison Corporation announced Net sales were \$1.73 billion, down 1.8%. Sales were down 1.3 percent ex. currency, and down 3.6 percent on an organic basis. The operating margin increased 100 basis points

to 12.3%. Adjusted EBITDA margin increased 190 basis points to 16.1%, while adjusted operating margin increased 140 basis points to 13.1%. Reported net income was \$1.79 per share, up 5%, and adjusted net income was \$1.91 per share, up 15%, both of which were above the company's expectations, reflecting a sales decline below the low end of its outlook range in July. Year-to-date free cash flow was \$342 million, up 4.4% compared to the same period last year.

CCL Industries announces record quarterly result for Q3 2020 with sales increased 1.2% to \$1,373.4 million compared to \$1,357.1 million for the third quarter of 2019. For the nine-month period ended Sept. 30, 2020, sales and operating income declined 3.8% and 0.5 percent to \$3.9 billion and \$610.2 million, respectively. However, net earnings increased 3 percent to \$383.8 million, compared to the same nine-month period in 2019. The 2020 nine-month period included results from 13 acquisitions completed since Jan. 1, 2019, delivering acquisition-related sales growth for the period of 1.8 percent. Organic sales decline

Any Security Printing Company reported 20 percent declines in consolidated net sales for Q1-Q3 period ending September 2020 of HUF 20,121 million comparing to HUF 25,277 for the same period 2019. According to

company officials, the results are improved in the 3rd quarter and company remained profitable, its financial liquidity was stable even during the worst week. As one of the leading security printing companies in the CEE

region, ANY Group companies comprises of ten companies. There are 3 sites in Hungary, two in Romania and one each in Bulgaria, Slovakia and Moldova.

Sales Segments	2019 (Q1-Q3) HUF millions	2020 (Q1-Q3) HUF millions	Change	Change%
Security products and solutions	7,343	4,861	(2,482)	-33.80%
Card production and personalization	8495	6,272	(2,223)	-26.17%
Form production and personalization, data processing	7,800	7,415	(385)	-4.94%
Traditional printing products	1,199	1,033	(166)	-13.84%
Other	440	540	100	22.73%
Total net sales	25,277	20,121	(5,156)	-20.40%

was 5.9 percent and foreign currency translation was a 0.3% positive impact. Both CCL Design electronics and Healthcare & Specialty maintained second quarter momentum, as sales increased on share gains and higher consumer demand from the pandemic.

Crane Co. reported declining revenues and profits for the past quarter as it continued to deal with the disruption of the coronavirus crisis. Third-quarter revenues amounted to \$735 million, a 5 percent year-over-year decline that company officials mainly attributed to "COVID-19 related macroeconomic factors." Total sales decline 13 percent in core sales partially offset by a 7 percent acquisition benefit and a 1 percent benefit from FX.

Sales decreased in its fluid handling, aerospace and electronics and engineered materials businesses, while an acquisition-related benefit helped its payment and merchandising technologies unit increase its returns.

Control Print coding and marking equipment manufacturer report net sales of Rs 530 million for Q2 ended September 2020 (April-September) with an increase of Rs 30 crore for the same period (April-September 2019). Revenue was highest ever for any quarter with recovery in Industrial Production, new product launches and printer demand.

De La Rue reported a near seven-fold jump in first-half profit buoyed by cost cuts under a turnaround plan. Adjusted operating profit came in at 15.3 million pounds (\$20.44 million) for the six months ended Sept. 28, compared with 2.2 million pounds a year earlier. Revenue fell 15.1 percent to 174.7 million

pounds. Currency sales were down 2.1% at £126m. Authentication, where De La Rue has high hopes for future growth and profits, slipped 9.2 percent to £31.7m. However, De La Rue said it had signed multi-year contracts in Authentication during the period, "with lifetime values of more than £120m", while two contracts had been impacted with reduced volumes as a result of the pandemic. It also reported they are in early discussions with several countries over immunity certification schemes.

DIC Corporation consolidated net sales for 9 months amounted to ¥514.3 decrease -10.8% from ¥576.6 for the same period. The spread of COVID-19 infection subsided in many areas in the third quarter, leading to signs of an improvement in shipments, but demand failed to recover to pre-pandemic levels. Sales shrank in all segments. Net sales were 5.2 percent higher in the current third quarter (July 1-September 30, 2020) than in the second quarter (April 1-June 30, 2020).

Document Security Systems (DSS) report record \$5.4M net income for the third quarter ended September 30, 2020. Revenue for the third quarter of 2020 was \$4.2 million, up 59% from \$2.6 million in the third quarter of 2019. The printed product segment revenue increased by 40 percent to \$3.0 million in the current quarter from \$2.1 million in the third quarter of 2019. In the latest quarter, it completed acquisition of Impact BioMedical and closed a deal with Malaysian personal protective equipment (PPE) exporter Crecom Burj Group (CBG) to provide its new AuthentiGuard as a Service (AGaaS) anti-counterfeiting technology. CBG has partnered with DSS to

combat counterfeits of their AAMI (Association for the Advancement of Medical Instrumentation)-certified isolation gowns and gloves currently exported to the US healthcare market.

K Laser reported NT\$ 1501.58 million sales for period July to September increased compared to NT\$ 1444 million for the same period for the period July to September 2019.

Komori consolidated net sales during the first six months (April-September) of the fiscal year under review amounted to ¥33,910 million, representing a 17.4 percent decrease from the same period of the previous fiscal year, because of the ongoing fallout from the COVID-19 pandemic worldwide. Regionally highest sales drop noted in North America (-53.7 percent) and ASEAN region (-38.8 percent) which includes India. In current quarter it announced the release of "advance" series in its mainstay offset printing press business focusing on creating a solution capable of helping customers enhance ROI.

Koenig & Bauer group Q3, order intake was down 13.8 percent at €232.6m and revenue was down 32.2 percent at €198.1m year-on-year. Besides the effects of the pandemic, this revenue decline was materially because the new internal revenue recognition guideline of the Koenig & Bauer AG, which caused a once-only revenue shift of €52.5m to 2021 in the Sheetfed segment. In the first three quarters of 2020, new orders of €712.8m were below the previous year's figure of €843m by 15.4%. Cumulative revenue came to €602.6m in the first nine months of 2020 (2019: €798.2m). At the end of September,

management and supervisory board decided the Performance 2024 programme, which had been enhanced and expanded over the last few months, to strengthen a Koenig & Bauer's position as leading supplier in packaging, industrial, security printing and postpress as well as to increase the group's operating profitability.

Nocopi Technologies, Inc.

developer of specialty reactive inks used in entertainment, toy, and educational products as well as in document and product authentication technologies reported 18% growth in Q3 revenue, ended September 30, 2020. Revenues rose 18 percent to \$755,000, driven by a 34 percent increase in specialty ink product sales. Net income decreased to \$163,100 from \$206,800 in Q3'19, because of higher salary and consulting expenses and lower gross margin.

OrellFüssli achieved net sales of CHF 104.1 million in the first half of 2020. The decrease of 10 percent compared to the same period of the previous year (CHF 115.2 million) was mainly due to corona-related effects, the changed product mix in the Security Printing division and the sale of the Track & Trace activities at Zeiser traced back. The operating result (EBIT) fell to CHF 6.7 million in the first half of 2020 (previous year CHF 8.1 million).

Rolling Optics sales in Q3 were SEK 7.2 million, which was better than our expectation of SEK 5.0 million and meant a full 259 percent growth yoy. However, the quarterly figures can be sluggish depending on when orders are received, which is why the information value in an individual quarter is limited. For the period January-September 2020, growth was good + 118 percent yoy. Sales

growth was entirely driven by the Brand Security business area. It also starts begins recruitment of a new President and CEO for intensified marketing.

Spectra Systems Corp report revenue rose to \$6.5 million from \$6.4 million for the first half ended June 30, 2020. Annual earnings will beat market expectations as it reported a decent set of first half results amid the COVID-19 pandemic. Chief Executive Nabil Lawandy said: "Spectra Systems is on track to deliver an excellent performance for the full 2020 financial year and expects to significantly exceed market expectations for 2020, despite of the COVID-19 pandemic."

Uflex Q2 results: Packaging materials firm Uflex Ltd reported an over two-fold jump in consolidated net profit at Rs 222 crore for the September quarter, helped by volumes growth. The company had posted a net profit of Rs 94.26 crore during the July-September period a year ago, Uflex said in a regulatory filing. Total income was at Rs 2,234.46 crore, up 19.15 percent from Rs 1,875.32 crore in the corresponding period of the previous fiscal. Total expenses rose 10.43 per cent to Rs 1,934.85 crore compared to Rs 1,752.01 crore earlier.

During the quarter, Uflex witnessed a "surge in demand" for multiple lines of businesses while also adding newer clients, the company said in a post-earnings statement. Total production volume for the quarter showed an increase of 25.7 percent YoY to 1,184,70 MT, the Packaging Films production volume grew by 26.8 percent YoY and Packaging production volume grew by 22.1 per cent YoY.

VerifyMe Reports revenues increased 79 percent to \$100,697, compared to \$56,255 in the third quarter ended September 30, 2019 ("Q3 2019"). The major increase coming as it expanded business with multi-billion-dollar global consumer products company, Partnered with Corsearch, Inc. to collaborate on solutions for e-commerce counterfeiting and brand abuse and SmartGlyph to integrate technologies and market digital security. The operating loss increased by 48 percent to \$982,829 and net loss increased by 39 percent to \$706,548.

Outlook Revenue came in significantly better than expected at the start of the quarter, which, combined with cost reduction actions, enabled companies to deliver strong earnings growth. The operating segments expanded their adjusted operating margins compared to last year, despite lower sales, as demand improved sequentially.

Global Security Paper Market to Recover from COVID-19 and Reach \$ 6.58 bn in 2025: Smithers



Worldwide 914,000 tonnes of specialty paper grades will be used in different security document applications in 2020, according to the new Smithers report – The Future of Security Papers to 2025. This will have a projected value of \$6.27 billion.

It is forecast to increase to \$6.58 billion in 2025 at a compound annual growth rate (CAGR) of 1.8%, even as volumes fall and suppliers adjust to new priorities in a commercial landscape altered by COVID-19.

Smithers' analysis dissects the growth prospects across all major end-uses: banknotes; cheques; personal identity documents; postage and tax stamps; transportation, event, and lottery tickets; and other applications.

It finds that coronavirus lockdown orders will have the biggest

impact on ticket papers; and cheque papers, as consumers move to more online and contactless payment options in response to infection risks. Event and transportation tickets have been similarly affected by ongoing travel restrictions, and

the shift towards paperless or fully electronic ticketing moving forwards. Demand in banknotes and personal ID documents – principally passport visa pages – will be much less affected and continue to benefit from wider use of identity documents and the cash economy in developing regions through to 2025.

The 2020s will pose some specific challenges to suppliers of security paper grades. Postage stamp volumes will continue to decline, but the segment will benefit from the wider use of tax stamps as authorities look to clamp down on illicit and grey market trade. The EU's Tobacco Products Directive (EUTPD) and the WHO's Framework Convention on Tobacco Control (FCTC) will continue to provide a welcome stimulus.

Banknote demand saw a peak in H1 2020, as economic uncertainty led consumers to withdraw and hold cash. In the medium term, paper banknote printing volumes will remain stable. Polymer substrates are now in use for all denominations in two G8 countries; but no other changeovers for major currencies are anticipated. More importantly, central banks are increasingly looking for full-service providers to supply note substrates, security features, and design expertise, as a single package, opening new revenue potential for larger, integrated security print firms.

Conversely for those governments that retain a state-owned banknote paper mill; the impetus is to adopt a more commercial outlook and compete with private-sector security printers for contracts.

Across 2020-2025 genuine volume increases will be confined to growth economies in Asia and Eastern Europe. Asia-Pacific specifically will expand its share of the security paper market by volume from 41 percent to 47 percent across the Smithers forecast period. This will prompt existing suppliers to diversify their sales forces and pursue new joint ventures in the region.

Source: <https://www.smithers.com/>

IHMA Predicts Strong Demand for Anti-Counterfeiting Devices to Drive Holography Growth Despite COVID

New demand for security and authentication devices to tackle the threat of counterfeiting caused by the COVID-19 crisis will strengthen the holography market in 2021, according to a global trade body. The International Hologram Manufacturers Association (IHMA) says authentication and track and trace systems, which use holographic technologies, will help to underpin international efforts by government and law enforcement agencies to bolster overt and covert protection strategies in the next 12 months.

While Asia will continue to offer opportunities for holograms in 2021, the IHMA says countries across North America and Europe will also be ramp up investment in technologies to tackle counterfeiting as COVID-19 rages, offering additional opportunities for hologram sales across these regions.

Indeed, recent media reports* about the dangers of buying fake products online show that the pandemic will contribute towards the push for more security devices. Haircare brands, cosmetics and skincare tools among other consumer goods have been hit hard, with reports of a 56% increase in counterfeit products sold online across 700 brand clients in the first six months of this year. Some skincare device companies and haircare brands, for instance, have seen counterfeit sales increased by almost 40 percent. The World

Health Organisation (WHO) has said that a growing volume of fake medicines are on sale in developing countries, while Interpol has seen an increase in fake medical products. Seizures of fake Covid tests and personal protective equipment (PPE) have been reported by both the US CBP and the World Customs Organisation.

 A poll has revealed that almost 50% of hologram manufacturers and suppliers are seeing an increase in demand from customers, specifiers and end-users for holographic devices and technologies. 

This situation is set to continue in the next 12 months, predicts the IHMA, while growth in packaging authentication devices will stay 'strong and lucrative' on the back of forecasts that the market for anti-counterfeit pharmaceuticals and cosmetics packaging will reach more than US \$10 bn by the end of 2026, growing by almost 9 percent in the next five years despite the current situation. The overall global market for anti-counterfeit packaging is projected to be worth more than US\$ 188 bn by 2025**.

A poll has revealed that almost 50% of hologram manufacturers and suppliers are seeing an increase in demand from customers, specifiers and end-users for holographic devices and technologies. This indicates that hologram users will continue to be concerned about the impact of counterfeiting on e-commerce supply chains as the pandemic continues to be felt well into new year. The IHMA advises brand owners and product manufacturers to tackle the

threats, stepping up plans for investment in authentication and verification technologies to protect brands, profits and reputations. IHMA chair, Dr Paul Dunn, said: "Criminals are infiltrating global supply channels, deploying scams and counterfeits to trick people during these tough times. Items such as falsified medicines and drugs pose a terrible threat and can endanger lives.

"It's clear that in the face of the continued impact of Covid, we can legitimately say brand owners, law enforcement, government and other influencers will continue to push demand for authentication and brand protection devices such as holograms." He also added that holography will continue to find new applications in areas such as medical surgery, head-up display technologies and other smart devices, which enrich people's lives. "Display holograms, which can be overlooked and a small sector within the holographic sector, possess growth potential. The growing demand for this type of advanced holography for medical imaging in the healthcare industry, for example, is encouraging and will contribute to driving the sector's growth in 2021."

Using authentication solutions, as advocated by the ISO12931 standard, enables examiners to verify the authenticity of a legitimate product, differentiating it from fake products coming from counterfeiting hot spots in Asia and eastern Europe. Even those that carry a 'fake' authentication feature can be distinguished from the genuine item if that item carries a carefully thought-out authentication solution.

Source: www.ihma.org

Top Authentication & Traceability acquisition of 2020

January 2020: OpSec Security Completes Acquisition of MarkMonitor Brand Protection

Lancaster: OpSec Security completed its acquisition of the MarkMonitor™ Brand Protection assets from Clarivate Analytics. Last year in November 2019, OpSec Security, an Investcorp portfolio company, and Clarivate Analytics announced a definitive agreement to acquire the MarkMonitor brand protection, antipiracy and antifraud businesses. Clarivate will retain the MarkMonitor Domain Management business. “With the acquisition now closed,” said Richard Cremona of OpSec Security, “we can continue the process of creating the world’s top brand protection provider. With an integrated end-to-end experience, OpSec will provide industry leading solutions for online and offline brand protection to hundreds of the world’s top brands.” The combined OpSec and MarkMonitor online brand protection entity will be rebranded as OpSec Online™.



January 2020: Dover acquire traceability solutions providers Systech

USA: Dover a diversified global manufacturer with annual revenue of approximately \$7 billion agreed to acquire Systech International with an undisclosed transaction. Following the close of the transaction, Systech will become part of the Markem-Imaje business unit, a global supplier of product identification and traceability solutions, in Dover's Imaging and Identification segment.

January 2020: Bundesdruckerei concludes Acquisition of genua GmbH

Germany: Bundesdruckerei GmbH completed the acquisition of IT security specialist genua GmbH, based in Kirchheim near Munich. Effective Jan. 1, 2020, 100 percent of the shares are held by Bundesdruckerei GmbH. In 2015, Bundesdruckerei acquired 52 percent of the shares. The

takeover of genua GmbH is Bundesdruckerei of their strategy to be the preferred supplier of complete and future-proof IT security solutions for public authorities and companies,” said Dr. Stefan Hofschien, CEO of Bundesdruckerei. “As an IT security company, Bundesdruckerei offers services and products ‘Made in Germany’ for secure data and identities.

February 2020: Fedrigoni completed the acquisition of the Ritrama group

Italy: Fedrigoni Group, an Italian specialty paper manufacturer completed the acquisition of Ritrama, specializing in self-adhesive products with production facilities in Italy, Spain, UK, Chile, and China. The preliminary sale agreement was signed in October 2019. This result positions the combined group among the largest global players in the field of specialty papers for packaging and pressure sensitive labels.

Ritrama total revenues of approximately 400 million EUR (443 million USD) in the year ended December 31, 2018, coupled with Fedrigoni's total revenues of approximately 1.2 billion EUR (1.33 billion USD) in the same period.

February 2020: Pixelle Acquires Specialty Papers Business from Verso

Spring Grove, PA: Pixelle Specialty Solutions completed the purchase of two specialty paper mills from Verso Corporation, making it North America's largest specialty papers producers with production currently exceeding one million tons annually. Pixelle has industry-leading positions in multiple specialty paper grades including release papers, thermal labels, food and beverage labels, food packaging papers, inkjet papers, casting liners, book papers, carbonless and forms, security papers, envelope and converting papers, and various niche products.

May 2020: Food safety solutions provider acquires HarvestMark

USA: iFoodDecisionSciences, Inc. acquired Trimble's HarvestMark® business, a provider of food traceability and quality inspection solutions. iFoodDS, a leading provider of food safety and process control software solutions, has worked closely with Trimble's HarvestMark business. In 2018, the companies partnered to deliver an integrated supply chain solution for food safety, traceability and quality management.

April 2020: Parabellum Investments Acquires Anti-Counterfeit Specialist Advanco

UK: Parabellum Investments, an international private equity firm

specializing in mid-sized companies, has acquired Advanco, a global leader in tracking systems for serialised pharmaceutical products, with plans for international growth. This marks the first move into the pharmaceuticals market by Parabellum Investments, whose Founder and CEO Rami Cassis becomes executive chairman of Advanco, with Alf Goebel as CEO. Pharmaceuticals manufacturers around the world are currently racing to develop new vaccines and drugs to treat COVID-19, amid a rise in fake drugs. Advanco's Serialization Software, sold under the ARC brand, allows manufacturers to track the serial numbers of every medicine, helping to protect revenues and safeguard health authorities and patients from counterfeits. Brussels-based Advanco, which supplies global pharmaceuticals leaders like Pfizer, Zentiva, UCB and Helsinn, has revenues of Euro 4 million and its software is already used in over 35 countries worldwide. Now the company plans ambitious international growth, initially focusing on the US, Russia and Europe. Parabellum Investments, a privately-owned, global investment firm, has offices in London, Frankfurt, Brussels, Istanbul, Dubai, and Sydney, and acquires companies in the lower mid-market, primarily using its own funds.

May 2020: Partnerize Acquires BrandVerity to Bring Brand Safety and Compliance Protection to its Partnership Automation Platform

San Francisco: Partnerize provider of partnership automation solutions for global brands acquired BrandVerity, a leading SaaS provider of brand protection solutions for enterprise businesses. Partnerize will

incorporate BrandVerity's industry-leading brand monitoring and compliance solutions into the Partnerize Partnership Automation Platform, enabling brands to facilitate more effective partnerships and ensure brand-worthy customer experiences.

May 2020: Sharp, part of UDG Healthcare plc, a global leader in contract packaging and clinical supply services acquired a pharmaceutical packaging facility from Quality Packaging Specialists International, LLC (QPSI).

Pennsylvania, USA: The site, located in Macungie, Pennsylvania, will offer primary and secondary pharmaceutical packaging including bottling, blistering, vial labeling and medical device kitting as well as serialization services. Located within 6 miles of Sharp's Allentown campus, the Macungie site provides the company with an additional capacity in response to increasing volume demands from clients, as well as the space to expand further. The site will commence an immediate integration to the Sharp facility network.

July 2020: SIPI Acquires O2O Brand Protection to Bolster Online Anti-Counterfeiting Capabilities

Singapore: Strategic IP Information Pte Ltd (SIPI) announced acquisition of online brand protection services arm of O2O Brand Protection (Hong Kong). O2O will continue to serve leading brands in the automotive, luxury goods and pharmaceutical industries, while strengthening SIPI's investigative capabilities for their clients, especially within China. Mr. Bharat Dube, Executive Chairman of SIPI, said, "Our

acquisition of O2O complements our overall brand protection offering and, with the integration of the O2O team in Shenzhen, we will be better able to service client needs within China.”

August 2020: Merck Animal Health completes acquisition of food traceability firm IdentiGEN

UK: Dublin-based food safety and traceability company IdentiGEN has been acquired by Merck & Co's MSD Animal Health unit in a deal reported to be worth around 50m (\$59m). Formed in the 1990s as a spin-out from Trinity College, IdentiGEN has developed technology that allows foods such as beef, pork, poultry and seafood to be traced “from farm to fork” using DNA and data analytics. The platform – called DNA Traceback – is used by producers, processors, retailers and brand owners “to protect their brand's reputation, justify premium positioning in the market and meet consumer demand while being cost-effective at scale,” according to the Irish company, which also has operations in the UK, EU and US.

In April 2019, Merck Animal Health announced the completion of its acquisition of Antelliq Corporation and its market-leading brands, Allflex Livestock Intelligence, Sure Petcare and Biomark as leaders in emerging digital technology with animal identification, animal monitoring and smart data management for Livestock and Companion Animals. In December 2019, the company acquired Vaki, a leader in fish farming and wild fish conservation monitoring equipment and real-time video monitoring technology to advance fish health and welfare. In June 2020, the company acquired Quantified Ag®, a leading data and analytics

company that monitors cattle body temperature and movement to detect illness early.

August 2020: Bristol ID Technologies to enhance security offerings with acquisition of Plastic Printing Professionals, Inc. (P3), a Division of Document Security Systems, Inc.

New York: Bristol ID Technologies, a leading plastic card manufacturer, has acquired Plastic Printing Professionals, Inc., (P3) a division of Document Security Systems, Inc. Bristol ID's decision to create this powerful combination was due, in large part, to P3's cutting-edge plastics production and sophisticated customization processes. “It just made sense with our business roadmap to acquire P3,” stated Bristol ID's CEO, Keith Yeates. “Their state-of-the-art equipment will enable us to focus on innovation in research and development at our recently expanded facility.” Known in the industry for their world class services, P3 brings a wealth of knowledge in highly advanced security features to Bristol ID. Together, these revolutionary companies bring over 100 years of card manufacturing experience to the industry.

August 2020: HID Global Acquires Access-IS, a Leading Global Provider of Miniaturized Reader Devices

HID Global, a worldwide leader in trusted identity solutions, today announced that it has acquired Access-IS, a leading technology provider of miniaturized reader devices that combine several key technologies ideal for mission-critical environments. Access-IS's proven technology and solutions broaden HID Global's technology portfolio, accelerate its vertical market expansion, and add new

product offerings that help meet customers' evolving needs for integrated, digitized solutions. Access-IS's technology, products and solutions have been developed with a focus on innovative design and quality for over three decades. From barcode reading and image processing for document scanning to NFC and EMV for mobile ticketing, Access-IS has brought to market a range of devices that have been deployed worldwide in major cities and countries across a number of key verticals including finance, transportation and government.

August 2020: Domino acquires Lake Image Systems

UK: Domino Printing Sciences (Domino) acquired Lake Image Systems, a market-leading producer of automated, vision-based inspection systems for quality control and data verification. Looking to the future of manufacturing, Domino recognizes the importance of integration and connectivity when implementing solutions for smart, sustainable production lines and the acquisition will bring proven solutions into the Domino portfolio.

August 2020: Markem-Imaje a Dover subsidiary acquires Solaris Laser

Markem-Imaje, a Dover subsidiary that manufactures product identification and traceability systems, is strengthening its laser technology product line through the acquisition of Solaris Laser, a manufacturer headquartered in Warsaw, Poland. Solaris has served the marking and coding industry for more than 25 years, supplying advanced fiber, ultraviolet and CO2 laser systems used for product marking and coding in industrial and

packaging applications across a broad range of end markets.

September 2020: Fedrigoni to divest paper and security business in Brazil

Fedrigoni, the Italian parent of papermaker Fabriano, is planning to sell off the Brazilian banknote and

security paper mill Salto.

Fedrigoni, which was acquired by Bain Capital in 2017 for 600 million, bought the Salto mill from Arjowiggins for 85 million in 2015. It is the only such facility in Latin America and has a capacity of 20,000 tonnes per annum. The transaction is expected to be completed in the coming months, according to Fedrigoni.

September 2020: Authentix expands portfolio, acquire cover marker Traceless®

USA : Authentix providers of authentication and information services acquired the Traceless Authentication Group from Bibliotheca, Inc. a library systems solutions company serving over 30,000 libraries worldwide. At a stroke, the deal will increase Authentix' market share in pharmaceuticals, spirits, and the personal apparel market, whilst also providing "an opportunity for significant expansion into Asia," according to Authentix chief executive Kevin McKenna. The acquisition covers Traceless' entire portfolio of patented covert marking solutions, as well as its enterprise cloud-based digital track and trace software called Brand Protection Cloud. It's the second acquisition for Authentix in two years. In 2019, the company's UK subsidiary bought Security Print Solutions (SPS), adding high security printing to expand its presence in tax stamps and add to its security technology offering.

September 2020: Sun Chemical Acquires Brazilian Security Ink Company

Sun Chemical Corp (Parsippany, New Jersey), an affiliate of DIC, had acquired Seller InkIndustria e Comércio de Tintas e Vernizes Ltda., a specialty inks and coatings manufacturer based in São Paulo, Brazil. The cost of transaction was not disclosed. The acquisition will increase its specialty inks and coatings offering in Latin America and will obtain a local manufacturing platform for security inks to provide first-class service. 'Both the metal decorating and the security ink markets are high growth markets in Latin America,' said Felipe Mellado, Vice President of Special Projects at SunChemical.

October 2020: Corsearch announces acquisition of Marketly

New York: Corsearch announced the acquisition of the prominent provider of anti-piracy services, Marketly. The acquisition strengthens Corsearch's brand protection offering through the addition of the team trusted by leading media companies to safeguard their online content against piracy.

November 2020: Refinitiv to acquire GIACT

Financial market data firm Refinitiv has signed a definitive agreement to acquire identity fraud detection firm Giact Systems. Refinitiv said the addition of an industry leader in digital identity, payments verification and fraud prevention will boost its existing risk and compliance capabilities. The acquisition of GIACT comes at a time when organizations are challenged by the rapid growth in digitalization accelerated by the

emergence of new fraud threats, global connectivity and world events such as the COVID-19 pandemic. These factors are forcing improvements to fraud prevention and compliance procedures, as well as a move towards more holistic solutions for digital identity verification, fraud prevention and anti-money laundering.

November 2020: Antares Vision strengthens traceability position by acquiring Assets of Adents

Italy: Italian multinational Antares Vision, which offers customized inspection and track-and-trace systems, has been selected by the French judicial authority as the winner of the tender for the purchase—directly or indirectly through its subsidiaries—of the assets of the French company Adents High Tech International, which is in liquidation. The closing will occur within two months for \$1.8 million USD (1.5 million EUR), paid in cash. Mainly focused on the pharmaceutical sector, Adents offers traceability and serialization software that can be used for the data management and exchange between companies and regulatory authorities (level 5). It also offers single-tenant and multi-tenant cloud services. The deal lets Antares Vision multiply its software capabilities that can track and trace the end-to-end supply chain, which will allow for greater transparency among members across the industry.

ASPA Release Another Report for Nation: COVID-19, Currency Usage & Analysis for Polymer Banknotes in India



REPORT FOR NATION

COVID-19, Currency Usage & Analysis for Polymer Banknotes in India



The Authentication Solutions Providers' Association (ASPA) released a recent report summarizing the expert perspectives on COVID-19, sharing the central bank and industry responses about banknotes that are in the public domain.

Titled "Report for Nation – COVID-19, Currency usage and analysis for polymer banknotes in India", it examines the probability of disease being spread because of currency notes as well as the probability of polymer currency notes in India as an alternative to paper currency.

Despite the increasing use of electronic payments, currency retains an important role in the payment system of every country. However, today, the crime of

counterfeiting currency continues to present a potential danger to national economies and financial losses to consumers at large. Further, with the recent COVID-19 pandemic there has been a debate on the risk of spreading viruses & other infectious diseases through contaminated paper currency notes.

According to experts, Polymer notes are not porous and so do not absorb moisture or dirt like their paper counterparts. This means they have excellent anti-soiling properties. They can easily be cleaned with a damp cloth or hand sanitizing solution, which means that in parallel with their increased lifetime the notes will also remain cleaner for a longer period than paper notes.

In the future banknotes will be much used by automats like ATMs and banknote acceptors. From this perspective, polymer bank notes seem to behave better than cotton-based banknotes. Feeding polymer notes into an automat are easier because such notes are less affected by tears, missing parts, and clipped corners.⁵⁵ Also, from 'green' perspective, polymer banknotes seems to have better performance when it comes to environmental and sustainability aspects.

To download the report, visit <https://www.aspaglobal.com/report-for-nation>

COVID-19 Crisis Exploited as Opportunity by Counterfeiters: ASPA



ASPA release report "The State of Counterfeiting in India – 2020".

The Authentication Solution Providers' Association (ASPA) unveiled the first edition of its report "The State of Counterfeiting in India – 2020". The report highlights the trends of counterfeiting incidents reported in India for the period 2019 and 2018. According to the report, counterfeiting incidents have risen steadily in the last few years and in 2019 these have increased by 24 percent as compared to 2018.

Globally, counterfeiting now stands at 3.3 percent of global trade (according to OECD report) and is impacting the social and economic development of countries.

The report also points out that the COVID-19 crisis has been

exploited as an opportunity by counterfeiters. A spike in cases of fake hand sanitisers, masks, and PPE kits has been observed during the COVID-19 crisis. More than 150+ cases of counterfeit incidents had been reported from February to April 2020, including fake PPE kits, sanitisers, and masks. This is a direct threat to paramedical professionals, security volunteers, and society at large.

The top 10 sectors with the highest number of counterfeit cases reported include currency, FMCG, alcohol, pharma, documents, agriculture, infrastructure, automotive, tobacco, lifestyle and apparel.

States including Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, West Bengal, Punjab, Jharkhand, Delhi, Gujarat, and Uttarakhand are amongst top 10 states which need urgent attention to frame anti-counterfeiting policy mechanism. UP continues at the top followed by Bihar, Rajasthan and together these three states represent almost 45 percent of the total counterfeit incidents reported in India in the last two years.

Counterfeiting activities are not limited to high-end luxury items. Common day to day items including cumin seeds, mustard cooking oil, ghee, hair oil, soaps, baby care vaccines and medicine are increasingly reported counterfeited by criminals.

Nakul Pasricha, President. ASPA, said, "The trends call for immediate action. Counterfeit products across various sectors in India are causing over Rs 1 trillion (1 lakh crore) every year to our economy, and the progress to date is simply not good enough to fight this crime of the 21st century. There is a need for an

ongoing focus on building and nurturing authentication eco-systems in the country and as an industry association, we are committed to that. The involvement and active participation of all stakeholders is extremely crucial in this, as a lot of awareness is required at the industry, government, and consumer level."

Adding that the authentication environment will support the Government's "Make in India" initiative and its image at a global level, where trust is becoming an especially critical factor, Pasricha said, "We need to ensure that the "Make in India" products are genuine, safe, and secure until they are delivered to the end consumer across the globe. ASPA is building up innovative tools to help policymakers on the need for action and legislation in fighting counterfeiting and this report is one of such tools".

ASPA & GS1 India Signs MoU To Strengthen Anti-Counterfeiting Eco-Systems

ASPA and GS1 India to spread awareness towards authentication & traceability solutions using global supply chain standards to strengthen anti-counterfeiting eco-systems in India.

Realising the magnitude of damage caused by counterfeiting to the Indian economy, brands and consumers, Authentication Solutions Providers' Association (ASPA) and GS1 India have joined hands to take the fight against counterfeiting to the next level in India.

ASPA (Authentication Solutions

Providers' Association) is a self-regulated non-profit organization that represents the entire physical and digital authentication solutions industry. GS1 India, a standards body, is responsible for administering the use of global supply chain standards in India that enable businesses to implement counterfeit detection and product authentication solutions to safeguard their supply chains.

The two organizations have signed a MoU to jointly work towards mainstreaming and nurturing the anti-counterfeiting ecosystem by promoting the use of standards-based solutions for the betterment of industry and consumers at large.

Counterfeit products across various sectors in India are causing losses of over INR 1 trillion every year to the government, and the number of counterfeit cases has increased by nearly 24 percent in 2019 as compared to 2018. This causes business to lose brand equity and revenues, besides putting consumer safety at risk.

According to ASPA Counterfeit Repository findings Alcohol, FMCG, Pharma, Tobacco, Agriculture and Automotive are among the top sectors with the highest number of counterfeits in 2018 and 2019. During the COVID 19 pandemic period (between January to March 2020), more than 150+ cases of counterfeit incidents had been reported in the media. In March & April 2020, more than one case per day was reported related to fake PPE's kits, sanitizers, and masks.

Jointly, the organisations will be sensitising stakeholders in this respect and will spread awareness and motivate brands and customers to use 'Smart

Consumer' - an app launched to empower consumers with digital product information and is powered by the national repository of information on retailed products - DataKart, that is populated directly by brand owners.

Speaking about the partnership Nakul Pasricha, President, Authentication Solution Providers' Association (ASPA) said, "We are committed to build the authentication eco-systems in the country and enhance our relationship with other bodies working in the same space. The authentication environment will support Government "make in India" initiative and its image at global level, where trust is becoming an especially important factor. We need to ensure that the "Make in India" products are genuine, safe, and secure until it delivers to the end consumer across the globe.

"Involvement and active participation of all stakeholders is extremely crucial in this, as a lot of awareness is required at industry, consumer, and government level. We are sure that by combining resources of GS1 India and ASPA, we will add more momentum to our endeavours in fighting the menace of counterfeiting and develop the anti-counterfeiting ecosystem.", he added.

Sharing his views, S Swaminathan, COO, GS1 India said, "At GS1 India, we are constantly working towards overcoming the blocks in the global supply chain that prevent visibility and transparency. With this partnership with ASPA, we aim to further strengthen our endeavor to address the ever-growing threats presented by counterfeit products in existing supply chains. The use of GS1

standards and solutions like traceability, Smart Consumer app, DataKart, etc., will help Indian businesses gain trust of their consumers and trading partners by seamless sharing of product information. This would also act as a foundational step in our journey and empower consumers to authenticate products using the Smart Consumer mobile app".

Together ASPA and GS1 India will jointly work together to create awareness about the counterfeiting problems and build knowledge through various tools, including trainings, publishing of articles, enriching websites, etc., to drive adoption of global standards for detecting and controlling counterfeits.

OBITUARY

Satyadeep Ray

Indian holography industry lost one of its brightest stars...



In loving memory of Mr. Satyadeep Ray (1970-2020), we are saddened to announce his sudden demise on 17th August 2020.

He was Associated with Holostik since 1994 as Director Sales & Marketing. Mr. Ray was one of the brightest marketing & product development persons involved in rapid expansion of commercial holographic products in India. Under his supervision, Holostik has been able to successfully capture and deliver many remarkable projects and become one of the leading hologram companies in India. He was an extremely professional and dynamic person leaving his impact on everyone's mind whomsoever he met. His knowledge and persona made everyone of us learn new point of view about work and life both. "Things seemed tougher were things made easier by him"

Mr. Ray was born on 17th June 1970 in Cuttack and is survived by his wife, Ipsa and a daughter Katha Ray. He was known for his enthusiasm for holographic products and his role in fighting counterfeiting problem for socio-economic purposes.

Holostik, Director, and a long-term friend of Mr. Ray, said, "He was more than a colleague, friend, brother or anything that words can describe. It left a traumatic impact in my heart; it is difficult to stop the tears and no one will ever know what it meant to lose him. I still hold him very close within my heart and there he will remain to walk with me throughout my life".

May his soul rest in peace and provide his family the strength to withstand this situation, he further added.

"A life so beautifully lived deserves to be beautifully remembered"



The Seal of
Genuineness

HOLOSTIK[®]
Authenticating Supply Chains, Securing Lives

AUTHENTICATING SUPPLY CHAINS SECURING LIVES



30+
Years of Legacy



10000+
Satisfied Customers



750+
Members workforce



12+
Centers at
Strategic Locations



**SERVED
90+**
Countries Globally



5+
State-of-the-Art
Manufacturing Facilities

- ◆ Pioneers to **LEADERS IN 4 GENERATIONS OF HOLOGRAPHY** in India
- ◆ **DSIR RECOGNIZED R&D LABS** with world class European machinery
- ◆ **END-TO-END PHYSICAL & DIGITAL TECHNOLOGY** development under one roof
- ◆ **CMMI LEVEL 3** certified IT solutions
- ◆ **FOUNDING MEMBER OF ASPA**

Anti-Counterfeiting Products



Security
Holograms



Security
Labels



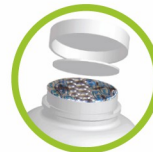
3D Specialty
Labels



Shrink
Sleeves



Hot Stamping
Foil



Holographic
Wads/EPE Liners



Holographic
Monocartons



Holographic &
UV Packaging
Films

IT-Enabled Solutions



Authentication



Track & Trace



Supply Chain
Management



Warranty
Management



Inventory
Management



Reward
Management

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