

Supply Chain Disruptions Bring Short Notice Changes to Ingredients – But Can Your labelling and Artwork Management System Cope?

Supply chain and procurement industry figures have called this the 'era of the shortage', with widespread disruption to supply chains, raw materials and ingredient availability. Ingredients substitution is a viable tactic to avoid product shortages or ceasing production, but it unlocks a whole host of operational challenges, argues Bob Tilling, VP of Sales at Kallik. With product packaging, labelling and artwork also requiring updates every time an ingredient changes, business leaders must embrace technology to ensure ingredient substitutions do not become a disruptive 'chop and change' tactic that overshadows other operations.

Earlier in the year we saw the disruption caused by strikes at paper mills in Finland, which resulted in a major shortfall in packaging and labelling materials. This has been a drop in the ocean compared to the widespread business challenges posed today by raw material shortages, supply chain crunches, cost pressures such as inflation and even severe weather delaying or limiting harvests.

Popular Ingredients Are Few and Far Between

This isn't strictly limited to the food and beverage market – affected industries cover healthcare products such as pharmaceuticals, and cosmetic lines, which have far more ingredients in each product than many consumers anticipate.

Although many ingredients have become scarce or expensive, manufacturers have had no issues sourcing alternatives. For example, a likely shortfall in sunflower oil caused by the conflict in Ukraine – the world's largest supplier of the oil – has caused disruption for many food manufacturers, yet is already being actively mitigated by switching to rapeseed oil as a close alternative.

The problem lies not with this product reformulation, but the ripple effect on operations such as labelling, artwork and

packaging – all of which must be updated in line with any ingredient switches.

Reformulate, Reformulate and Then Reformulate Again – A Pattern is Emerging

The ingredients issue is forcing change at a far greater pace than usual. U.S. consumer foods giant General Mills cited some products as being reformulated over 20 times between January and April. For comparison, many ingredient tweaks are typically a very rare occurrence, with adjustments to tried and tested formulations taking place perhaps every 2-3 years.

As manufacturers across multiple industries jostle to secure limited stocks of existing ingredients in what is a very fast-moving situation, some products may end up being repeatedly reformulated with alternatives on a regular basis during this ongoing 'perfect storm' of disruption.

But product formulation is far more than a simple 'drag and drop' activity during the manufacturing process – especially in highly-regulated industries such as pharmaceuticals, cosmetics, and food & beverage.

Don't Let Product Labelling be the Forgotten Piece of the Puzzle – It's an Essential Part!

Packaging and labelling can often be an oversight in this current laser focus on ingredients supply and reformulation to ensure production continuity – but it plays an equally vital role in the overall process, and manually adjusting these assets can be a long, laborious process.

Indeed, a UK Food Standards Agency report on food substitution and labelling places label change lead times at 6-12 weeks – assuming disruption such as supply chain issues is not extending this even further.

If labelling and artwork cannot be adjusted at the same pace as product ingredients, production could be severely delayed or even halted. It is clear advanced technology is needed to cope with the impact of short-notice changes and bring agility to the artwork and label management process.

Ensure your Digital Eye is on the Entire Production Process

Any business with multinational operations





or large product ranges will likely see a major impact to operations if they cannot identify and address ingredient changes on packaging in an agile, accurate manner – ideally from a ‘single source of truth’.

With many firms still outsourcing their product artwork and label management to local third-party agencies, dealing with ingredient shifts is a slow, costly process with no complete visibility of operations and an ever-present threat of inconsistencies introduced by human error.

This outdated process can today be phased out with the arrival of advanced, end-to-end label and artwork management (LAM) systems, which will offer features to identify every instance of a specific ingredient used on every product label – in every language – and update accordingly.

Disruption and Regulation are Now Par for the Future

Global disruption has reached unprecedented levels over the last few years – but further uncertainty for businesses and their supply chains could be on the horizon. Constantly shifting regulations on both a regional and national level are likely to cause business leaders to rethink their

product formulations – think ‘sugar taxes’ requiring lower sugar content in the food & beverage industry.

We’re also currently seeing businesses across multiple industries – from cosmetics to consumer goods – adopt a ‘shrinkflation’ tactic, where products reduce in size while remaining the same price. Again, this will likely demand a change in product composition, with a knock-on labelling effect.

Ultimately, any change – whether imposed by supply chain disruption or even seasonal crop availability – will require ingredients to be updated or listed in a differing order on product packaging.

Act Now to Avoid Further Supply Chain Headaches

As these various supply chain woes continue to pose problems to business worldwide, it has become apparent that a solid digital framework is required to provide the necessary agility to deal with problems as they arise.

LAM solutions will not replace creative tasks such as artwork design, but they can significantly increase the speed at which

businesses can react to shifting ingredients availability and in turn avoid operational disruption.

With strict regulations in place for many industries worldwide and constant concern over introducing unlabelled allergens into products, establishing a consistent, digitised approach to label and artwork management is a business priority that underpins many other critical operations.



Bob Tilling

Bob Tilling is the VP of Global Sales at Kallik, an enterprise labelling and artwork management company. He has a wealth of knowledge when it comes to the life sciences industry, particularly regarding medical devices. Bob helps businesses in highly regulated industries begin their journey of transforming their labelling and artwork management.

Email: bob.tilling@kallik.com