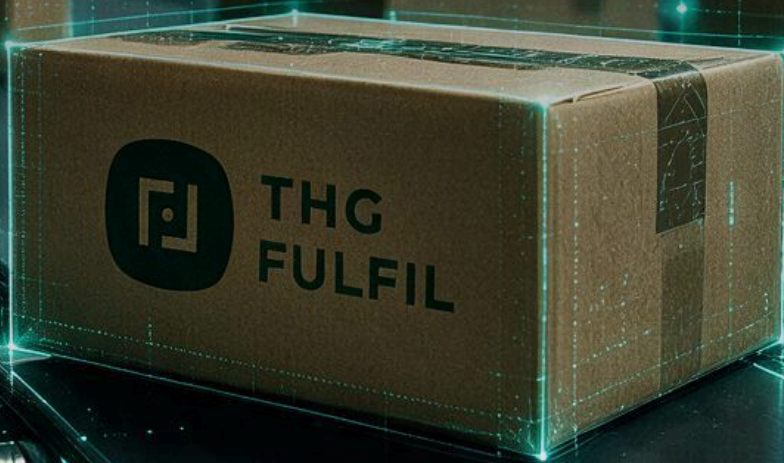




The End of Predictable Peak

What Viral Commerce Means for
Fulfilment Infrastructure



Explore how automation, AI forecasting and intelligent operations give brands the resilience to turn any spike into an opportunity.

When should we start preparing for peak?

The answer?

Historically, peak planning has been a known quantity with operations teams across the globe spending months planning for Q4:

- Audit your carrier capacity in June.
- Stress-test your systems in September.
- Hire your seasonal staff in October.
- Have everything locked in by the first week of November

Having spent the last two decades in ecommerce operations, we have seen Black Friday evolve from a single frantic day into a three-week promotional window. We have watched Cyber Monday dwarf the trading volumes we once considered extraordinary. We have lived through the kind of demand spikes that made experienced operations managers question everything they knew about planning.

But nothing in those two decades prepared the industry for what has happened the last few years. The viral moment has arrived as a commercial force, and it has dismantled the assumption that peak is something you can see coming.

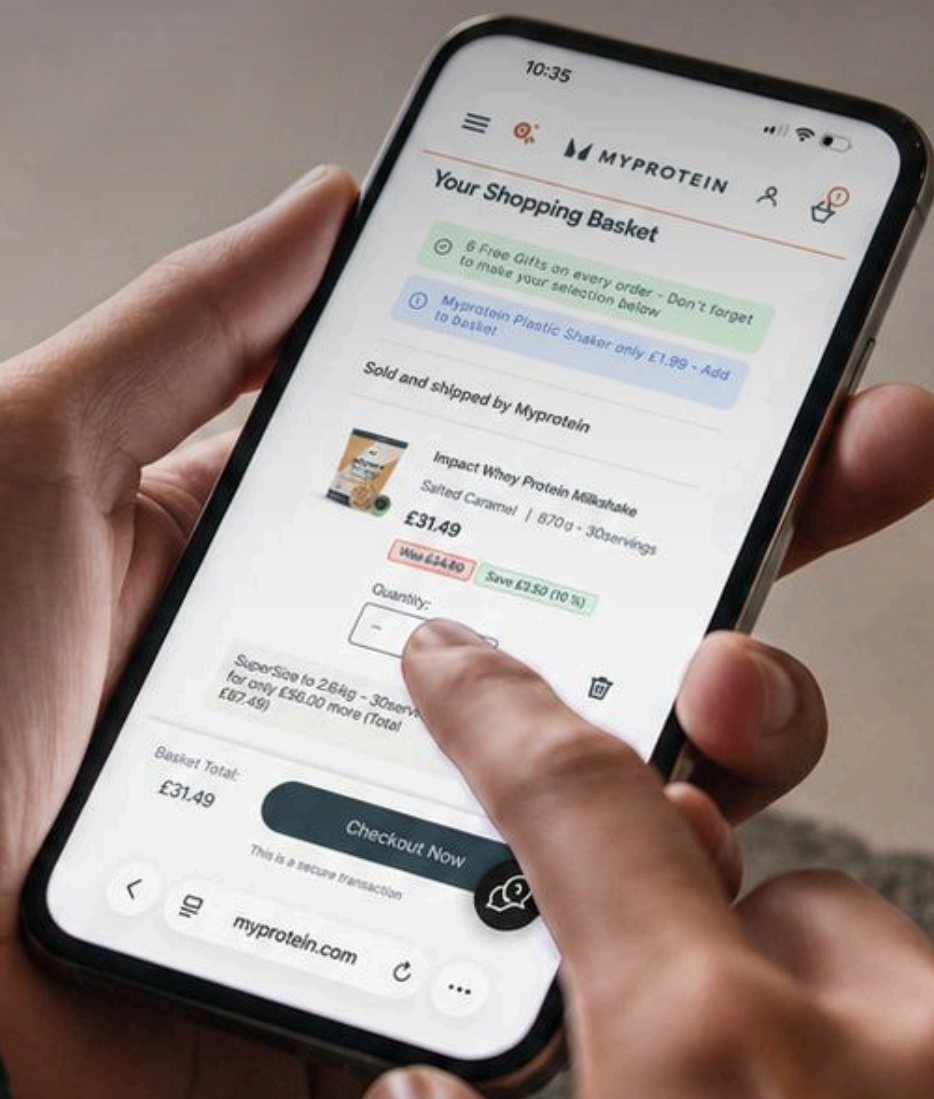
A product trends on TikTok on a Tuesday morning. By Wednesday evening, you have more orders than you processed in the previous fortnight. A Pinterest search term climbs 10,000% in thirty days across your core demographic. Your demand forecast, built on twelve months of careful analysis, is irrelevant before the week is out.

The brands that are winning are not those with the most stock, biggest warehouse space, or the biggest seasonal headcount. They are the brands whose fulfilment infrastructure is built to absorb the unexpected.

Automated enough to scale without lead time, intelligent enough to forecast without certainty, and integrated enough to keep its delivery promises when volume arrives without warning.



01. Peak Has Changed



For most of the last two decades, peak season was the fixed point around which ecommerce operations were built. You knew when it was coming. You had months to prepare. The brief was simple, if demanding: get through Black Friday and Cyber Monday intact, maintain performance through Christmas, and recover in January. Everything else was a warm-up.

The 2025 holiday season was the first ever quarter-trillion-dollar holiday season in the United States¹ – a landmark that confirmed the commercial scale of Q4 but concealed a more important truth. The demand was no longer concentrated in a two-day window. Cyber Weekend matched Black Friday's \$11.8 billion² in total ecommerce sales for the first time. What had been a single inflection point was now spread across an extended promotional arc, with brands pulling spend forward into October and holding it through December.

That extension has real operational consequences. A warehouse geared for a 48-hour surge now needs to sustain elevated throughput for three weeks or more, at the same level of accuracy and speed, with the same carrier cut-off performance. The forgiveness that once existed either side of the peak window has gone.

But the shift in when Q4 demand lands is only part of the story. The more structurally significant change is what is happening to the rest of the year.

Analysis of real ecommerce transaction data across a broad merchant base shows that June through September now averages 6.5%³ more orders than the annual baseline – a four-month sustained uplift that rivals Q4 in duration if not in absolute volume.

This is not a summer promotion effect. It is trend-driven purchasing, shaped by cultural moments, creator content, platform discovery and the kinds of demand signals that do not appear on a twelve-month trading calendar produced in January.

At the other end of the year, the February trough sits 32%⁴ below the annual baseline at its deepest point, creating a difference of 96% between the November peak and the post-Christmas slowdown. No amount of seasonal headcount smooths a gap of that size. The only infrastructure that absorbs it without degrading performance is automated.

Meanwhile, the proportion of businesses that rely on October to December for their primary demand spike fell from 66% to 57% in a single year⁵. That shift represents thousands of brands actively distributing their promotional effort across the calendar – partly by choice, partly because their customers are buying at different times than they once did. The result is a commercial environment in which there is no true off-season, and no single moment that can be treated as the operational test that defines the year.

This matters because the entire architecture of traditional fulfilment planning rests on the assumption of a predictable peak. You model for it, staff for it, negotiate carrier capacity for it, and prepare your warehouse for it. When the peak becomes diffused, sustained and increasingly difficult to predict, that architecture does not bend; it fails.

The question for any operations leader is whether their infrastructure was built for the commercial environment that existed five years ago, or the one they are operating today.

¹ <https://business.adobe.com/resources/holiday-shopping-report.html>

² <https://www.digitalcommerce360.com/article/cyber-weekend-ecommerce-sales/>

³ <https://www.syncio.co/blog/ecommerce-seasonality>

⁴ <https://www.syncio.co/blog/ecommerce-seasonality>

⁵ <https://nshift.com/engage/black-friday/kb/the-state-of-ecommerce-black-friday-peak-season-reality>

02. The Rise of Viral Commerce

Any Product, Any Day, Any Category.



55% UK TikTok users make a purchase after watching a product in a video

£3.6 Bn Retailer ecommerce revenue driven by Pinterest in 2025

£1.2 Tn Projected global social commerce sales in 2026

“What are we planning for?” A question that has been asked by brands preparing for peak. It used to be straightforward to answer: Black Friday, Christmas, maybe a Valentine's Day campaign for the right categories. Even with dates, lead times, and a reasonable history to plan against, that question is getting harder to answer. Not because the data is worse, but because the demand signals are coming from places the planning calendar was never designed to accommodate.

TikTok Shop's global GMV doubled to \$64.3 billion in 2025⁶ and is forecast to reach \$112.2 billion in 2026. In the UK alone, the platform has become the fourth-largest beauty retailer, with beauty category sales growing 60% year-on-year. 55%⁷ of UK users report making a purchase after watching a product in a video. That's not an aspiration. That's purchase intent converted in real time, at scale, without any advance warning to the brand's operations team.

Businesses can move from 50 customer enquiries per day to 500 within 48 hours after a single creator feature. Products can go from relative obscurity to thousands of daily orders before the brand has time to brief their fulfilment partner. The operational shock is not gradual. It's a vertical line on a chat that appears without warning in beauty, fashion, homeware, electronics, and nutrition alike.

Pinterest tells a different but equally important story. With 619 million monthly active users as of Q4 2025⁸, it's the platform that consistently outperforms every other social channel on purchase intent – at 5.6 times the social platform average⁹. 80% of weekly Pinners have made a purchase via the platform. Pinterest drove \$3.65 billion in retailer ecommerce revenue in 2025¹⁰. Unlike TikTok, where the spike and purchase happen almost simultaneously, Pinterest trends tend to lead demand by two to four weeks – making it one of the most actionable forward indicators available to an operations team that knows how to read it.

The data from Pinterest Trends in June 2026 illustrates the breadth of this challenge. “Summer nails 2026” recorded a 10,000% year-on-year rise in US monthly searches and a 300% monthly rise in the UK – a demand signal arriving weeks before the associated beauty product orders land on a warehouse floor. “Wallpaper” held a top five position in both US and UK yearly trends year-round, with a 40-50% year-on-year rise sustained across all twelve months, driven not by a promotional event but by an unbroken stream of home renovation content. “Outfit ideas” peaked in September 2026 – not November – driven by back-to-school and autumn cultural moments. In the UK, “world cup activities for kids” surged 10,000%+ year-on-year, triggering adjacent demand across crafts, homeware, apparel and food simultaneously. This is not a single category problem; it's a cross-sector operating reality.

For electronics and nutrition, the picture is the same. Expressed through different platforms. Viral unboxing and setup content on TikTok consistently creates short, sharp demand spikes for phones, consoles and peripherals. Functional drinks, supplements and health foods track cultural wellness moments – new year, summer fitness, sporting events – with enough predictability in the category, if not the timing, to plan around with the right infrastructure.

Global social commerce sales are projected to exceed \$1.2 trillion by 2026¹¹. The commercial opportunity is clearly enormous. The operational requirement to capture it is specific: the ability to scale throughput at speed, without advance notice, across any product category, on any day of the year.

That is the operating environment. The question is whether the infrastructure being used to compete in it was built for it.

⁶ <https://resourcera.com/data/social/tiktok-shop-statistics/>

⁷ <https://www.ringio.io/blog/tiktok-shop-statistics-2026>

⁸ <https://sproutsocial.com/insights/pinterest-statistics/>

⁹ <https://sproutsocial.com/insights/pinterest-statistics/>

¹⁰ <https://marketingltb.com/blog/statistics/pinterest-statistics/>

¹¹ <https://www.bigcommerce.com/articles/omnichannel-retail/social-commerce/>

03. Traditional 3PLs

Traditional 3PL operations were engineered for a world that existed, and for many years they served it well. Predictable demand, manageable SKU ranges, two or three genuine peaks per year and enough lead time to staff up, stock up and prepare. The model worked because the commercial environment it was designed for was relatively stable.

A manual pick-and-pack warehouse is a fixed-capacity asset. At steady-state volumes, it performs adequately. Under demand spikes – the kind that TikTok and Pinterest are generating with increasing frequency across every category – it degrades. Error rates climb as operatives are pushed beyond their normal pace.

Throughput falls as the system approaches its limit. Carrier cut-offs are missed because the warehouse cannot clear its backlog before dispatch. The customer experience deteriorates precisely when demand is highest, and the cost of failure is greatest.

The traditional response to this is seasonal labour. Hire a cohort of temporary workers before peak, onboard them in a matter of weeks, absorb the volume, and release them in January. It was never an elegant solution, but it was functional when peak was predictable.

It has become genuinely inadequate where 45% of warehouse operators rate hiring as extremely challenging and 52% report retaining staff as equally difficult¹².

Recruiting, onboarding and training temporary staff takes weeks – considerably longer than the lifespan of most viral demand spikes. By the time new resource is operational, the peak has passed, the customer has bought elsewhere, and the only thing left to manage is the backlog.

The data blind spots are equally damaging. Without real-time inventory visibility, a brand cannot make accurate delivery promises when volume is elevated. It cannot detect a developing stockout before it hits the customer. It cannot dynamically re-route orders between facilities or switch carrier allocations to protect on-time dispatch rates. It is, in operational terms, flying blind at the moment that demands the sharpest visibility.

Stockouts alone cost global retail \$1.14 trillion in lost sales annually. Overstock generates a further \$562 billion in losses. The combined cost of getting demand response wrong is \$1.7 trillion per year¹³. That figure is not the result of bad planning in a knowledgeable world; it is the inevitable consequence of operating in a variable-demand environment.

45% of warehouse operators rate hiring as extremely challenging

¹² <https://thenetworkinstallers.com/blog/warehouse-automation-statistics/>

¹³ <https://www.omniful.ai/blog/inventory-planning-holiday-demand>

250% ROI with payback periods of less than 24 months

140% Increased operational capacity



04. Warehouse Automation

The Infrastructure for Always-On Commerce

Automation is not a future aspiration or a capital project for next year's budget cycle. It is the operating infrastructure that any brand competing in the current commercial environment needs today.

The global warehouse automation market was valued at approximately \$30 billion in 2026¹⁴, growing at a compound annual rate of between 15% and 18% and projected to exceed \$60 billion by 2030. More than 450,000 logistics robots were sold globally in 2025¹⁵, compared to 75,000 in 2019. That's a 500% increase in six years. By the end of 2026, approximately 4.7 million commercial warehouse robots will be installed across more than 50,000 facilities worldwide¹⁶.

Automation is not an emerging technology in logistics. It is mainstream infrastructure.

The fundamental shift that automation delivers is the inversion of the picking model. In a conventional warehouse, operatives walk to the inventory, retrieving items from fixed locations at a pace limited by human physiology. In a goods-to-person operation, the inventory comes to the operative.

The throughput implications are significant. Implementations consistently deliver throughput improvements of around three times against manual operations, with

- Fulfilment error rates below 0.1%
- Labour cost reductions of 40%
- ROI above 250%
- Payback periods under 24 months. These are not projections; they are outcomes from operational facilities processing real orders.

Within THG Fulfil's network, three robotics technologies form the automation backbone, each serving a distinct operational purpose.

AutoStore

A cube-based automated storage and retrieval system engineered for dense inventory management at speed. By stacking bins vertically within a grid and deploying robots to retrieve them, AutoStore uses up to 75% less floor space than traditional shelving while maintaining 99.99% picking accuracy. The modular architecture allows capacity – additional robots, additional grid sections, additional ports – to be added without shutting down the live operation. For a brand managing rapid SKU growth or launching new product categories, that modularity is operationally critical. The system grows with the business rather than constraining it.

Libiao Robotics

In September 2025, THG Fulfil deployed 430 Libiao T-sorting robots at its Manchester facility.

The results speak for themselves:

- Operational capacity increased by 140%.
- Batch output scaled from 42 orders to 3,800.
- The facility achieved 11,151 items per hour – 34% above the original target – with 99.9% system uptime.

The modular architecture allowed deployment in as little as two to three weeks with minimal infrastructure changes. When a viral product creates a Thursday morning demand spike that needs to be clear by Friday dispatch, this is the difference between a customer who receives their order on time and one who cancels.

Geek+

In categories where product ranges are wide, frequently changing and require configurations that range from hanging garments to multi-shelf rack structures and pallet-based formats, Geek+ robots navigate this complexity intelligently, managing dynamic SKU profiles across configurations in a single automated environment. The system reported 30% growth in order intake in the first half of 2025, reflecting accelerating adoption among brands that cannot afford the rigidity of fixed-format storage in a market where product ranges evolve as fast as the trends driving them.

Together, these three technologies represent a comprehensive automation stack. But hardware alone does not solve the problem.



¹⁴ <https://www.mordorintelligence.com/industry-reports/warehouse-automation-market>

¹⁵ <https://thenetworkinstallers.com/blog/warehouse-automation-statistics/>

¹⁶ <https://www.sellerscommerce.com/blog/warehouse-automation-statistics/>

05. The Software Layer

Intelligence That Turns Automation into Competitive Advantage

The best robotics installation in the world can be undermined by the software running around it. A warehouse full of AutoStore robots coordinated by a poorly integrated WMS is not an automated facility, it's an expensive one.

At THG Fulfil, we didn't build software to run warehouses. We built warehouses, and the software emerged from the operational necessity of running them at scale, in live production, across billions in GMV and tens of millions of orders. Every capability in the technology stack exists because we needed it and nothing adequate existed to buy.

Proprietary WMS

Voyager, our proprietary Warehouse Management System (WMS), is the central engine of our operations. It provides real-time inventory visibility across the entire facility, traceable stock control, and the configurability to adapt to bespoke client requirements without compromising throughput and speed. The 1am next-day delivery cut-off that THG Fulfil offers in the UK – a market-leading position – is a direct consequence of our ability to process high-volume demand at accuracy.

AI Forecasting and Peak Simulation

Demand is getting harder to predict, and the consequences of getting it wrong are more expensive. THG Fulfil's AI forecasting capability analyses demand patterns across the operation to identify developing volume spikes before they fully materialise. It's not a replacement for operational experience and judgement; it's the early warning system that gives judgement more lead time to work with. Peak simulation planning takes this further, allowing operations teams to stress-test fulfilment capacity against both known demand events and modelled unknowns. In a world where a trend can translate into a warehouse surge within 72 hours, even a modest improvement in forward visibility creates meaningful operational headroom.

Courier Management & Last Mile Delivery

THG Fulfil's courier management platform (CMP) connects brands to over 250 integrated courier services globally through a rules-based delivery allocation engine that can switch between providers in seconds rather than days. The relevance of this to the viral commerce problem is often overlooked.

An automated warehouse that cannot maintain its carrier cut-offs under elevated demand has converted a picking problem into a dispatch problem. The two have to be solved together. THG Fulfil's Courier Management Platform achieves a 99.9% on-time dispatch rate, with 77% of UK orders delivered next-day. The platform maintains that performance when volume is elevated precisely because the carrier logic can flex in real time rather than waiting for a manual intervention that may arrive too late.

Robotics-as-a-Service (RaaS)

RaaS addresses the access barrier that prevents many brands from deploying automation at the scale they need. The capital cost of building a world-class automated facility is significant. Not every brand can absorb it as a CapEx investment. THG Fulfil's RaaS model converts that cost into a predictable operating expenditure, enabling brands to access AutoStore and Libiao Robotics capabilities. Productivity improvements of up to 200% are delivered through an OpEx model that scales with operational growth.

The protection of cash flow is not a secondary consideration, it's what makes automation commercially viable for the brands that need it the most.

Checkout by THG Fulfil

For brands with international growth ambitions, Checkout by THG Fulfil extends the operating system to the point of purchase. Instant access to over 200 markets, local currencies, international payment methods and languages. Up to a 25% increase in conversion rates through fully branded and localised checkout experiences. An industry-leading 0.04% chargeback rate through an award-winning fraud engine. A viral moment that drives demand across multiple markets simultaneously requires the infrastructure to convert that demand globally, not just domestically.

25% increase in conversion rates



06. Building the Always-On Fulfilment Operation

The most successful operational leaders have one common habit. They don't wait for failure to diagnose a problem. They run their own infrastructure against a set of questions that they know, from experience, expose the gaps before a demand spike finds them first.

The following questions are the product of nearly two decades of running operations that have been stress-tested by every kind of peak, planned and otherwise. If your current infrastructure can't answer yes to all of them, you have a resilience gap. The question is whether you find it before the next viral moment does.

Can your operation scale throughput by 50% within 24 hours without additional headcount?

A genuine automated operation scales by deploying additional robot capacity, adjusting batch configurations and opening additional workstations. The response time is hours, not weeks. If your surge mechanism involves people who need to be hired, inducted and trained, your peak response time is measured in weeks. That is longer than most viral demand spikes last.

Do you always have real-time inventory visibility, including during high-volume periods?

Not end-of-day visibility. Not visibility that depends on a manual count. Real-time visibility that tells you, right now, what you have, where it is and how quickly it is moving.

Data lag during a demand spike is the operational equivalent of driving with a fogged windscreen. You know roughly where you are going but you cannot see the hazards until you are already in them.

A stockout discovered at dispatch is not a warehouse problem, it's a customer experience failure.

Can your carrier allocation logic switch between providers in seconds?

The automation investment in your warehouse is only as valuable as the last-mile performance it enables. If your dispatch operation relies on a fixed carrier arrangement that cannot flex under elevated volume, you are solving the warehouse problem and creating a delivery problem. The rules-based carrier allocation engine should be able to respond to real-time performance, cost and capacity data without requiring a human to intervene at every decision point. Cut-off adherence under pressure is the metric that separates an automated facility from an automated warehouse with a manual exit.

Historical sales data is valuable, but it cannot predict a viral moment.

Does your demand forecasting incorporate external signals?

Historical sales data is valuable, but it cannot predict a viral moment. Some of the most successful operations teams build cultural calendars that include sporting events, influencer moments and trend data alongside the traditional promotional calendar. If your forecasting model starts and ends with last year's sales data, it's missing the most important signals in the current commercial environment.

Is your automation infrastructure modular?

A system that cannot grow without operational disruption will constrain your business at the worst possible moment. The ability to add AutoStore grid sections, deploy additional Libiao robots or extend Geek+ coverage without a facility shutdown is not a nice-to-have. It's what distinguishes infrastructure built for growth from the volume that existed when it was installed.

Your peak next year will not look like your peak this year. The system needs to be able to accommodate what you cannot yet predict.

If you are answering no to more than two of these questions, the infrastructure you are operating was built for a world that no longer exists. The cost of that gap is measurable: stockouts cost global retail \$1.14 trillion in lost sales annually, with overstock generating a further \$562 billion in losses. The combined cost of demand response failure across global retail is \$1.7 trillion per year¹⁷. The investment case for automation is not a three-to-five-year ROI conversation. It's a question of whether the current infrastructure can afford the next demand spike it is not ready for.

07. The New Standard for Fulfilment

Peak is no longer an event. It's a condition.

Any brand still operating on the assumption that fulfilment resilience means surviving November has misread the commercial environment it is competing in. The demand spikes of previous years have not been confined to Q4. They have arrived in June, driven by summer aesthetics trending. They have arrived on a Tuesday, driven by a creator post that reached ten million people before the brand's operations team had finished their morning briefing. They have arrived across fashion, beauty, electronics, nutrition and homeware simultaneously, triggered by a sporting event that no fulfilment calendar had accounted for.

The brands navigating this successfully are not the ones with the biggest warehouses or the most seasonal staff, they are the ones whose operations are automated enough to scale without hiring, intelligent enough to forecast without certainty, and integrated enough to maintain carrier performance when volume arrives without warning.

THG Fulfil was not built as a software company that decided to run warehouses. It was built as an operator, one that has spent over twenty years solving complex challenges, across billions in GMV and millions of orders spanning the most demanding peak trading conditions in global ecommerce.

The fulfilment operating system that resulted from that experience – integrating AutoStore, Geek+ and Libiao robotics with a proprietary WMS, AI forecasting, peak simulation and a network of over 250 carrier services – is the infrastructure that converts any demand spike into a fulfilled order, and any fulfilled order into a retained customer.

The next peak is coming. It may be planned, it may not. It may arrive on a weekend. It may be driven by a sports result, a viral video, or a search term that hits 10,000% year-on-year growth before anyone in your operations team has noticed it.



Worried about missing your
next peak - planned or otherwise?
Speak to one of our experts today.
contact@thgingenuity.com
<https://www.thgingenuity.com/contact>

