



Drawing on industry research, we've put together this easy-to-read report on the top seven trends driving the printing industry.

Consumer Preferences

Power shift to consumers

Since the arrival of the Digital Age, the world has experienced an accelerated rate of change that has and continues to transform social interaction, human behavior and expectations.

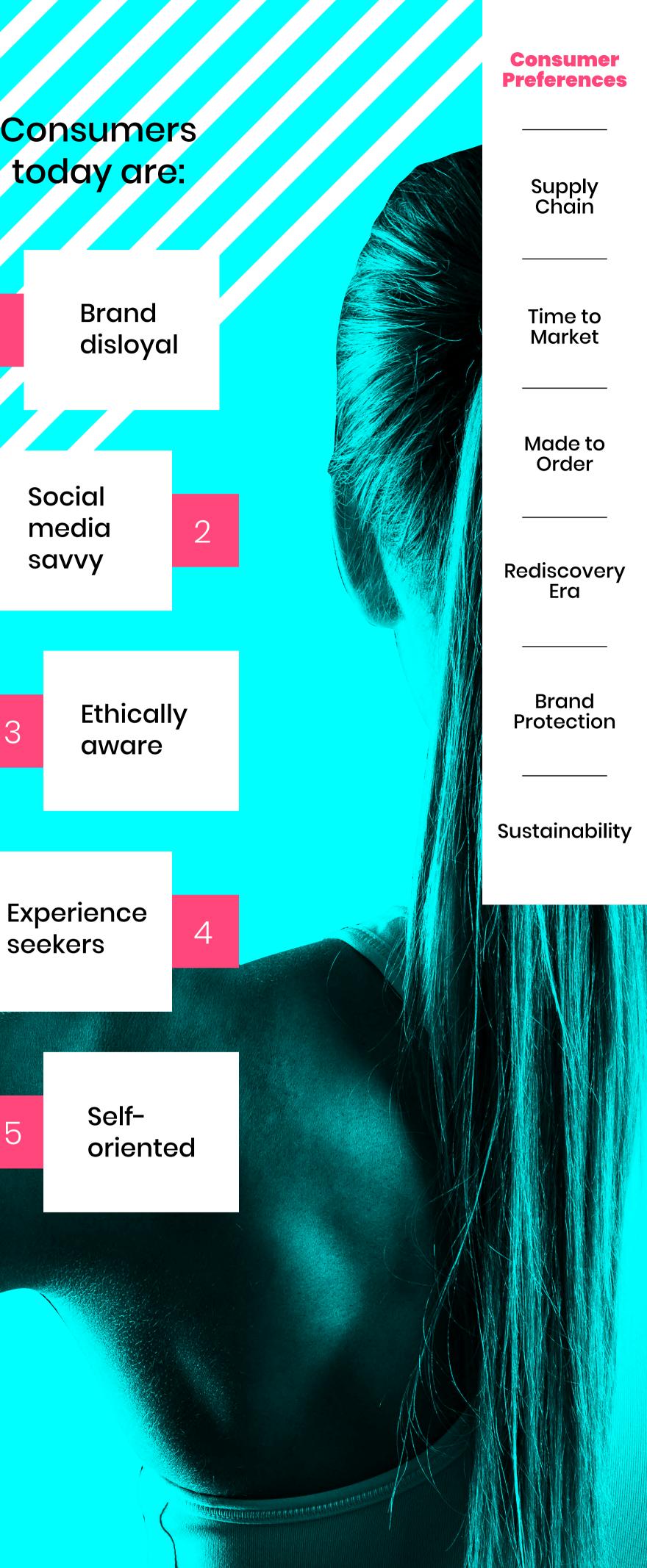
The impact is seen and felt by all people, changing what consumers purchase, how they purchase and where they purchase.

The Digital Age has turned the notion that the "consumer is boss" into a reality. Social media allows and encourages consumers to share their experiences on the internet. As such, today's consumers enjoy connecting with brands that provide relevancy and appeal to their community.

Brands need to constantly keep an eye on the "likes" and "dislikes," as feedback upon launch to products and packages is instant and available for all to see.

To be successful in this environment, brands must provide their target market with exactly what they want, when they want it and deliver on their brand promise.

Mike Ferrari, Brand,
Packaging and Innovation Consultant,
Ferrari Innovation Solutions , LLC



Consumer Preferences

challenges become opportunities



Brands can go bold, quirky, big or small with HP Indigo digital printing.

The short runs ability and the agility to keep flexing the same design and infinite interpretations of it, are big opportunities for graphic design.

There's now the choice to be geo-specific with an international brand; to create infinite varieties of the same design, which can appeal from a one-off perspective; or to experiment with a quick reaction to market trends, all of which a national brand would typically not have done in the past.

The power might be shifting to the consumer, but brands, big and small, have the HP Indigo ability to answer new consumer demands.

2

3

appeal

Complex

designs for

higher shelf

Get to market fast

4



Consumer **Preferences**

Supply Chain

Time to Market

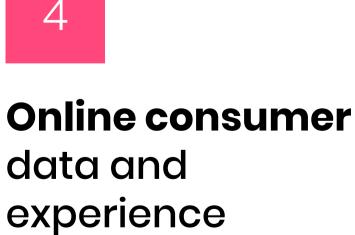
Made to Order

Rediscovery Era

Brand Protection

Sustainability

Multiple product versions

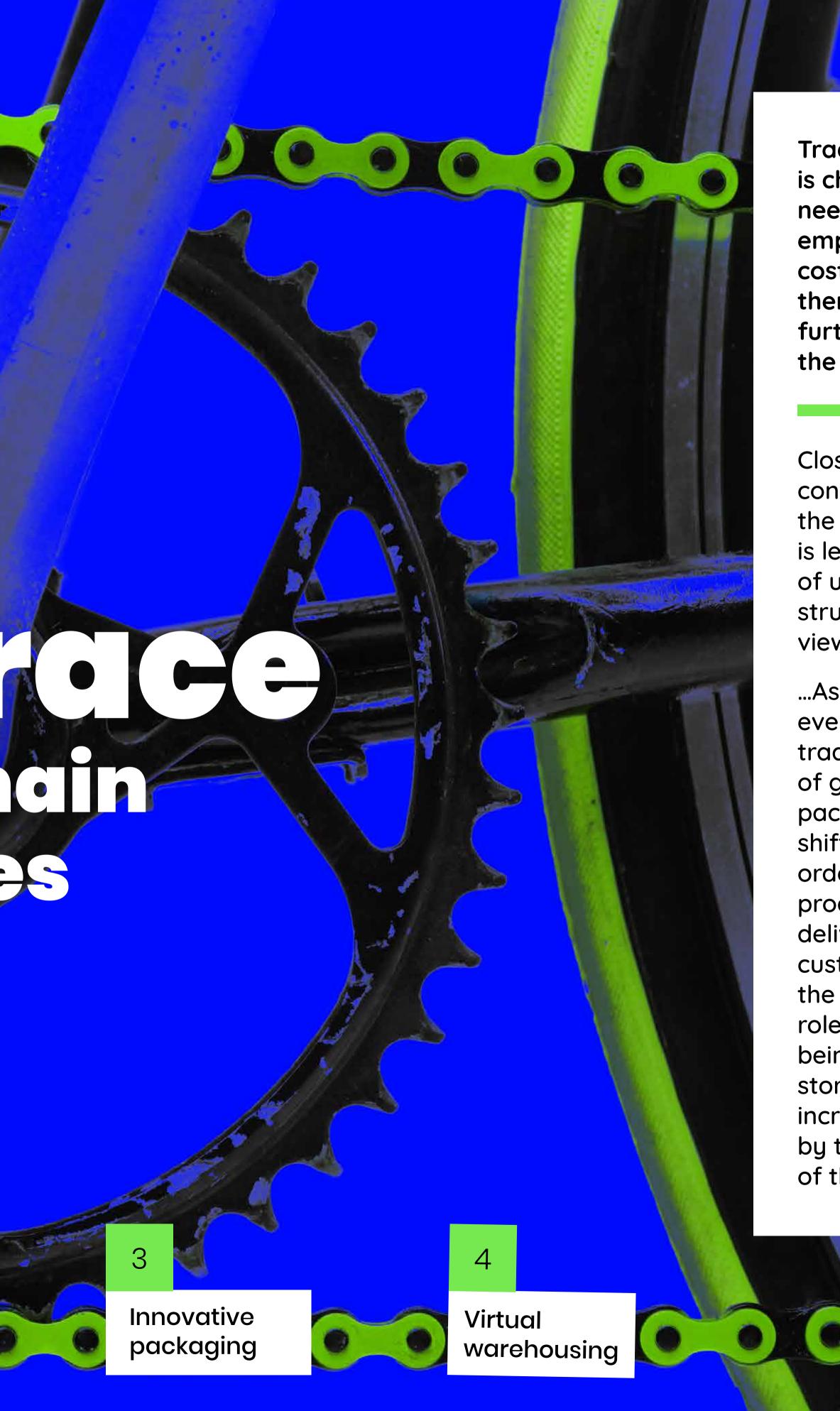


Supply Chain

Chain Supply

Embroic supply chain challenges

Reduce carbon emission



Consumer Preferences

> Supply Chain

Traditional supply chain model is changing. With the industry need to be leaner and the emphasis upon cutting both costs and carbon emissions, there is an expectation for further collaboration across the supply chain.

Closer cooperation between converters and retailers in the paper and board industry is leading to innovative ways of using existing packaging structures, many of which are viewed as staid by consumers.

...As online shopping becomes ever more important for traditional retailers, the centre of gravity of the consumer packaging supply chain is shifting further towards order fulfillment issues product-picking efficiencies, delivery distances, timing, customer satisfaction and the like. In this sense, the role of the warehouse is being refashioned to one of storefront, with consumers increasingly judging retailers by the accuracy and efficiency of their product deliveries.



Time to Market

Made to Order

Rediscovery Era

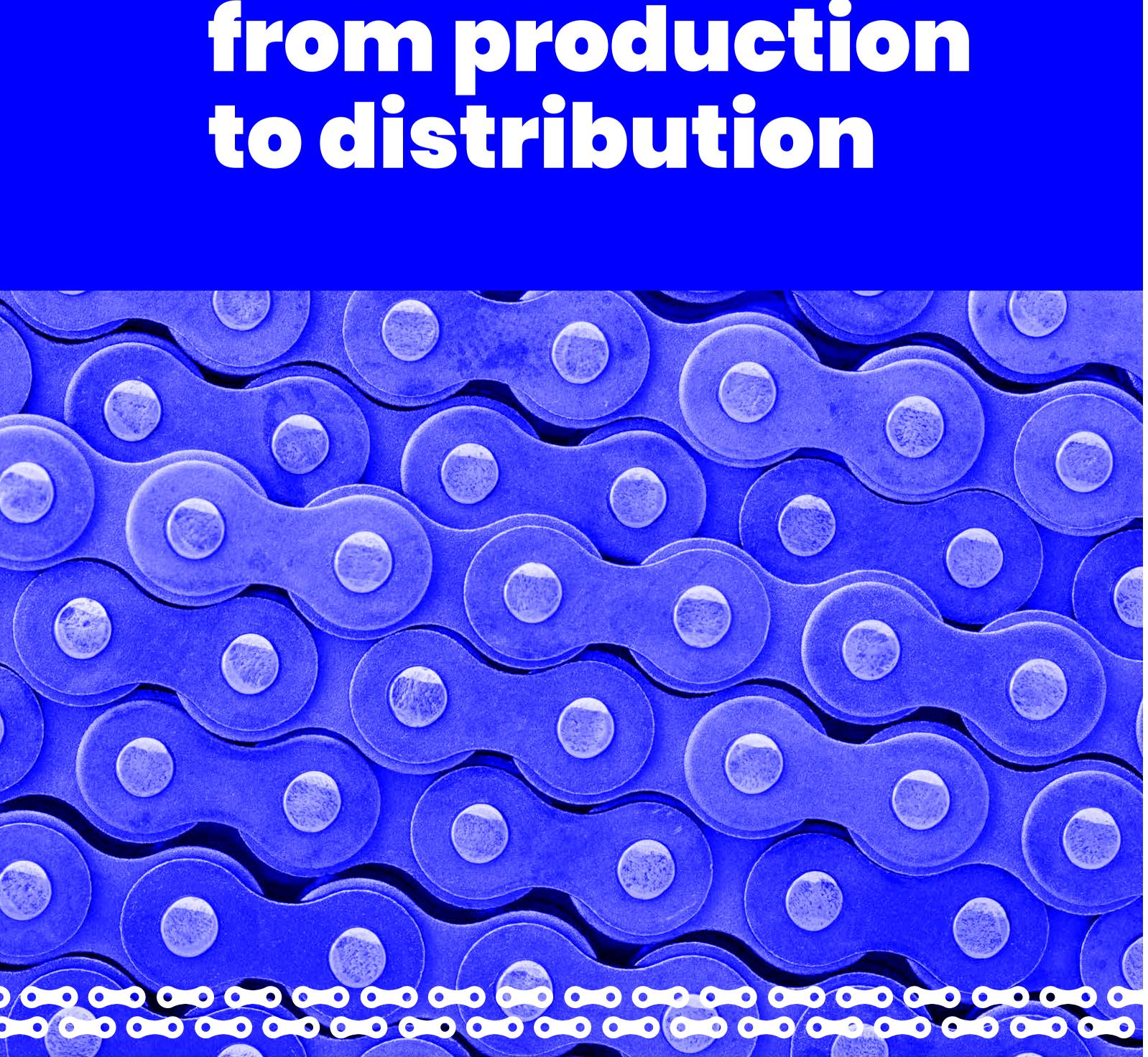
Brand Protection

Sustainability

The Future of the Consumer Packaging Value Chain, Simon Ford, Smithers Pira

Supply Chain

Optimised supply chain from production to distribution



HP Indigo technological innovations unite efficiency and excellence, reshaping sustainable supply chains for brands.

From the production of print to the distribution of finished materials, the just-in-time production offered by HP Indigo enables virtual warehousing, so that brands can print where and when they need.

Now brands can match supply to demand and reduce surplus in their supply chain, leading to less production, less shipping and waste, and fewer carbon emissions.

Consumer Preferences

Supply Chain

Time to Market

Made to Order

Rediscovery Era

Brand Protection

Time to Market

Get to Market

With the world around us constantly changing at a faster rate than ever, consumers expect the brands they love to evolve as fast as their social media feed.

Brands need to significantly reduce product lifecycle, and as a result speed up the process for hitting store shelves.

Product lifecycles are changing

1980s														
1990s														
2000s									1.(28	yea	rs		
Today					0.0	62	yec	irs						
Tomorrow		?												

2.25 years

Numerous studies indicate that faster cycle times is the primary advantage named when asked about using digital printing.



Faster cycle times

13.8%

More variable data applications

10.5%

More efficient warehousing

Consumer Preferences

Supply Chain

Time to Market

Made to Order

Rediscovery Era

Brand Protection

Sustainability

+

Source: Package Print: How Do We Sell the Digital Transformation? Multi-client Study, IDC, 2017 Time to Market

React fast with genuine digital flexibility



React fast with genuine digital flexibility

Embrace change, experiment, and update frequently, with digital prints that go from design to consumer in minimal time. HP Indigo eliminates the time consuming, traditional analog processes, and provides an array of digital solutions for streamlined print production, from submission to shipment, to offer fast turnaround time to your customers, shortening delivery times from weeks to days.

Consumer Preferences

Supply Chain

Time to Market

Made to Order

Rediscovery Era

Brand Protection

1 in 5

consumers who expressed interest in personalised products are willing to pay a 20% premium



of consumers who are interested in customised products, would still prefer brands, and to choose from a selection of options

Made to Order

It's all about

12



22

Empowered by social networks and their digital devices, consumers are increasingly dictating what they want, when and where they want it. They have become both critics and creators, demanding more personalised service and expecting to be given the opportunity to shape the products and services they consume. Deloitte research shows that in some categories, more than 50 per cent of consumers expressed interest in purchasing customised products or services. Moreover, not only would the majority of consumers be willing to pay more for a customised product or service, they would also like to be actively involved in the process.

of consumers are happy

to share some data

in return for a more

service or product.

personalised customer

Source: The Deloitte Consumer Review: Madeto-Order: The Rise of Mass Personalisation Consumer Preferences

Supply Chain

Time to Market

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Brand Protection



Creating unique prints for a memorable customer experience has never been easier — with smarter customisation tools.

Brands can convert their data into actionable content by applying sophisticated variable personalisation at any level and any run size, driving engagement and inspiring action.

Similarly, the power of variable data printing can be harnessed to produce mass customisation and personalised prints, to meet the increasing demands for personal connections.

- HP SmartStream Mosaic
- → HP SmartStream Collage
- HP SmartStream D4D (Design 4 Designers)
- PrintOS Siteflow for Brands

Supply Chain

Consumer Preferences

> Time to Market

Made to Order

Rediscovery Era

Brand Protection

Rediscovery Era

The quest for premiumisation

Year



Products made and sold locally in small "factories"

For centuries, things were made by craftsmen who personalised every element of design and manufacturing. Industrialisation, and in particular the application of standardised parts and processes, blew away custom craft production in terms of cost and, quite often, quality.

That is changing now, and it is changing fast. Data from our recent Future of Supply Chain survey points to rising SKU complexity, more postponement in manufacturing, and a degree of personalisation that would never have been entertained by Henry Ford.



1800s **Mass Production** stage

Industrial manufacturing and national supply chains lead to economies of scale, driving higher quality and lower consumer prices

1900s

Homogeneity stage

Maximum efficiency, but also maximum boredom limited choice. Consumers get restless

FORBES: **Digital Printing** And Extreme Personalisation. 2017





Consumer Preferences

Supply Chain

Time to

Market

Made to

Order

Rediscovery

Era

Sustainability

2000s

Rediscovery stage

Consumers demand more choice and premium products, and are willing to pay for them

Rediscovery Era

Drinking less but drinking

Premium and super premium brands are driving growth as consumers are increasingly "drinking less but drinking better".

The premiumisation trend has been bolstered by the financial crisis as many consumers typically "trade up" in a recession. Consumers are embracing a "less but better" approach when making alcoholic beverage choices, to justify spending.

In emerging or developing markets the appeal of premiumisation is anchored in the desire to demonstrate wealth and sophistication.

Best-Selling Beers Volume

2007-2016

Best-selling beers are

in decline

Source: Key Trends in the Global Beer Market, Global Data, 2018

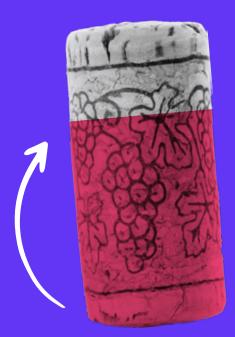
Number of U.S. **Craft Breweries**

1,596

0

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Employment growth at liquor distilleries and wineries between 2006 and 2017



SHARE (by volume)

5.8% •

2016

2011

Consumer Preferences

Supply Chain

Time to Market

Made to Order

Rediscovery Era

Brand Protection

Sustainability

Average Price

6,100

ES

2017

100

2006-2016

Driven by an increase in quality and variety

Rediscovery Era

HP Indigo LEP technology: Versatility Equality



In a world where customers across many industries demand highly crafted solutions, only HP Indigo gives print service providers the agility to meet any need across any type of commercial printing and packaging job.

HP Indigo Liquid Electrophotography (LEP) Technology is engineered to evolve, enabling versatile,

#Unlimited potential of color

HP Indigo ElectroInk is an exclusive ink formulation that, together with HP Indigo Liquid Electrophotography (LEP) Technology, enables an extended color gamut. It comprises the largest variety of inks available in the digital printing industry.

HP Indigo solutions offer the widest media and application versatility through thermal offset transfer. Supporting virtually any off-the-shelf substrate, they allow print service providers to access the broadest media gamut available in the industry.

cutting-edge digital print solutions that will keep print service providers, productive and competitive long into the future, even as challenges and opportunities change.

With HP Indigo technology, print service providers can delight customers and transform their business from an "ink on paper supplier" into a true marketing solutions partner.

Consumer Preferences

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Rediscovery Era

Brand Protection

Sustainability

#The agility to innovate

Brand Protection

dre under

Traditional protection can't keep up





Investment in anti-counterfeiting and track & trace solutions for cosmetic products

1 in 3Pharma companies

are not ready for the serialisation required under the FDA DSCS Act

\$600

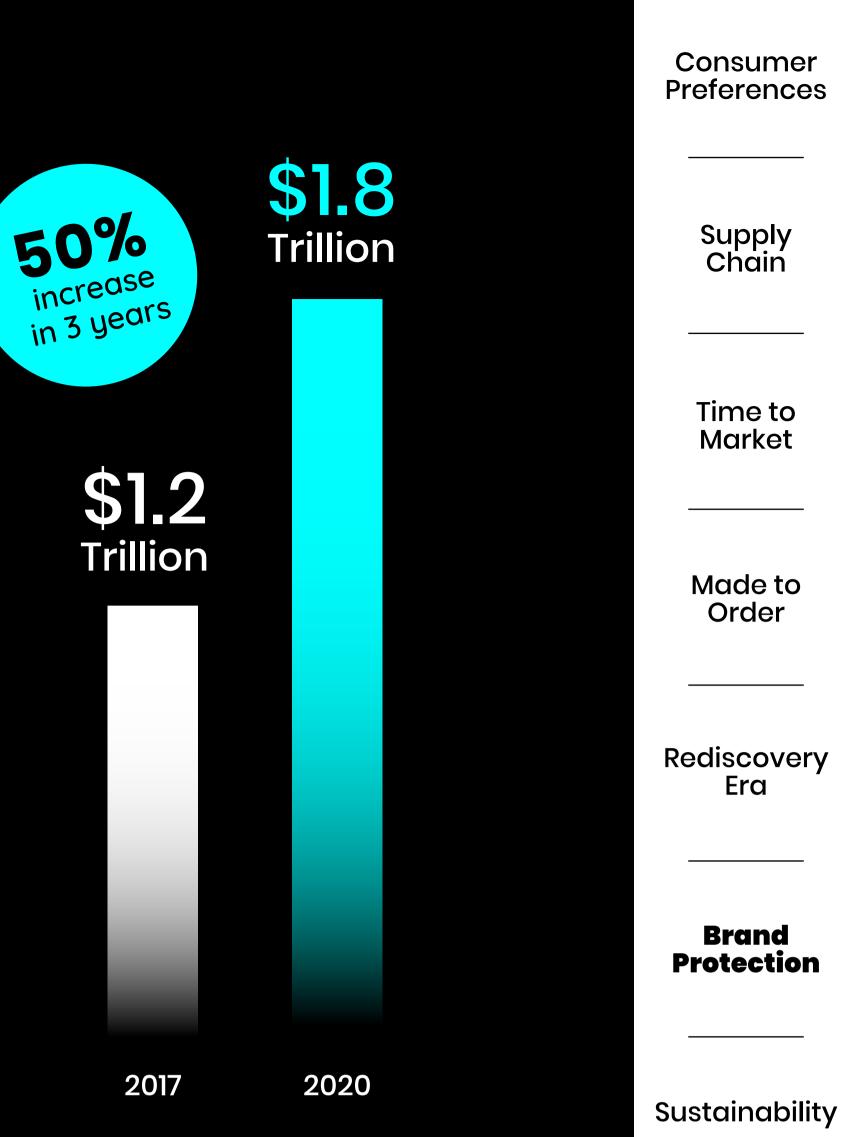
Billion

Annual revenue loss in 3 years

> 26.4**Million liters**

Counterfeit alcohol seized by Interpol and Europol in 2017 25%

Illegal products in the pesticides & seeds market



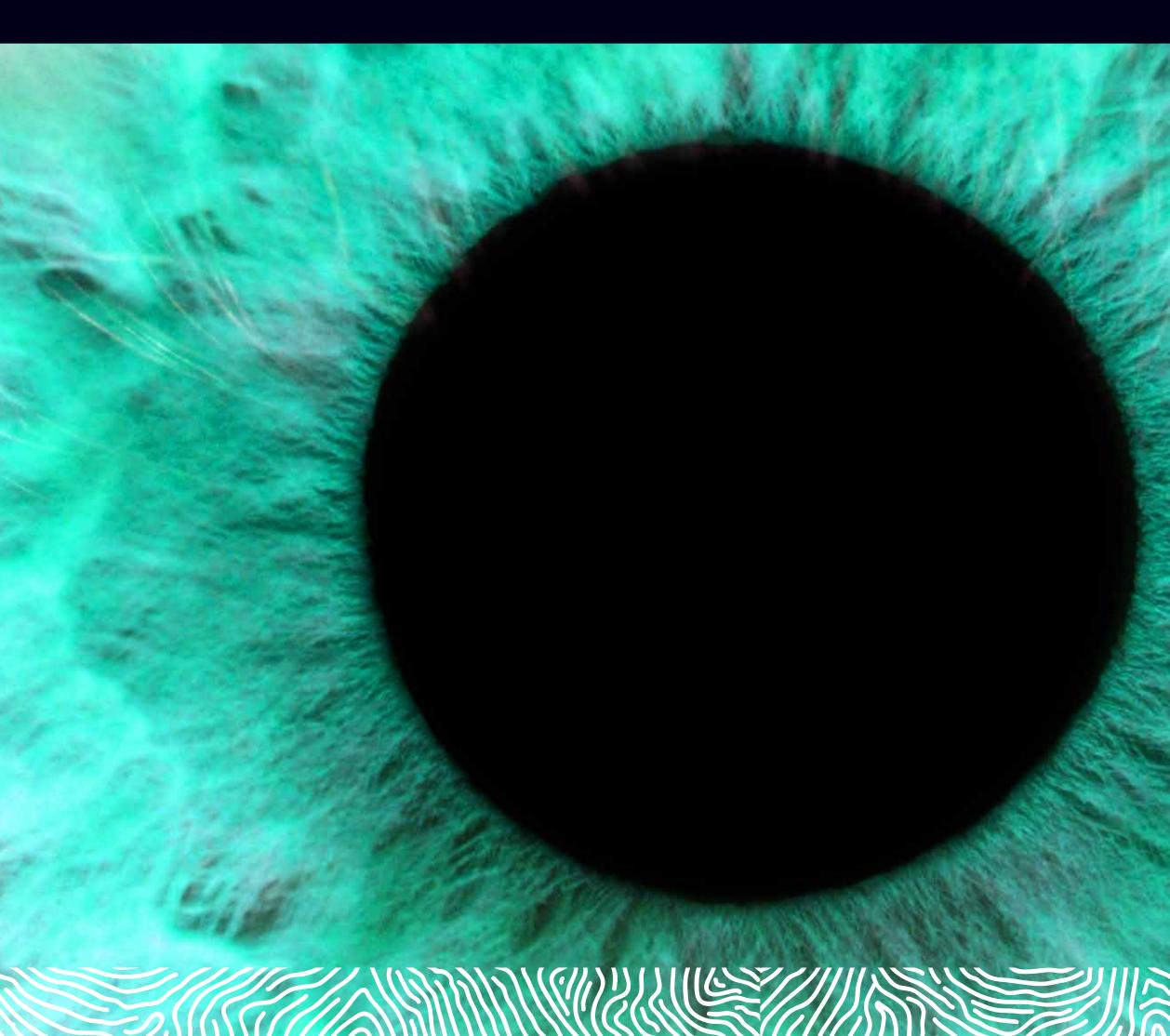
Estimated revenue losses for brands from counterfeits



Investment in security printing for ticketing & lottery (2020 projection)

Brand Protection

Security to better protect business



Generate new business opportunities by offering a wide range of security solutions to meet the stringent brand protection needs of varied industries. Strengthen every solution with the power of HP Indigo digital print. Be agile by mixing-and-matching dozens of security features to create layered protection in a unique on-press production process.

Hard to copy, easy to print

Smart anti-counterfeiting features prevent copies with subtle, unique elements.

2

Covert serialisation for your specialisation

Ensure unique and deterministic identification for each print with serialised codes and ultraviolet or infrared invisible inks.

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Mark. Track. Trace

Open up your ability to print covert tracking marks that cannot be erased or blocked.

Consumer Preferences

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Brand Protection

Sustainability

Sustainability matters

The trend toward sustainability is an important influence on the print industry. Consumers, manufacturers and retailers are all demanding more sustainable systems which are formalised in corporate social responsibility goals and publicised in product marketing. Consequently, sustainability is no longer just "nice to have", but is now seen as a necessity for attracting consumers and protecting market share.

Sustainability has become an important consideration in many areas over the past two decades. This is especially true in packaging where it is a major issue since packaging materials are extremely visible to the consumer. This is because packaging as a singleuse product faces intense and growing pressures from

Packaging industry is steadily growing

\$839 billion

2015

consumers, retailers, suppliers, governments, regulators, NGOs, environmental groups and others for the development of environmentally friendly solutions to improve packaging sustainability by reducing its societal and environmental impacts.



Format change

4

Use of green materials

Reusability

Consumer Preferences

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Brand Protection

Sustainability

5

Recyclability &

recoverability

Source: **Ten-Year Forecast of Disruptive Technologies** in Sustainable Packaging to 2026 Dr Terence A. Cooper, **Smithers Pira**

Sustainability

Good for business and good for the environment



Reducing the impact of printing on the environment is good for business

Our HP Indigo business is driven by sustainability. With day-to-day operations tightly focused on a circular and low-carbon economy that spans our entire value chain and beyond, we're innovating from sourcing practices and operational excellence to the design, delivery, and recovery of our leading products and solutions. Our work is dedicated to creating value for you, our customers, by lowering waste, increasing productivity, and reducing the carbon footprint of printing.

Being a champion of the environment is part of our DNA. So when you choose HP Indigo digital printing solutions, you're joining the cause. Welcome.

Preferences

Consumer

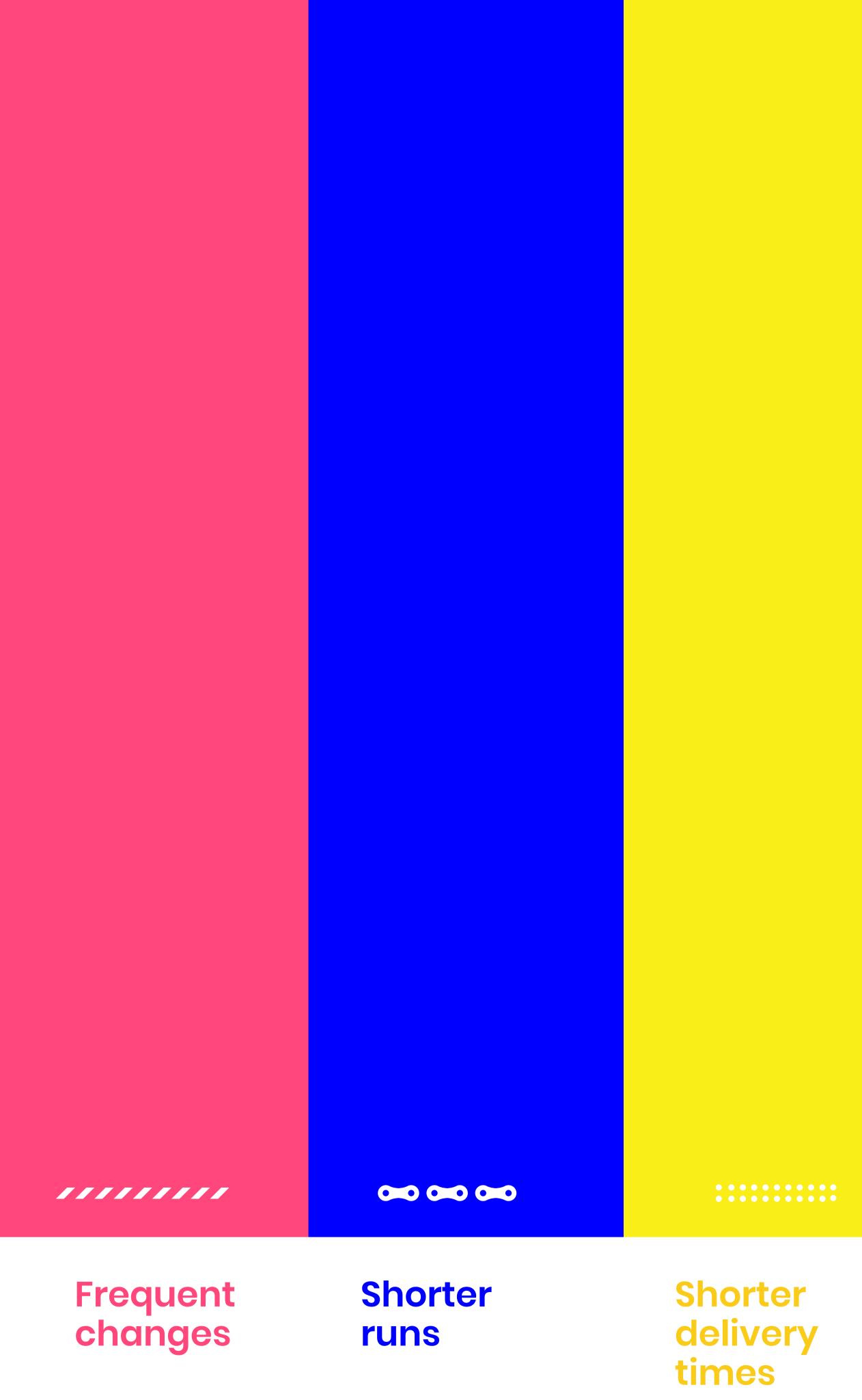
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Brand Protection



These seven global trends are shaping the landscape of the print production business

In the print service industry, growing your business is the only way to survive.

But that can seem impossible in today's increasingly competitive landscape. One thing's for certain, doing nothing is not an option. That's why it's time you go for a competitive edge. Go for higher profits. Go for superior technology. Go for unmatched print quality and go for bigger and better clients.

Data driven applications

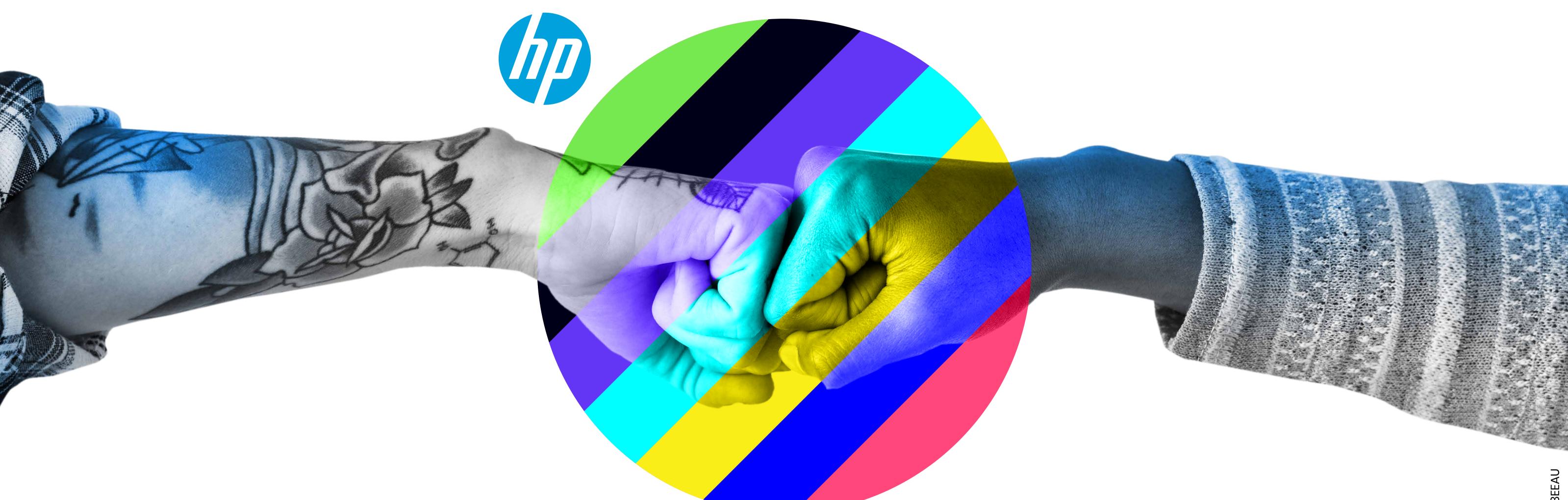
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Higher quality demands

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Security and brand protection

Sustainable packaging





Created by HP Graphics WW Marketing, based on industry research and internal documentation

Go for growth Go for Indigo

