

2024: Another game-changer for **pharmaceutical serialization**.

Firstly, a happy new year to you all. We hope you enjoyed a festive season filled with fun, family, and friends, and hope that you feel relaxed and recharged, ready to tackle 2024 head-on.

□ *Article by Alf Goebel, CEO of advanco*



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And, what a year we expect 2024 to be. To say it is going to be a busy one is perhaps one of the biggest under-statements ever written.

Indeed, we expect changes to come at us from all angles during the next 12 months.

We will see the wider economic climate continue to bite, resulting in pharmaceutical manufacturers having to constantly re-evaluate how their businesses are structured for ongoing agility and success. This comes at a time when Industry 4.0. is paving the way for some of the biggest technological advances ever seen, changes which are causing a seismic shift when it comes to how pharmaceutical supply chains operate across the world.

Add to this the pressures being placed on the overall pharmaceutical sector from a rapidly increasing regulatory burden, plus the ongoing danger caused by those who forge medicines, and you begin to see that there are some serious pressure-points facing the sector.

However, despite these issues, the serialization sector is set for serious growth. Research from The Insight Partners forecasts huge growth for the global serialization market, estimating it will be worth US\$6,049.0 million in 2027, a significant growth from the US\$1,728.3 million recorded in 2018.

Indeed, this growth is reflected in what we are experiencing ourselves at advanco. In addition to our recent high-profile growth through the acquisition of Vantage, we continue to experience strong organic expansion. Our experts continue innovating and setting the serialization standards of the future, and our diary is already bursting at the seams for another busy year of industry conferences and networking opportunities.

So, for many reasons, all the signs point to 2024 being a pivotal year. Let's look at some of the wider industry developments we are likely to witness.

More packaging = more serialization opportunities

The global pharmaceutical contract packaging sector is expected to grow at an 8.1% CAGR through 2027 to reach a value of \$29.62 billion.

Contract firms handle primary packaging and labeling and provide secondary services, such as assembling and secondary packaging of vials, auto-injectors, and prefilled syringes.

Add to this the huge pharmaceutical companies with their own vast, in-house packaging operations and you

begin to see there are some golden opportunities for the serialization companies. Indeed, there is a direct correlation – as the packaging sector grows, the serialization sector will have no choice but to grow to keep up with it.

The coming 12 months will be significant for the growth of contract packaging.

Combined with ongoing developments in drug production, we are seeing major developments in the evolution of the cold chain, which is dictating the need for new types of packaging. Hand in hand with these changes goes a need for serialization solutions that can perfectly adapt to these changes.

Serialization as a driver for streamlined packaging operations.

Hand in hand with a booming packaging sector goes a need to streamline the packaging process to ensure it remains profitable. And this streamlining process is being increasingly driven by technology – technology which can be perfectly complemented by serialization software.

Recent years have seen a move towards a much more agile, local supply chain. The rapid uptake of digital scanning systems combined with the very latest, cutting-edge technology, has made supply chains much more secure. New-edge computing is set to tighten this up even further. It will power automatic, time-sensitive supply chain processes in warehouses, factories, and manufacturing facilities. These processes will lessen the need for human management and create optimal outcomes while eliminating the risk of error due to manual processes. This is, of course, incredibly welcome by CEOs and senior decision makers of companies across the globe.



One way that technology will drive the process will see the addition of a scanner with a mobile application supporting the handling of serialized products across the supply chain and within warehouse operations. It will run on commercially available devices deployed at the warehouse, packaging, and other operational facilities. The product will provide complete visibility across the global supply chain. This, combined with the ability to connect with multiple Enterprise-Level (Level 4) serialization repositories, Warehouse Management Systems (WMS), and Enterprise Resource Planning (ERP) solutions, will complement the valuable investments made within existing solutions.

Furthermore, new-edge technology will sit behind the rise of smart robots that are poised to transform warehouse operations even further. Indeed, Gartner predicts that 75% of large enterprises will have adopted some form of smart robots in their warehouse operations by 2026 as they search for flexible automation.

The latest serialization software doesn't just sit behind all these developments – it can enhance them. This is becoming increasingly recognized by the pharmaceutical sector, a sector that understands how easily it can adapt to the latest technology trends.

Regulatory compliance

More countries are realizing the importance of regulating their pharmaceutical production process, and much like a snowball effect, momentum is gathering.

With the EU Falsified Medicines Directive (FMD) coming into effect in February 2019 and the US introducing legislation in November 2017, as part of the Drug Supply Chain Security Act (DSCSA), it's expected that more than 75% of global medicines were covered by some form of track and trace regulations by 2019 – a figure that is constantly growing. For example, traceability legislation has recently been mandated in the Middle East and North Africa (MENA) to combat the growing problem of counterfeit medicines.

This regulatory pattern will continue during 2024 – indeed, we may well even see some tightening-up on the already stringent rules that exist now.

An ongoing fight with the forgers

All of us who work in the pharmaceutical sector are profoundly aware of the ever-present, and ever-dangerous issue of counterfeit drugs.

It is predicted that 10% of pharma products worldwide are counterfeit, with the global counterfeit drug market exceeding an eye-watering \$75bn. Research further estimates that the death-toll caused as a result could increase to 10 million people by 2050.



Such pressure will only increase the need for pharmaceutical serialization and regulatory compliance. The ability to accurately trace a drug across the entire supply chain, from manufacture to the point of sale, or point of dispensation, provides the watertight confidence needed that the drug is the real deal.

This peace of mind is something that the world is demanding more and more as the counterfeiters continue producing their life-threatening fake goods.

Conclusion

The future is looking bright for the serialization sector, and 2024 is set to be a pivotal year with many changes and developments set to become entrenched even further.

Add to this recipe the fact that advanco itself continues to experience a huge growth trajectory, with new clients, offices and opportunities coming at us from all sides.

Here's to a successful year ahead for us all!

