Tailored for a new era

The ellipsis-like design of Dot Dot Dot shampoo points to the open-ended nature of refillable beauty products. The label is made from 100 per cent rPE

The label industry has weathered the global pandemic and prospects remain good, despite the cost challenges ahead. Dominique Huret reports

The global market for label printing (all substrates) is forecast to reach a value of nearly $50 billion in 2024, with volumes of 1.59 trillion (A4 prints or equivalent). This unabated annual growth rate of 4 per cent in value and 5.5 per cent in volume tracks the steady growth already witnessed between 2014 and 2019, when value increased by 4.8 per cent a year and volume by 5.2 per cent.

In a report by Smithers that addresses the future of label printing, James McKay points to Asia as the largest geographic market for printed labels, with annual growth rates since 2014 of 7 per cent in both value and volume. Interestingly, Asia's share of the global printed label market is almost 49 per cent by volume but only 38 per cent by value. North America and western Europe are the next two largest markets for printed labels, and these three regions make up just over 85 per cent of global A4 print demand and 87 per cent of the global value.

While India tries to match China as one of the leading global growth engines for labels, Africa experienced the highest growth in demand over the Smithers review period, at 8 per cent, although this was achieved from a relatively small base with correspondingly large upside potential.

Despite the heady growth, fragmentation of the label market is both obvious and increasing. This is driven by many factors, including a continued uptick in products on the market, an increase of versioning [different versions of the same product], and a strong trend for customisation.

"In addition, e-commerce increases the demand for transit labels, and the surge in craft/local/organic food producers is also a game changer generating many more labels," explains Francois Martin, marketing and communications and PL narrow-mid web marketing director at Bobst Group. "Regulatory laws and obligations have also led to a bigger demand for new labels in some regions. All these changes mean shorter production runs and these require additional flexibility and new capabilities for converters and printing presses."

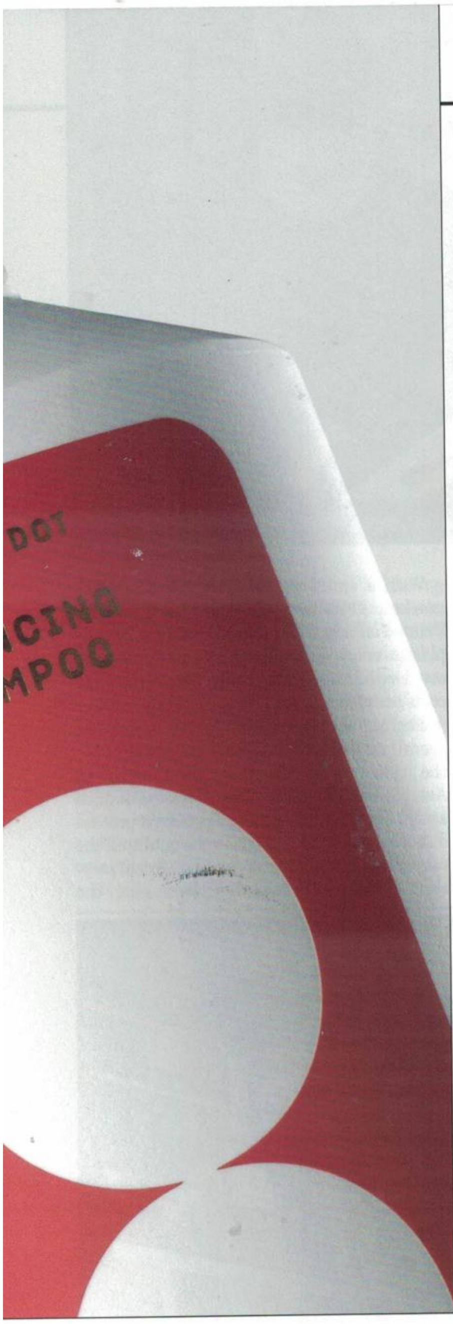
As expected, pressure-sensitive and wet-glue labels dominate the market for printed labels, with a combined global share of 79 per cent of total value and just over 82 per cent of volume. Pressure-sensitive labels come out on top with 60 per cent of the total share in value, forecast to grow to 64 per cent by 2024. Value-wise, wet-glue labels are slowing, decreasing from 20 per cent in 2019 to a provisional 18 per cent in 2024. In-mould labels (IMLs) remain stable, as do sleeves.

As users move to pressure-sensitive labels, and wet-glue run lengths fall, their continued decline in market share demonstrates the importance of overall labelling performance rather than low unit price.

Alexander Watson Associates (AWA) defines four principal application categories for pressure-sensitive labels: variable information printing (VIP), primary product, functional/security, and promotional.

"VIP labels currently account for 48 per cent of the global pressure-sensitive label market," claims Catalina Steenbakkers, market research consultant at AWA. "Primary product labels are the second category at 43 per cent of

***Left to right:** Catalina Steenbakkers, market research consultant at AWA; Francois Martin, marketing and communications and PL narrow-mid web marketing director at Bobst Group; Hassan Rmaile, general manager and vice president for Europe, Middle East and North Africa at Avery Dennison*



Above and below: Bobst has fully equipped its Competence Center at Bobst Firenze in Italy, where the portfolio of flexo, UV inkjet and all-in-one label presses can be seen demonstrating how converters can optimise their entire production floor

the global market, followed by functional/security labels and promotional labels with 5 per cent and 4 per cent shares, respectively. VIP is the generic term given to the printing technologies allowing print of unique readable data [barcodes or graphics] on individual items such as label, tag, ticket, poster, or direct marking."

Product identification is important for consumers and manufacturers alike, not just at item level but also at component level. Supply chain efficiency has increased significantly across retail and manufacturing industries worldwide with the adoption of barcode technology throughout their distribution network. All pressure-sensitive label application segments have shown growth for the year 2020.

"However, both VIP and primary product label application experienced significant growth across all regions as the demand for food, healthcare and personal care, household chemicals, and transport and logistics/e-commerce increased," adds Steenbakkers. "This was especially the case between the second and third quarters, when most countries entered quarantine/lockdown related to the Covid-19 pandemic."

The two largest end-use segments for printed labels are the beverage and food industries with 51 per cent and 16 per cent respectively of A4 print demand and 45 per cent and 17 per cent respectively of value (figures from 2019). Healthcare is the third-largest end-use segment. These three will remain the fastest growing applications all the way to 2024. General industrial labels and other speciality labels follow.

Globally, beverage label demand has had the highest growth rate in volume over the past five years. According to Smithers' report, demand from this segment will continue to grow to 2024 at around 6 per cent on average in volume, but demand in individual countries will vary. Sleeve labels overall are extending their applications within the beverage market, while shrink sleeves are the fastest growing label type.

Sleever's LDPET full-body sleeves enable improved recyclability of PET bottles

Several market drivers are impacting printed labels for foods and are making it more challenging for brands to stand out in both online and physical outlets. The three major factors are slow growth across developing markets, product saturation in advanced markets and diminishing returns on premium-end segments. But demand is higher for eye-catching label designs with multiple colours and visual effects, as well as additional labels announcing prices or promotions. The continued drive to improve food safety standards and to improve sustainability is also impacting the direction of label development.

The cosmetics market has undergone a rapid period of growth, with subcategories such as premium and men's experiencing double-digit growth. Because the premiumisation trend is moving toward a degree ▶

of maturity, more brand owners are manufacturing products that incorporate electronic tags to include security features, and to improve consumer engagement as part of the drive toward smart packaging.

New trends

Label customers have new demands that influence the choice of label type, which then affect the market dynamics. For pressure-sensitive labels, machinery manufacturers continue to develop faster application equipment to match the line speeds of wet-glue labels. New developments in impact oil injection systems have also helped to address issues relating to press blockages and delays caused by pressure-sensitive materials.

Currently, there is a growing push to reduce the environmental impact of release liners, explains Kevin Clunie, the vice president of sales and marketing for Mactac North America.

"Celab is an industry coalition founded with a vision to create a sustainable pressure-sensitive labelling industry by offering solutions and providing education to enable matrix and liner recycling," he says. "By 2025, we aim for 70 per cent of the self-adhesive industry to have access to matrix and liner recycling. Its mission is to drive progress in legislative requirements and establish regional groups to oversee strategy and progress."

IBE in Italy offers a variety of printing techniques – up to ten colours, in the demanding oil and wine sector

Despite the e-commerce boom, the multi-part tracking labels market is slowly being eroded by newer electronic tracking solutions increasingly developed by the industry, such as RFID technology, explains Hassan Rmaile, general manager and vice president for Europe, Middle East and North Africa at Avery Dennison. "We see this further implementation of RFID technology and end-to-end digital ID solutions as offering exciting possibilities at every step of the value chain across industries."

With a small share of the label printing market, IML demand is holding steady. Printed on thin substrates and of a low-density plastics composition, IMLs give a perception of eco-friendliness, while transport and storage costs are also reduced.

Shrink labels represent 90 per cent of the overall volume of the sleeve market, with PVC the most common substrate, particularly in Asia, and PET glycol growing in North America and Europe. In order to avoid potential process disturbances or a reduction in the quality of the recycled material during the mechanical recycling of clear PET household packaging, the

Xeikon offers both UV inkjet and dry toner printing technology, depending on the specific application

sleeves must be separated from the PET during the sink-float process. Recent developments in multilayer cyclic olefin copolymers (COC) with PE or PP allow the sleeves to float during this step. Sleever is a significant player in this area, with its LDPET option enabling the use of non-bleeding inks to comply with food-grade requirements for rPET bottle-to-bottle.

Digital printing remains strong

Flexo continues to grow but the use of digital and hybrid presses is growing faster. That's the opinion of Bobst Group's Francois Martin, who adds that shorter print runs and greater levels of flexibility are pushing digital printing ahead. It is a trend that is here to stay.

"The combination of technologies has led to the rise of hybrid flexo/inkjet, which is a major trend in the label printing industry," he says. "We believe that the future will be a blend. We are starting to propose modular presses combining inkjet and flexo printing technologies but also embellishment and cutting modules – all-in-one and all inline. Regarding digital, remember there are two main processes: xerography (using either powder or liquid toners) and inkjet. In addition, hybrid presses offer the opportunity to not only address short runs but also medium runs very economically."

Today, xerography is the larger of the two digital processes, but inkjet has been growing at a much faster rate since 2014. Experts forecast that inkjet will overtake xerography in volume before 2024.

In terms of automation, investment is rising in sophisticated management information systems that are integrated with specialised inspection and colour performance software and technology.

Guido Van der Schueren, chairman of Hybrid Software, explains: "Automated manufacturing is a data-driven process. This requires label designs that are printable, variable data sources that are correct, and manufacturing systems that efficiently map orders to available production equipment and substrates. What's the common element? Software."

Converting equipment manufacturer Tecnocut assesses future priorities. "The label sector will continue its upward path during 2022 and will focus its efforts on optimising production processes," explains international business manager Pol Estrada. "Going green is no longer just an option, as the market for more environment-friendly manufacturing processes continues to grow."