INVENTORY MEDIA OPTIMIZER
What challenge are we looking to solve here?

This might not even be a problem, or challenge you were looking to solve—given that media spend is handled by the media department—and inventory optimization is in the domain of the supply chain team. But by bringing these two silos together, we are able to find ways to optimize the spend of one, while offsetting the costs of the other. That’s got to be worth a short read.

So, why do Publicis Sapient believe they’ve found something others didn’t even know to look for? It’s in our heritage. It’s what we do. Publicis Groupe, Publicis Sapient’s parent organization has a long heritage of optimizing and managing media and advertising spend. Our unique data assets from Epsilon enable us to have visibility of over 200bn customer events, every day...that’s 200,000,000,000. This represents the largest transactional data repository, with the most comprehensive consumer behavior, intent and action data in the industry.

The Inventory Media Optimizer starts with unique demand models to generate customer buyer propensity scores that can uniquely optimize media spend and inventory planning.

This will allow you to ensure you have the products and messaging the customer wants and needs in the right place, when they want to buy it.
But what is the Inventory Media Optimizer?

The Inventory Media Optimizer—has a palindrome effect, in that it can function in either direction. You can start from the perspective of the media buyer, looking to optimize media spend and creative, or you can arrive from the viewpoint of the supply chain function, looking to improve the customer experience by ensuring the products they wish to buy are in place and available. This might all seem obvious, but not many companies are currently working across their organizations in this way. Too often, while leaders are looking at how they can improve efficiencies and optimize within their function (e.g. media buying or supply chain optimization), they are doing this in a silo. We have all too often seen media continue to be spent against product not in inventory, and we are confident we can fix that.

The rewards can be significant for those who use customer buying propensity data to influence their media spend and allocate their inventory. So, let’s explain why Publicis Sapient, in partnership with IBM, are uniquely positioned to help you address this.

---

**THE IBM AND PUBLICIS SAPIENT VALUE PROPOSITION**

- Increase media efficacy through optimized inventory positioning.
- Increase supply chain inventory efficacy through customer propensity models tied to often missed media based buying and demand signals.
- Optimize offer spend with machine learning models tied to often missed media based buying and demand signals.

Powered by the industry leading data science team at PS AI Labs.
Why Publicis Sapient?

Because we have a deep exposure to and understanding of both silos. Publicis Media are able to coach and guide to better understand the world of media and media buying—while Publicis Sapient has a deep exposure to the supply chain and inventory management and optimization through the work we do in partnership with IBM. In particular IBM Sterling and our Supply Chain Control Tower solution. As such, we have a long heritage and a deep expertise in supply chain, order management and inventory optimization solution implementations for clients across the globe. In addition, we also partner with leading supply chain product vendors in engineering next generation supply chain, order management and inventory optimization solutions. Our inventory visibility benefits framework helps you determine benefit potential upfront.

PUBLICIS SAPIENT INVENTORY VISIBILITY BENEFITS FRAMEWORK

- Increase conversion by offering faster and more accurate inventory visibility
- Reduce stock outs by providing alternate options
- Avoid markdowns

Increase Sales & Margin

Reduce Inventory Cost

- Real-time inventory visibility increases velocity and reduces carrying cost
- Better visibility helps improve inventory planning and reduce on-hand inventory

WE HAVE IMPLEMENTED STERLING INVENTORY SOLUTION AROUND THE WORLD—DELIVERING A MORE REAL TIME AND SCALABLE INVENTORY MODEL.

- For an American Clothing Retailer, we were able to realize a 1% increase in digital revenue by leveraging our global inventory solution—along with zero order cancellations across fulfillment centers.

- For a leading American CPG company, we were able to offer real-time inventory across a 4,000+ fulfillment network as compared to their previous situation where inventory visibility was 2-3 hours behind.

- For a leading British Multinational Retailer, we were able to improve order promising based on greater inventory visibility, leading to reduced order cancellations due to inventory discrepancy and a reduction in call center call volumes.
In addition, through Epsilon we bring a unique understanding of identity as it relates to media and as it relates to customer propensity to purchase. Epsilon’s CORE ID has a unique ability to deliver personalization at scale, providing a bridge across inventory and media performance. The identity graph gives us unique customer and prospect spending pattern insights that allow us to improve inventory outcomes and allows our inventory levels to improve media conversions.

The final piece of the jigsaw puzzle is data science. You can have all of the information in the world, but without the right lens at the heart it would be impossible to read what the information is telling you and to drive optimization. We do this through our PS AI Labs joint venture and our strong foundation in a data driven approach. Our PS AI Labs team delivers the fastest, most efficient data science to continuously activate and optimize personalized experiences – and eliminate media waste.

So, what are we saying? In a nutshell, anytime a customer or prospect interacts with your brand we can use media signals and inventory signals to improve the outcomes of those interactions. Knowing whether or not products are available in a given region—as defined by your customer’s identity—we are able to improve conversions and optimization, simply by not showing the products that are out of stock or optimizing through an offer for stock which has excess inventory. Through a real-time data connection between inventory and media performance, we can optimize your media spend and customer experience—while simultaneously optimizing your supply chain, inventory and returns.

**INSIGHTS AND MODELS BUILT ON THE INDUSTRY’S LEADING IDENTITY GRAPH**

- Highest-performing identity
- #1 transactional & behavioral data in the industry
- Fastest, most efficient AI

Driven by performance
Independent, unbiased, focused on your outcomes with truth, proof and transparency
Another key element is Machine Learning which is deployed to improve outcomes by understanding how identity data can give a supply chain owner better depth and accuracy of prediction—by building always on Machine Learning predictions based on every time there is an interaction with a customer – onsite or offsite. Typically, brands have far more advertising-based interactions than they do customer website-based interactions. For example, a customer might go to a website two times to look at or purchase a product, but they will often interact with your brand through an advertising impression many times more.

Publicis Sapient have carried out this work for a large global automobile company, and discovered that over a five month buyer journey, while there were in the region of 200 visits to the company website and a handful of visits into dealerships, (so within the company wall of insight) there were several thousand interactions with the auto manufacturers advertising impressions—collected from buyers interacting with articles about the brand.

**THE INVENTORY MEDIA OPTIMIZER FLOW**

- Media informed demand signals
- The Persistent Real-Time Data Connection of Inventory and Media Performance and Metric
- Machine Learning Models based on unique customer and prospect data
- Optimized media and customer experience levels across digital and traditional
- Optimized supply chain, inventory, and returns

**IMPROVED BUSINESS OUTCOMES WITH UNIQUE CUSTOMER AND PROSPECT DATA**

- **Demand and Customer Propensity**
  - Media Buying Block Optimization
  - Enhanced Dynamic Creative
  - Optimized Offers

- **Inventory Management**
  - Enhanced Demand Sensing/Forecast
  - Return Sensing & Optimization
  - Cross-channel/ Multi-echelon Inventory Optimization

- Improved Customer Satisfaction
What benefits might you expect to realize by employing the Inventory Media Optimizer?

This is not a one size fits all methodology—in fact, our data scientists use a Bayesian style approach to evaluate the likely returns for an organization. This is the same methodology used by vaccine manufacturers to speed up results, so we know it works.

By overlaying the demand by region or zip code in North America, along with the inventory within the same region or zip code, we were able to see where demand outstripped inventory, and make adjustments accordingly (either by changing dynamic ad creative in that region or increasing inventory to meet demand.) As you can imagine, this led to big efficiencies in media spend and in inventory optimization for the organization.

Finally, the other way in which the Inventory Media Optimizer delivers benefits is through an improved customer experience. The more we know about the customer, the more we are able to tailor offers and ensure stock availability in alignment with their preferences. Also, once we know more about the customer, it is possible to vastly improve the relevancy of their search and offers by applying criteria from past searches and purchases.

In conclusion, we know the Publicis Sapient Inventory Media Optimizer will be able to increase the efficacy of your media spend and improve your inventory management such that you can cut costs and improve revenue—the only unknown at this time is by how much? If you would like to explore this further, please get in touch. No smoke and mirrors, only science.
Together We Take Digital Experiences Into Tomorrow

Publicis Sapient is a digital transformation partner helping established organizations get to their future, digitally-enabled state, both in the way they work and the way they serve their customers. We help unlock value through a start-up mindset and modern methods, fusing strategy, consulting and customer experience with agile engineering and problem-solving creativity. As digital pioneers with 20,000 people and 53 offices around the globe, our experience spanning technology, data sciences, consulting and customer obsession – combined with our culture of curiosity and relentlessness – enables us to accelerate our clients’ businesses through designing the products and services their customers truly value. Publicis Sapient is the digital business transformation hub of Publicis Groupe.

For more information, visit publicissapient.com.