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PACKAGING & LABELS

Trends in Labels and Packaging:
A new year is coming

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About Ghent Workgroup

The Ghent Workgroup (GWG) is a worldwide assembly of graphic arts stakeholders (user associations, vendors, consultants, educational institutions, service providers, and end users) founded in 2002. It was founded in response to increased needs for standardization of the various processes in graphic arts workflows, especially in an increasingly globalized service provider landscape. The rules of the group have been carefully conceived to ensure that the group remains practice-oriented and focuses primarily on the needs of the end users.

The GWG focuses on the development of best practice guidelines and specifications for graphic arts workflows. While the group started its work with the development of guidelines for PDF quality control, it has expanded its scope. The group now deals with magazine, office, and packaging specific specifications, the development of job ticket metadata specifications for delivering PDF files for advertisements, packaging, digital print and signage, preflighting PDF files, and in developing test suites to ensure that workflows and applications are configured and used correctly.

All material created by the GWG is distributed free of charge via the GWG website (www.gwg.org) and via the vendors and user associations involved in the work of the group.

The mission statement of the GWG states that the group will “establish and disseminate process specifications for best practices in graphic arts workflows”. In practice this means that the group:

- Develops and maintains process specifications and associated documentation for best practices in graphic arts workflows.
- Develops tools to implement best practices and/or identify opportunities for improvement
- Develops and maintains reference implementations to ensure that the specifications it develops are usable in the real world.
- Actively promotes adoption of its work in both the graphic arts user and vendor communities.
- Optimizes and coordinates the decision-making process between its members.

Much of the work of the group is done through teleconferences and e-mail discussions. Three times a year, the members come together for a three-day face-to-face meeting. In order to streamline the work and decision-making process, subcommittees have been organized around specific topics do the actual work. To learn more about the various subcommittees, or to find out how you can contribute to this effort, visit the GWG website (www.gwg.org).

Introduction

As 2025 comes to an end and we look ahead to 2026, it's a good moment to reflect on packaging trends from the past year and anticipate what's next. During the month of November, we had an opportunity to see the latest NAPCO Digital Packaging research report, and to meet with many packaging converters at the Digital Packaging Summit, to hear first-hand of their challenges and opportunities. At the same time, RR Donnelley released their latest Packaging and Labels Insight Report. These were not connected in any way other than their focus on the present and future of labels and packaging. While many or most of you are familiar with NAPCO research (a division of Printing United), before I jump into some of the more interesting results from these reports, I thought I should answer what appears to be some confusion about RR Donnelley (RRD) and packaging.

Labels and Packaging?

RRD has been a fixture in print since 1864 when its founder, Richard Robert Donnelley purchased 50% of an existing commercial printing company in Chicago. In their early years much of their growth was organic and driven by innovation. In 1870 he established Lakeside Press, built a new building which subsequently burnt down during the great Chicago fire in 1871. He rebuilt and they began printing directories, magazines, catalogs and books in addition to general commercial print, and touching on many historic moments. Subsequently, while still achieving organic growth, RRD went into acquisition mode in the 1990' and 2000's with a zeal. In 2016 they split into three publicly held companies; RRD, LSC Communications and Donnelley Financial Services. In 2022 RRD was acquired by Chatham Asset Management and became a private company. As you know, RRD's legacy is commercial printing. Many don't fully understand RRD's role, commitment and growth in labels and packaging, today that business is also focused on labels and folding carton. According to Lisa Pruett, RRD's President of the Packaging and Label segment, "When we think about the packaging and label segment, we think about it globally, and that business is worth about \$2.3 billion in revenue for RRD. We have manufacturing facilities throughout Asia and in Europe, in Central America and in the United States and Mexico, with about 45 plants, that employ over 10,000 people". They spent the last five years building that up, and investing heavily in that area. As such they have been closely monitoring the trends in packaging.

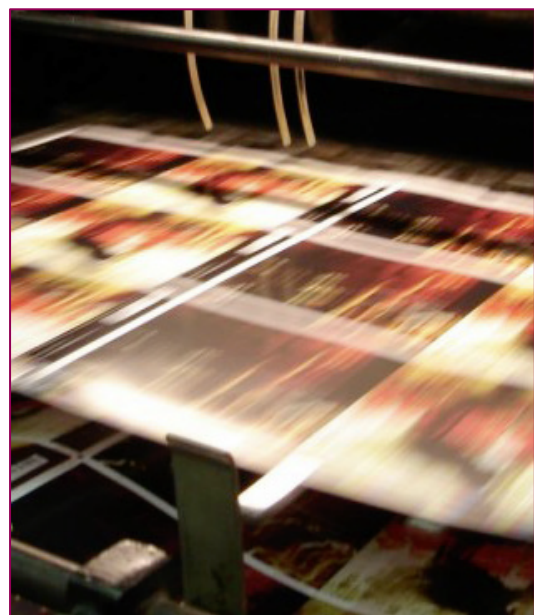
Challenges and Opportunities

This is the 3rd trend report RRD has executed in an effort to gain insights into how companies are adapting packaging and labels operations to market shifts. Their first Packaging & Labels Insight Report was produced in 2022,

and they released the Q4 2024 report. This attempts to gauge response to trends such as product safety, e-commerce growth, sustainability goals, and supply chain challenges, and to better understand the factors shaping these decisions.

The report surveyed 300 U.S.-based business leaders and managers with decision-making responsibilities for their companies' packaging and label needs, focusing on their priorities and strategies within these operations. Nearly half (47%) of the survey respondents identified as decision makers for both packaging and labels.

From the RRD side, according to Pruett, "We haven't seen much real growth in the last few years since Covid and the resultant destocking. On the label side, it's been flat, if up slightly. We're seeing our SCS (Supply Chain Solutions) business grow substantially in Mexico and in Europe, and we've added a few additional clients. The Chinese economy is not super robust, so that's having some impact. However, we do a lot of packaging for consumer electronics and that continues to grow. So, it just depends on the region and the product line. Since our business is so diverse, when one product line or region is down, we usually can offset that in another area".



NAPCO Research designed and deployed two surveys in September 2024: One to package printers and one to brand owners. The respondents included 106 Package Printer and 131 Brand Owners. They presented this at the Digital Packaging Summit. This year the Digital Packaging Summit celebrated its 10th anniversary, and kicked off the event with a general economic outlook of the print industry from PUA Chief Economist Andy Paparozzi. While no surprise the top concerns were; increasing sales, maintaining profitability, economy/business conditions and rising labor costs. On the positive side, they saw investments in increasing productivity, sales and marketing, along with expanding their client base a tangible benefit.

Marco Boer, President of IT Strategies, highlighted that the print and packaging industry is shifting from a Labor to a Capital-Intensive Industry. Driving this is fewer labor resources. According to a study recently published by Heidelberg, “nearly one in two companies lack suitable skilled staff. This is currently the biggest challenge, even ranking ahead of increased energy prices and bureaucratic burdens”. For the study, the company surveyed 700 firms.

The BLS (Bureau of Labor Statistics) documented that print industry employment was approximately 415,000 in March of 2020, dropped by to approximately 18% to 341,000 in April of 2022. While print industry employment has trended upward since the pandemic, it is reasonable to expect it will not return to early 2020 levels, due to advancements in automation and efficiency of printing technology. On the positive side, sales efficiency has improved, with sales per employee rising from \$181,501 in 2010 to \$264,458 in 2022, thanks to technological advancements and enhanced productivity.

Reports Trend Highlights

Overall, it is anticipated that the global label and packaging sector will grow at a rate of

about 13% CAGR from 2024 through 2029, at different rates depending on the packaging types. One of the biggest drivers of this growth is the continued rise of e-commerce and its varied requirements over in store packaging. In 2023, global e-commerce sales reached \$5.8 trillion, and are projected to grow to over \$8 trillion by 2027. This is a 39% increase from 2023. In the US, in Q3 2024, US e-commerce sales grew 7.5% year over year, accounting for 54.2% of total retail growth. This is reinforced in the RRD 2024 report, “following a year of tremendous e-commerce growth shown in their 2023 report, the majority of packaging (78%) and label (79%) respondents reported a rise in their e-commerce business over this past year. From customer preferences for convenience to brand agility and cost-saving considerations, e-commerce continues to evolve, and companies are investing in ways to attract customer attention online”.

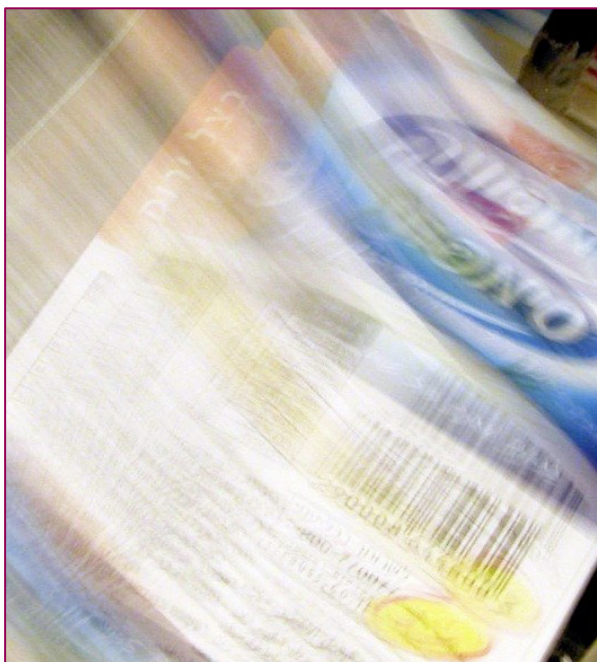
Of those trying to meet growing demand, over half (55%) of respondents have designed packaging specifically for e-commerce, up 18% from RRD’s 2023 report. Of those who have seen an increase in e-commerce activity, product protection and customer satisfaction was a top consideration for companies. When asked how companies are ensuring products are packaged safely and arrive without issue, packaging (64%) and label (67%) respondents say they are using specialized materials for added protection, and 58% and 66%, respectively, are focusing on end user feedback and reviews to impact packaging decisions.

Product safety and functional design emerge as top priorities to meet consumer expectations for quality and functionality in both packaging and label designs. This focus on protective materials and appealing design choices reflects an industry-wide commitment to ensuring products arrive intact, meet consumer standards, and align with broader corporate responsibility goals. This is driven to a great extent by the increasingly bifurcated retail market with the online channel growing at the expense of the brick and mortar, creating a

need for packaging targeted at each of those channels.

According to the RRD survey, in the next two years, 89% of packaging respondents expect to make changes to their designs, with 36% anticipating major changes, to enhance functionality and adapt to evolving consumer expectations. The two primary design changes all respondents expect to make are functional design (75% for packaging, 60% for labels) and materials and composition (73% for packaging, 70% for labels).

As e-commerce demand increases, functionality and product safety remain top priorities, and brands are willing to make the investment for the right materials. RRD's latest report shows three quarters (75%) of packaging and over half (60%) of label respondents expect to make functional design-related changes (strength, size, opening) in the next two years, while 73% and 70%, respectively, plan to make material composition changes. Additionally, the large majority of packaging (86%) and label (79%) respondents agree that inflation and rising costs of raw materials have caused changes in the way their organization sources packaging and labels over the past year.



When asked to assess factors motivating their expected packaging changes, respondents rated consumer or end-user appeal (48%), efficiencies in storage/distribution (47%), and increased product protection (46%) as the top three major priorities. Top motivations for label respondents include pressure to lower costs (45%), meeting new regulations (41%), and new products or product changes (40%). Along with a focus on materials, companies are continuing to prioritize, track, and make adjustments that impact overall company sustainability performance. With heightened emphasis on brand sustainability performance coupled with increasing customer demand for eco-friendly products, companies are striving to meet internal and external stakeholder expectations. 57% of packaging respondents indicate they are taking sustainable and eco-friendly aesthetic direction over the next two years to appeal to buyers. From the NAPCO study, 74% of brand owner respondents report converters' ability to provide documented sustainability information is very important or essential. 47% of converters state more than half of their customers have defined and documented sustainability goals for their packaging. 37% of brand owner respondents report meeting sustainability goals is a top 5 packaging challenge. The large majority of packaging (83%) and label (80%) respondents say their companies have moved closer to their sustainability goals, with 81% and 79%, respectively, indicating their packaging and label operations specifically have moved them closer to their sustainability goals. For packaging respondents, reduction of material waste (69%) remains a top sustainability consideration when making packaging design decisions, followed by material recyclability (68%) and material removal/light weighting (54%).

Does digital print play into this?

According to the NAPCO report, 91% of brand respondents use digital printing and recognize the digital advantage, and place efficiency benefits

over creative benefits. These remain top advantages, even though not all brands require versioning or customization. Although SKU proliferation continues with a vengeance. In the NAPCO study 88% of brand owner respondents offer their products via e-commerce.

As a result, personalization, unboxing, and enhanced shipping boxes are all key opportunities for digital print. Package printers were asked about their top efficiency challenges and opportunities. Top responses are tied to digital's advantages: Fast changeovers, managing versions and SKUs, and optimization of end-to-end workflows.

In summary

During the Covid pandemic there was a lot of discussion about the “new reality” post pandemic. It appears that the Covid driven new reality is finally settling in. The new purchasing behaviors driven by the growth of e-commerce are still shifting. The resultant forced growth over concerns with product availability seems to be over, and whatever destocking was needed seems to have run its course. The new “empowered shoppers continue to scout information from company values to manufacturing and supply chain practices in search of sustainable options: 68% of highly empowered consumers plan to step up their efforts to identify brands that reduce environmental impact, 61% seek out energy-efficient labels when making purchases and 47% regularly buy organic products”. Consumers have proven that they are willing to pay a premium for those products as well. These market shifts are in addition to the increased global sustainability regulations, either here or coming soon. These factors, and the increasing labor challenges will continue to put pressure on both brands and converters. The good news is that markets appear strong but different, and new

automated hardware and software technologies are being developed to better support these new realities.

More to Come ...

I would like to address your interests and concerns in future articles as it relates to the manufacturing of Print, Packaging and Labels, and how if at all it drives Industry 4.0 and 5.0. If you have any interesting examples of hybrid and bespoke print manufacturing, I am anxious to hear about them. Please feel free to contact me at david@zwang.com with any questions, suggestions or examples of interesting applications.

About the author

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David L. Zwang, travels around the globe helping companies increase their productivity, margins and market reach. With over 40 years of industry experience, David specializes in process analysis, and strategic development of firms in the fields of publishing, design, pre-media, and printing across the globe. He began in the graphic arts as a commercial photographer and has since founded and sold several prepress and printing operations. His experience includes expertise in pre-media and cross media publishing, with an extensive background in digital, offset, and flexo printing processes. His expertise in production optimization, strategic business planning, market analysis, and related services to companies in the vertical media communications market has transformed many businesses.