VISUAL MERCHANDISING:
The Future of Global Brand Management

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Overview

The past two decades have found retail in an increasingly competitive world. Customers have more choices than ever before, with products often only one click, or one touch away. New channels, such as mobile, online, and retail apps have grown dramatically, leaving brick-and-mortar retailers searching for ways to maintain market share and bring customers into their stores.

This white paper explores how new merchandising technology offers retailers unprecedented visual access to their stores and products, powerful insight into the customer experience, a competitive advantage that drives increased sales and reduces the cost of doing business.
Background Context
In 2012, U.S. retail sales topped $4.7 trillion, and retail consumption accounted for an estimated two-thirds of the U.S. GDP. Even with the rapid growth of non-traditional channels, last year, 90% of all U.S. retail sales took place within brick-and-mortar stores.

It is through visual merchandising — the art and science of displays, product placement, and store design — that brick-and-mortar retailers differentiate themselves from their online counterparts. By optimizing product placement and tailoring store design to customer needs, brick-and-mortar retailers are able to drive increased store traffic, raise customer engagement levels, and of course, increase sales.

Statement of Problem
Retailers are presented with a number of visual merchandising challenges, none of which are adequately solved by their current technology:

- **Lack of visibility** into stores at any given time
- **Absence of insight** into how customers interact with products and displays
- **High cost** of secret shopper programs, audits, and site visits

There are clear answers to these issues, but until recently, they have been hidden within one of retail’s most overlooked investments. In the past decade, brick-and-mortar businesses have spent more than $100 billion building out their security camera networks. Yet these cameras are not typically used by anyone outside of security or loss prevention. There has not been a reason — or even the means — to do so. Only recent advances in mobile connectivity and cloud technology have unlocked new uses for security camera networks.
Our Solution

By transforming noisy, grainy security footage into stunning images that can be accessed from any device, Prism Skylabs enables visual merchandising to be conducted remotely, in real time, and across any number of sites around the globe. The unique cloud service brings crystal clear images of any product, shelf, or display to retailers laptops and mobile devices, and provides a host of powerful customer data, allowing retailers to measure conversion, product lift, and footpaths — all using the cameras they already have.
Unprecedented Visual Access
Immediate Answers to Key Questions

Retailers spend millions of dollars designing and redesigning their stores. Teams of specialists, designers, and consultants work to create in-store environments that elevate the brand experience and appeal to customers both old and new.

But despite extensive research, careful planning, and execution, there’s a simple question that retailers cannot answer: “What do my stores look like?” Or, more specifically, “What do my stores look like right now? Are the shirts folded correctly? Does the lighting properly represent the brand? Is the planogram being followed?

Sure, visual merchandisers or regional managers can travel from store to store, take pictures, and upload images that will later be put in a report. Or secret shoppers can describe what a particular store looks like at a given time. But this is not ideal. Visual auditing as it stands today is limited, slow, non-centralized, and for the most part, the same as it’s been for decades. According to a recent study by RIS News, 63% of retailers are still using Excel spreadsheets — a tool without visual access or images — for in-store merchandising, planning, and compliance.

While the process of visiting or auditing a store has changed little over the past years, the store itself — both in concept and design — has changed dramatically. The store is no longer simply an enclosure with doors and a cash wrap. Like most elements of retail, brick-and-mortar stores have been absorbed into the omnichannel ecosystem, offering new and more frequent customer touch points. There are pop-up shops, stores-in-stores, stores that serve as showrooms, and even stores without merchandise: just touch screens and kiosks with on-demand delivery. And there are brands — looking to increase margins and deliver a hyper-curated customer experience — that are not only opening up stores of their own, but also taking a much more active role in managing their identity at the retailers who sell their products.

Figure 1
Zooming in on a display with Prism Skylabs.
With increased channel diversity, more than ever, retailers and brands need visual access to all stores across all channels. In a recent study by UMB Tech and Intel that polled 159 retail executives, 75% of the respondents were interested in an end-to-end solution that delivers consistency across channels.

Prism Skylabs enables retailers to take virtual tours of any store, unimpeded by geography, time, or travel cost. With remote, real-time access to in-store images, employees of all types can quickly jump from store to store and ensure planogram compliance, maintain brand consistency, and evaluate store design. By bringing the full retail environment to their mobile devices and laptops, retailers are able to manage the full suite of distributed stores, whether they be pop-ups, outlets, marquee stores, malls, etc.

**Actionable Insight**

*Measure conversion with any-camera people counting*

One of online retailers huge strengths has been the ability to understand their customers. E-commerce has a number of advantages over its brick-and-mortar counterparts, not least of which is the ability to measure customer conversion. The formula is simple (the number of people who visit the website divided by the number of people who make a purchase), but the data is powerful. Conversion rates indicate how well retailers can execute on their goal of converting potential customers into a paying customers.

Recently, people counting technology has come to offline businesses, and has enabled retailers to literally count how many people enter or exit their stores. Much like their e-commerce counterparts, brick-and-mortar retailers use this data to measure conversion, by comparing store transactions with the number of people entering the store. While only about 35% of retailers are currently employing solutions to measure traffic (and therefore conversion) in their stores, adoption is growing quickly.

Prism Skylabs enables brick-and-mortar retailers to count the number of customers who enter and exit their store, but the unique cloud service offers a much more robust way to measure conversion. In addition to simple
door counts, Prism Skylabs allows retailers to measure how many customers are in any specific location over any period of time. Retailers can assess the efficacy of a particular floor, department, or even rack of clothing. And through Prism Skylabs enterprise-wide counting reports, retailers can measure conversion rates and compare trends month-to-month, department-to-department, or even brand-to-brand.

Visual merchandising plays a key role in driving customer conversion, as changes to lighting, displays, design alter customer purchasing patterns. But without a way to accurately measure how well a particular department or store is delivering on its customer conversion goals, there’s no way to properly evaluate performance and make the necessary changes — visual merchandising-related or otherwise — that drive conversion.

Optimize store design with customer pathmaps
Once retailers are able to understand how many customers are entering their store, almost invariably, the next question is: Where do they go? Stores are designed with very specific customer paths in mind, but it’s difficult — if not impossible — to understand how well customer movement aligns with store design goals. Small retailers with one or two boutique shops may have an idea about how customers move through their stores, but lack hard data. For larger retailers, specifically those with thousands of sites spanning multiple continents, understanding customer movement seems an insurmountable task.

Through advanced computer vision and computer photography, Prism Skylabs has created Pathmaps, which are easy-to-understand visualizations of how customers move from any point to another. These visualizations include both a visual representation of customer movement, as well as a numeric quantification of this movement. For example, a Pathmap at the store entrance will show what percentage of customer head left, what percentage of customers head...
right, and what percentage head straight — with the thickness of the visualization equating to the percentage of customer movement.

By understanding customer paths, visual merchandisers and store designers can validate whether or not their designs are achieving their intended results. And since this data is available on demand, it’s easy for retailers to a/b test new designs and displays, and immediate understand what works and what doesn’t.

Pathmaps are key to visual merchandising agility, as they provide instantaneous feedback on the customer experience — data that in the past was either unavailable, or delayed by weeks if not months.

**Understand which displays, floor sets, and products engage customers**

Another significant challenge retailers face is quantifying and understanding how particular merchandising decisions affect customer engagement. Historically, retailers have had to rely on guesswork to determine which floor sets were effective, or which window displays drove traffic into the store.

Using advanced computer vision and computational photography techniques, Prism Skylabs condenses customer interaction and movement into simple, privacy-protected images that provide instant understanding of any event or time period.

These visual representations display not only where customers spend their time in a store, but also which products are picked up the most. These visualizations, known as heatmaps, can provide this information over any period of time, and any location in any store.

But it’s not only in the store where display engagement matters. How do visual merchandising know if their window displays or signage are bringing traffic into the store? How many people are walking by, but not actually entering the store?

With Prism Skylabs counting technology, it’s easy for retailers to measure their customer entry rate, and make data-driven decisions about what works and what doesn’t. Again, this is invaluable data for a retailer. Without it, there’s no way to truly know whether or not visual merchandising efforts are successful in increasing in-store traffic.

**Reduce Costs**

**Travel and Auditing**

Retailers spend significant time and money traveling from location to location, auditing their stores and ensuring that planograms and brand decisions are properly executed. Retailers have to absorb the growing costs of transportation, lodging, and incidentals for each for a visit.

Auditing is often outsourced to the secret shoppers, a $1.6 billion industry largely comprised of auditors who produce reports on in-store performance and adherence to merchandising plans. But delivering this information is not only expensive — at upward of $200 per store audit — it is not in any way comprehensive or expedient.

In-store audits, whether they are completed in house or sourced to a third party, are limited by time, scope, and subjectivity. It takes time to travel from store to store and assess visual merchandising compliance. For large distributed retailers, it’s almost unthinkable to audit every store across multiple channels, countries, and continents. And even if each store were to be audited, it’s generally a one-time review and limited to whatever the store looks like during that period of review. This is an antiquated system lacking efficiency, oversight, or governance.

Prism Skylabs revolutionizes this labor intensive, costly, slow, and subjective process. Any number of employees can log in on a mobile device or laptop and view real-time or historical images of any store, anywhere in the world. There’s no limit to the number of images that can be viewed and no additional
charge for multiple audits or look ins. And since any image can be shared, annotated, and stored forever, store audits are no longer subject to the whims of one person assessing one store at one particular time.

**Conclusion**

In the extremely competitive retail industry, businesses are continually looking for ways to increase sales and minimize costs. Through visual merchandising, brick-and-mortar retailers aim to create an engaging environment that brings customers into stores and drives increased conversion.

Until recently, there’s been no way for retailers to know what their brand, business, or product looks like at any given time. By transforming in-store video cameras into powerful new tools, Prism Skylabs fundamentally changes the retail landscape and provides brick-and-mortar businesses with a number of significant benefits:

- **unprecedented visual access** to real-time images of any product, shelf, display, or store
- **actionable insight**, and the ability to measure conversion, understand customer-product interaction, and optimize store design
- **reduced costs** through remote auditing of stores and merchandise
About Prism Skylabs

Prism Skylabs is the global leader in visually understanding and optimizing offline commerce. Its unique cloud service transforms any video camera into a visual merchandising, auditing, and business intelligence tool that can be accessed from any device.

Prism Skylabs offers businesses unique and valuable tools such as the ability to measure offline conversion, understand long-term trends, and dig in to powerful analytics — from dwell to footpaths to product lift — using the cameras they already have in place. Prism Skylabs transforms customer interaction and movement into stunning imagery and analytic reports that provide instant understanding of customer preferences over any period of time.

Some of the world’s largest retailers, CPGs, supermarkets, malls, and convenience stores use Prism Skylabs to gain extraordinary insight into their businesses, and to build and maintain the ideal experience for their customers.