



Technology and its Impact on ePac's Exponential Growth

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about ePac

ePac Flexible Packaging is the first North American all-digital, full service, printer/converter providing economical short and medium run length jobs, to brands of all sizes, with rapid time to market and true high-definition quality graphics.

ePac's story

After watching corporations get bigger/global, move from local communities, substitute healthy ingredients with imported fillers and reduce the size per serving all in the name of "profit", ePac was formed to assist our customers, employees and communities to fight back with.

ePac gives small to medium brands the ability to serve consumers with healthier, local and unmanipulated products.

ePac gives our communities the ability to create true manufacturing jobs that utilize local resources and to allow people to have a better standard of living at home and at work.

We strive to help brands from their beginning days grow into major contributors within the community. Going from the kitchen table to a production facility of their own, ePac will be there to help them grow at every step of the way.



ePac's history

2016

ePac Madison

2017

ePac Boulder

2018

ePac Miami

ePac Chicago

2019

ePac Austin

ePac Boston

ePac Atlanta

ePac Los Angeles

ePac Vancouver (Canada)

ePac Silverstone (UK)

2020

ePac Indonesia

ePac Sacramento

ePac Philadelphia

ePac Richmond

ePac Cleveland

ePac Minneapolis

2021

ePac Lyon (France)

ePac Toronto (Canada)

ePac Portland

ePac Melbourne (Australia)

ePac Kansas City

ePac North Poland

2023

ePac Sheffield (UK)

ePac Innsbruck (Austria)

ePac Ghana (West Africa)

ePac Montreal (Canada)



core value propositions enabled by our technology



fast time to market

- Orders ship in 5-10 business days
- 5 business days for rollstock, 10 business days for pouches (once artwork is approved)



economical short & medium runs

No plate fees, minimal waste, quick set up, low minimums



order to demand

Eliminate inventory obsolescence, improve cash flow



custom printing with variable data & graphics

Product differentiation, Consumer engagement, Track & trace



easy on the environment

- Reduced emissions and energy consumption
- Less obsolescence = less waste = less ends up in our environment

how digital is different

EPAC	VS	CONVENTIONAL
5-15 business days time to ship		6-12 weeks time to ship
Low minimum runs		High minimum runs
Low inventory levels		High inventory levels
Low obsolescence		High obsolescence
No plate or setup fees		Plate & waste costs charged
Target market customization		Not possible with static print

Our Commitment

sustainability is our priority

As an eco-friendly company, ePac is committed to creating a more sustainable world through our development of earth-friendly packaging solutions, our energy-efficient production process, and involvement in local communities.



ePac's sustainable offerings



Recyclable



Compostable



Post-Consumer
Recycled

a digital + green future

ePac's digital printing platform is inherently sustainable, using less energy, producing less waste, and having a smaller carbon footprint than conventional printing technology.

carbon-neutral

Our carbon-neutral HP printers ensure that the process of printing our digitally printed pouches and rollstock has a lower environmental impact than conventional printing, specifically on global warming potential and petrochemical ozone creation.



HP Indigo 20000/25000 Digital Press

- Lower energy consumption
- No printing plates
- Less waste
- Fewer CO2 emissions
- Order to demand
- Less inventory and obsolescence
- Recyclable films
- Compostable inks

variable data printing (VDP)

Software that varies design elements like text, images and graphics vary on each individual package.

- A form of digital printing
- Elements such as text, graphics and images may be changed from one unique item to the next, without stopping or slowing down the printing process
- Uses information from a database or external file.



digitally enhanced packaging



Mosaic

Software that generates virtually unlimited variations of a seed pattern by using scaling, transposition and rotation



Collage

Software that allows designers to control for variables like repetition, rotation and size, overlap and overall scattering of “seed elements”

mosaic



Nutella Unica Video



mosaic design

- Create one-of-a-kind products for a memorable customer experience
- Produce mass customization and personalized campaigns
- Enable unique, engaging experiences for your customers.



AI in our business



ChatGPT

Gemini



loom



Google Ads

Canva



Using technology to engage customers beyond packaging graphics



Customer Engagement

- Sustainability messaging
- Cross sell/upsell
- Capture email/contact
- Marketing analytics



Product Integrity

- Product Validation
- Anomaly detection
- Capture email/contact
- Marketing analytics



Tracing

- Scan data reporting
- Capture email/contact
- Marketing analytics

connected packaging platform



Consumer Engagement

- Prizes and promotions
- Loyalty programs
- Product information
- Recycling instructions



Brand Authentication

- Scan to confirm authenticity
- Protect from counterfeiting and diversion



Supply Chain Analytics

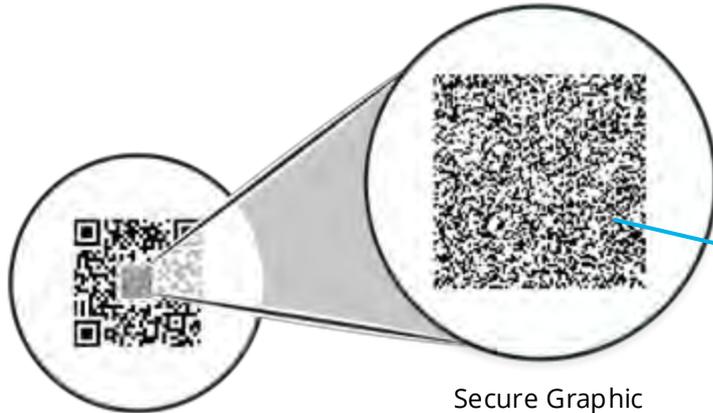
- Dashboard analytics
- Real-time business intelligence

Enabled By Variable Data Printing

how does it work?

serialized secure qr codes

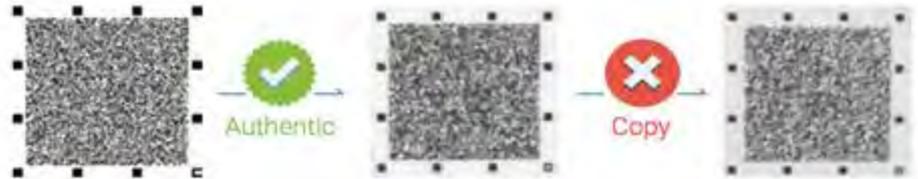
- Each package has its own digital identity
- Each and every package is uniquely trackable
- Secure Graphic enables Authentication



how is it copy proof?



ScanTrust developed the world's first Copy-Proof Serialized QR codes.



DIGITAL FILE
100%Information/quality

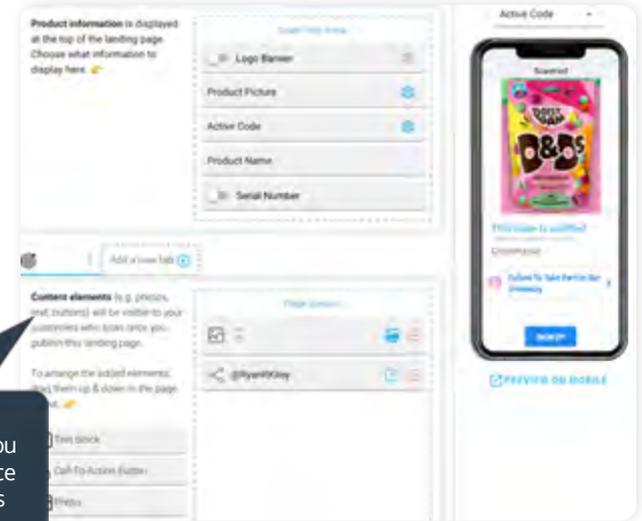
ORIGINAL PRINT
60%Information/quality

PHOTO COPY
30%Information/quality

client self-service portal



Brand dashboard shows engagements, unique users, time of day, day of week, and so much more



The landing page editor is where you configure your consumer experience with graphics, messaging and links

This portal can be accessed 24/7 to change the experience at any time, even after products are in circulation

serialization

use case

- Certificates of Analysis (COAs) are required for each strain produced in each greenhouse and must be accessible to the consumer. 10 greenhouses with 5 strains each and 5 crops/year = 250 COA's per year
- Using ePacConnect we register pouches at fill-time to a specific COA using supply-chain management fields
- In addition to presenting COAs, the brand gets the marketing benefits of ePac Connect; Marketing analytics, consumer engagement, loyalty programs, and more



greenhouse



strains



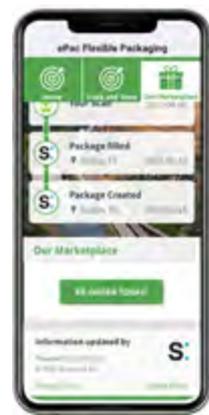
COAs



Consumer experience

marketing use case

- Your brand story is bigger than your packaging. Sourcing transparency, natural ingredients, passionate causes.. These are part of your identity and reasons for consumers to choose you. **Tell your story.**
- Business changes. You launch new products and add new channels of sale. **Update your story;** even for products already in circulation.
- Access advanced analytics previously only available to big brands with bigger budgets. **Learn from your customers.**





about ePacONE

With ePacONE, ePac is able to print up to 8 million linear feet each day, increasing to 17 million with ongoing expansion. Built on an all-digital technology platform, ePacONE is proprietary software that allows us to produce short and long runs at competitive prices, shipped in 5-15 business days.

ePacONE controls the movement of jobs from one manufacturing location to another, splits jobs to be produced at different locations, and provides failsafe redundancy - all with the click of a mouse.





ePacOne for

100 million masks per week...



flexible
packaging
made simple



Thank You
epacflexibles.com